

https://dspace.org/

Desiring conscious, critical, careful practice — linking autoethnographic practice-based architectural design research with transformative pedagogy

Felix, Sandra Lourenço

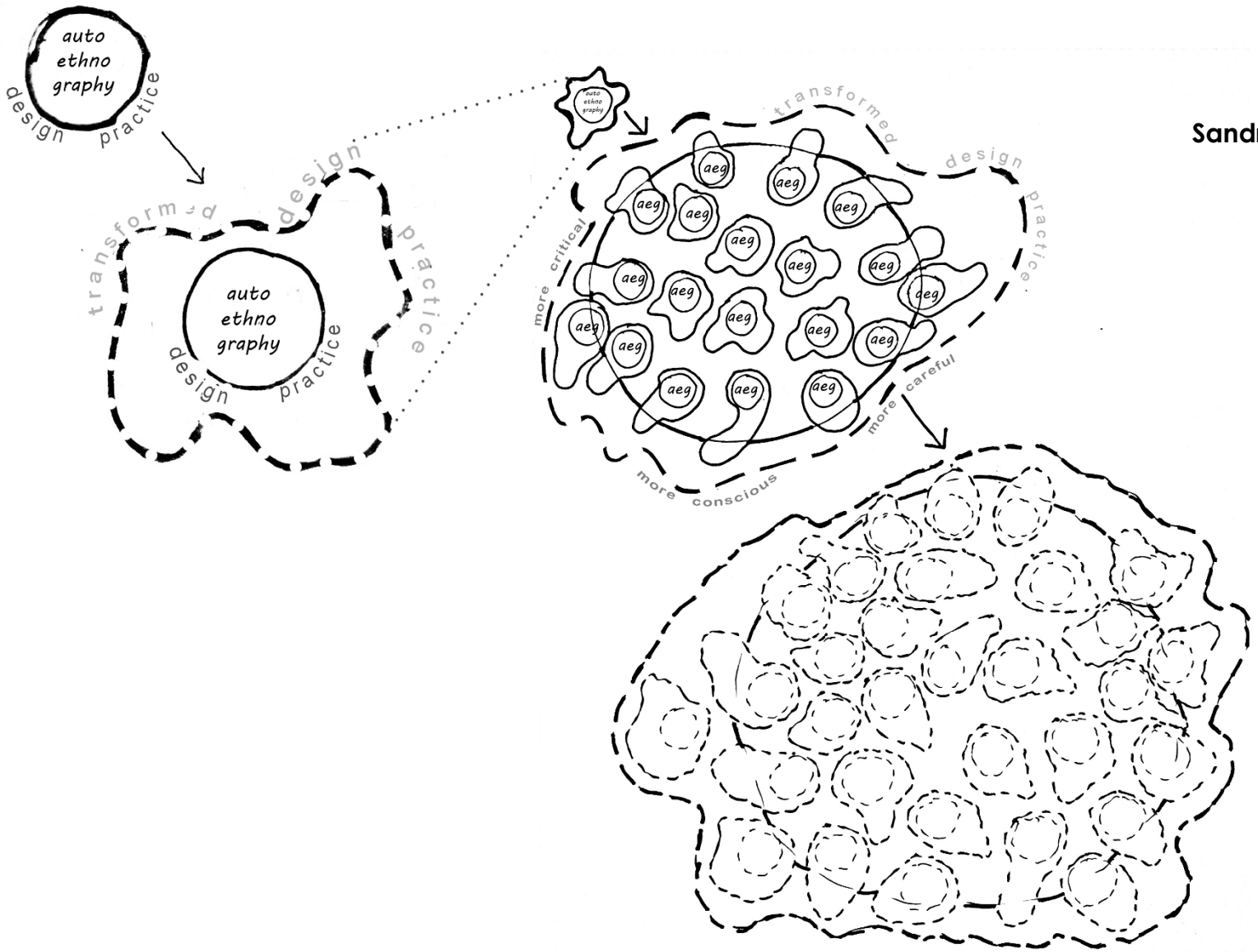
2025-10
University of the Witwatersrand, Johannesburg
https://hdl.handle.net/10539/50039
Felix, Sandra Lourenço. (2025). Desiring conscious, critical, careful practice — linking autoethnographic practice-based architectural design research with transformative pedagogy. [PhD thesis, University of the Witwatersrand, Johannesburg]. WIReDSpace. https://hdl.handle.net/10539/50039

Downloaded from a DSpace repository. https://dspace.org/

Desiring conscious, critical, careful practice

—linking autoethnographic practice-based architectural design research with transformative pedagogy

Sandra Lourenço Felix



Desiring conscious, critical, careful practice

—linking autoethnographic practice-based architectural design research with transformative pedagogy

Sandra Lourenço Felix

A thesis submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in fulfilment of the requirements for the degree of Doctor of Philosophy in Architecture

Johannesburg, October 2025

DECLARATION

I declare that this thesis is my own unaided work. It is being submitted to the Degree of Doctor of Philosophy to the University of the Witwatersrand, Johannesburg.

It has not been submitted before for any degree or examination to any other University.



……

Sandra Lourenço Felix

Student number: 9105979M

6th day of October 2025

ABSTRACT

Rooted in an autoethnographic approach, this study explored how practice-based design research methods—originally developed in postgraduate architectural programmes—could be adapted to foster a more conscious, critical, careful architectural design practice for both myself and undergraduate students. This adaptation took place within a parallel-engaged pedagogy of care, drawing from the critical pedagogies of Paulo Freire, bell hooks and Boaventura De Sousa Santos, where care was taught through practising caring, towards self, others, the environment and, by extension, design, building and material processes.

Evolving through seven years of action research (2019 to 2025) at the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg, South Africa, the pedagogy engaged students and myself in parallel autoethnographic research of our design practices. Together we reflected inwardly, validating our particular ways of being and seeing through *Personal Spatial Narratives* and memories of past lived spatial experiences. Simultaneously, we diffractively examined the influence of our practice and educational context using *(De)constructed Archives* and *Communities of Practice Archives*. We gained conscious personal self-awareness and critical positioning within a post-colonial, post-Apartheid and post #FeesMustFall institutional and practice landscape.

The findings demonstrate that adapting practice-based design research methods to undergraduate education within a parallel-engaged pedagogy was transformative. It reshaped students' perceptions of themselves by validating their diverse ways of seeing and being, thus contributing to a pluriversal architectural education in the global south. This approach not only expanded the canon and curriculum to include previously silenced voices but also critically challenged established norms in teaching, redefined institutional epistemologies and supported the academic success of previously disadvantaged students.

DEDICATION

To my family, Rudi, Pascale and Gabriel, who put up with me for six years, especially in the last year (or more) of writing, thank you.

For the never-ending support of my sister, Alda, who has been there longer than anyone.

Para a minha mãe. A primeira conferência em que participei aconteceu na mesma semana em que partiste deste mundo. Obrigado pelo carinho, pelo trabalho e pelo esforço que fizeste para que eu e a Alda pudéssemos alcançar os sonhos que também eram teus—de estudar, de ser professora.

ACKNOWLEDGEMENTS

To my supervisor Ariane Janse Van Rensburg, who encouraged me fifteen years ago to do this research, but it took me almost ten years to start it. Your patience, insight and support have made this thesis possible. I built on the foundations you laid in educational action research at Wits. To my mentor Susan Van Zyl, you arrived just at the right time to help me with the writing, your input was invaluable and memorable. To Hannah Le Roux, who supervised me at the beginning, clarified many things, and broadened my theoretical and practice-based view of the research.

Thank-you to my research group, Anita, Dirk, Althea, Nomonde, Amina and Jhono. It was a privilege to follow this journey with you. I learnt much from all of you, but more importantly, your empathy, kindness and support kept me going. Thank you to my teaching partner, Melinda. Teaching with you and learning from you was a memorable teaching experience.To my colleagues who were there on the teaching and research journey, Tunde, Gustavo, Patricia, Avish, Deborah, Kevin, Sundeep, Liale, Brigitta, Fiona, Kiki and many more. Thank you for your valuable insights and collaborative spirit. To Gerald, who left us too soon, your joyous spirit will be long remembered by your students and colleagues.To my other colleagues at SoAP, thank you for the encouragement.

Thank you to my practice colleagues, Tanzeem, Althea, Sushma and Morag, for the many discussions and collaborations and your inspiration. Continue to forge those new paths.

To Sarah and Lebo for the invaluable assistance in editing and statistical analysis. To Alice's caring support.

Lastly, to all the students, believe it or not, I learnt more from you than you from me.

TABLE OF CONTENTS

DECLARATION ..... **III**
ABSTRACT ..... **IV**
DEDICATION ..... **V**
ACKNOWLEDGEMENTS ..... **VI**
TABLE OF CONTENTS ..... **VII**
LIST OF FIGURES ..... **XII**
LIST OF TABLES ..... **XIX**
LIST OF ACRONYMS ..... **XX**
GLOSSARY OF TERMS ..... **XXI**
PART A: INTRODUCTION **1**
1 CHAPTER ONE: INTRODUCTION **1**
1.1 DESIRING CHANGE **3**
1.1.1 Personal and institutional context—University of the Witwatersrand and University of Porto 10
1.1.2 Transformative design pedagogy in South Africa 16
1.2 AIM: CONSCIOUS, CRITICAL, CAREFUL PRACTICE **24**
1.2.1 Conscious practice 26
1.2.2 Critical practice 30
1.2.3 Careful practice 33
2 CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK **38**
2.1 AUTOETHNOGRAPHY **43**

2.1.1 Autoethnographic pedagogy 45
2.1.2 Situating self 47
2.1.3 Scaling autoethnographic research 49
2.2 PRACTICE-BASED DESIGN RESEARCH 52
2.2.1 Reflective 56
2.2.2 Diffractive 67
2.2.3 Practice-based design research internationally 73
2.2.4 Practice-based design research in South Africa 76
2.2.5 The thinking hand (Figure 2.9) 83
2.3 TRANSFORMATIVE PEDAGOGY 88
2.3.1 bell hooks' "engaged pedagogy" 90
2.3.2 De Sousa Santos – "Epistemology of the South" 91
3 CHAPTER THREE: RESEARCH DESIGN AND PROCESS 93
3.1 ACTION RESEARCH METHODOLOGY 96
3.1.1 Scope of study 101
3.1.2 Action research validity and reliability 103
3.1.3 Action research cycles 2019 to 2025 105
3.2 ASSESSING SHIFTS IN DESIGN PRACTICE 124
3.2.1 Transformative Social Emotional Learning surveys 128
3.2.2 Focus groups and interviews 153
3.3 LIMITATIONS TO THE METHODOLOGY 169
3.4 ETHICAL ISSUES 171

PART B: PAPERS 175
4 CHAPTER FOUR: DOING AUTOETHNOGRAPHY, TEACHING AUTOETHNOGRAPHY AS AN ARCHITECT-EDUCATOR-RESEARCHER 180
4.1 DOING AUTOETHNOGRAPHY, TEACHING AUTOETHNOGRAPHY 181
4.2 WHICH PRACTICE? ARCHITECT-EDUCATOR-RESEARCHER 183
4.3 SEEKING CRITICAL SPATIAL PRACTICE 186
4.4 POLITICS OF WHITENESS 191
4.5 INSTITUTIONAL NARRATIVES 196
4.6 MEMORIES 203
4.7 CONCLUSIONS 205
4.8 REFERENCES 208
5 CHAPTER FIVE: ADAPTING PRACTICE-BASED DESIGN RESEARCH METHODS TO A SOUTH AFRICAN UNDERGRADUATE ARCHITECTURAL STUDIO TO BUILD A MORE CONSCIOUS AND CRITICAL ARCHITECTURAL DESIGN PRACTICE IN STUDENTS 213
ABSTRACT 213
5.1 INTRODUCTION 213
5.2 ADAPTING PRACTICE-BASED DESIGN RESEARCH TO A SOUTH AFRICAN UNDERGRADUATE PROGRAMME 216
5.3 SOCIAL REFLECTIVE DIALOGUE 222
5.4 PERSONAL SPATIAL NARRATIVE 228
5.5 INSTITUTIONAL INFLUENCE 232
5.6 QUESTIONING MASTERY 235
5.7 HAVE STUDENTS BECOME MORE CONSCIOUS, SELF-AWARE AND CRITICAL? 237

5.8 REFERENCES 243

6 CHAPTER SIX: TRACING THE EVOLUTION OF A PARALLEL-ENGAGED ARCHITECTURAL PEDAGOGY OF CARE IN SOUTH AFRICA 247

ABSTRACT 247

6.1 DEVELOPING A PARALLEL-ENGAGED PEDAGOGY OF CARE IN ARCHITECTURE 254

6.2 ENGAGED PEDAGOGY 260

6.3 PARALLEL PEDAGOGY 263

6.4 PEDAGOGY OF CARE 267

6.5 PARALLEL-ENGAGED PEDAGOGY OF CARE IN PROGRESS 270

6.6 SIGNIFICANT FINDINGS 275

6.7 REFERENCES 280

PART C: DISCUSSION AND CONCLUSION 286

7 CHAPTER SEVEN: DISCUSSION AND CONCLUSION 286

7.1 AUTOETHNOGRAPHIC REFLECTION 286

7.2 HOW DID STUDENTS' DESIGN PRACTICE CHANGE? 290

7.2.1 Developing conscious practice 292

7.2.2 Building critical practice 301

7.2.3 Nurturing careful practice 308

7.2.4 A return to confidence 313

7.3 WAS THE PEDAGOGY TRANSFORMATIVE? 322

7.4 VALIDITY OF THE RESEARCH 327

7.5 ONTOLOGICAL LIMITS…A CONTRIBUTION? 331

7.6 CONTRIBUTIONS TO KNOWLEDGE(S) 334
7.7 WHAT NEXT? 337
REFERENCES 340
APPENDIX A: CURRICULUM 2019 TO 2023 370
APPENDIX B : T-SEL SURVEYS 428
APPENDIX C: FOCUS GROUP QUESTIONS 439
APPENDIX D: CONFERENCE & SYMPOSIUM PAPERS PRESENTED DURING THE ACTION RESEARCH CYCLES 443
APPENDIX E: ETHICS DOCUMENTS 451

LIST OF FIGURES

Figure 1.1.1 Design practice at the intersection of personal habitus and institutional/ contextual habitus (Author's drawing based on Payne's (2015) habitus research) 5

Figure 1.2 Reflective loops across the architect-practitioner-researcher-teacher es where each role is parallel to the other roles—separate but connected (Author's drawing) 6

Figure 1.3 Personal versus institutional habitus (Author's drawing adapted from Payne (2015)) 7

Figure 1.4 A watercolour perspective of the John Moffat Building, which is home to The School of Architecture and Planning (SoAP) at the University of the Witwatersrand by John Fassler, circa 1955 (SoAP archive) 10

Figure 1.5 Smiling Lion Building painting by Pancho Guedes (https://africanah.org/pancio-guedes-1925-2015-artist-and-architect) 11

Figure 1.6 Siza Vieira's Faculty of Architecture of the University of Porto campus buildings on the banks of the river Douro in Porto (https://www.archdaily.com.br/br/805973/faculdade-de-arquitectura-da-universidade-do-porto-pelas-lentes-de-fernando-guerra) 12

Figure 1.7 Streetscape drawings of Porto for a design project at the Faculty of Architecture of the University of Porto (FAUP) (Author's drawings while a student at FAUP, 1993-1994) 13

Figure 1.8 Diagram of consciousness, from Robert Fludd's Utriusque Cosmi Historia edition published in 1629 27

Figure 2.1 Scaling Autoethnographic practice-based design research– from my own autoethnographic research to students' autoethnographic practice-based design research within a transformative design pedagogy (drawing by author) (figure 2.1 is embedded within Figure 4.2) 50

Figure 2.2 Reflective-diffractive practice-based and led research, focusing inward and outward (Author's drawing) . 51

Figure 2.3 Iterative cycles of research, drawing on Frayling (2012), Archer (2012) and Cross (1999) (Author's drawing) 53

Figure 2.4 Intra-action of research, reflecting on personal and diffracting on context (Author's drawing) 55

Figure 2.5 Social reflection: reflecting on each other's personal deconstructed archives of reflecting-in-action (Author's drawing, 2022) 66

Figure 2.6 Graphical comparison of race and gender breakdown of the South African Institute of Architects (SAIA) Award of Excellence recipients (bottom) compared with registered architects and South African population demographics 71

Figure 2.7 Map tracing practice-based design research globally (Author's drawing) 73

Figure 2.8 Map questioning the relevance of models of PbDR from the global north to south (Author's drawing) 77

Figure 2.9 The thinking hand—the tool of autoethnographic design practice research, linking drawing and thinking, clarifying and exploring (Author's drawing) 83

Figure 2.10 Archive photographs of completed projects displaying the range of colour, texture and materiality (Author's photographs) 86

Figure 2.11 Archive photographs of completed projects displaying the range of colour, texture and materiality (Author's photographs) 87

Figure 3.1 Scaling of autoethnographic practice-based design research from architect to design pedagogy (Author's construct) 95

Figure 3.2 Action research: a typical cycle of autoethnographic practice-based design research and action research cycles from the first one spiralling outward in a loop of planning, action and reflection, with my autoethnography embedded in the process (Author's drawing) 105

Figure 3.3 2018 Manifesto Poster and an enlarged portion showing the 10 x 10 sketches (Drawings by student001, 2018) 109

Figure 3.4 2019 Manifesto Poster with enlarged portion showing sketches articulating a fascination with nature and landscape (Drawings by student7641-2019) 111

Figure 3.5 Melinda Silverman engaging with my Manifesto narrative poster in front of students in 2020 (Author's still frame from film) 112

Figure 3.6 2020 Manifesto Poster and enlarged portion showing sketches, displaying the move to a narrative structure (Drawings by Student0098-2020) 113

Figure 3.7 2021 Manifesto Poster showing the importance of past personal spatial memory on the project (Drawings by student1902-2021) 115

Figure 3.8 2021 Manifesto Poster with a narrative structure, exploring past projects through paper models, as well as drawing (seen in the enlarged detail) (Student453-2021) 116

Figure 3.9 2022 Manifesto Poster showing a narrative link between the personal spatial memory (bottom left), design practice and the student's position within Wits (Student2390-2022) 118

Figure 3.10 2023 Manifesto Poster with personal spatial memory on rural mountains being generative for this student's design practice (Student0903-2023) 119

Figure 3.11 2023 Manifesto Poster with memory of imaginary spaces in a tiny closet (Student3233-2023) 120

Figure 3.12 2024 Manifesto Poster evoking atmosphere (Student0001-2024) 121

Figure 3.13 2025 Manifesto Poster showing a close correlation between the Personal Spatial Memory abstract idea and the poster design evoking atmosphere (Student0001-2025) 123

Figure 3.14 Transformative Social Emotional Learning (T-SEL) Self1 survey 2023 results by gender then race, averaging the gender numbers 137

Figure 3.15 Transformative Social Emotional Learning (T-SEL) Self1 survey 2023 results by race then gender, averaging the race numbers 140

Figure 3.16 Transformative Social Emotional Learning (T-SEL) 2023 Self1 Sefl 2 and Of Other survey results of class averages 142

Figure 3.17 Transformative Social Emotional Learning (T-SEL) Self1; Self2 and Of Other 2023 survey results compared by gender (the arrows show the only differences that are statistically significant) 145

Figure 3.18 Transformative Social Emotional Learning (T-SEL) Self1 and Self2 2023 survey results compared by race (including gender) 149

Figure 4.1 The architect is at the centre of the autoethnographic research. The researcher and teacher roles keep looping back to the architect at the centre (Author's drawing) 184

Figure 4.2 A study within a study. Autoethnography on my design practice sits within a greater study of design pedagogy where students also carry out autoethnography on their design practices (Authors' drawing) 185

Figure 4.3 Proposed elevation showing reclaimed and salvaged brickwork. Photos of brick cleaning and bricklayer, Aaron Mahlangu, using creative licence to complete the façade (Author's drawing and photographs) 189

Figure 4.4 Vignette sectional drawings of Boa Nova Tea House by Siza Vieira and Casa das Artes by Souto Moura, alongside sections of my past projects, demonstrating the influence on my practice of a topographical architectural language that joins architecture and landscape (Author's drawings) 197

Figure 4.5 Sectional drawings of my projects, unpacking the different ways architecture related to land and landscape (Author's drawings) 199

Figure 4.6 Commonwealth War Memorial Competition: proposed grotto (middle) with blocks symbolising the weight of war that was carried by soldiers (top) (drawing from render by Talya Michaels) and sectional conceptual sketch (right) (Author's drawing) 201

Figure 4.7 Photographs of past built projects revealed a fascination with colour, texture and pattern (Author's photographs) 204

Figure 5.1 Practice-based design research for students in the context of Ubuntu entails unearthing who "I am" personal research on past practice and personal spatial memories, as well as reflecting on the relational "We are" within and outside of the institutional norms and culture, thereby pushing these institutional and epistemological boundaries (Author's drawing) 220

Figure 5.2 Manifesto Poster of 10x10 project drawings from first and second year. The bottom row shows some drawings enlarged. Through graphic techniques and colour the preoccupation with the relationship of light/ dark, solid and void is shown (Drawings by student7161-2019) 224

Figure 5.3 Manifesto Poster of 10x10 project drawings from first and second year. The bottom row shows some drawings enlarged. Through graphic techniques and colour the preoccupation with the relationship of building to landscape and nature is shown (Drawings by student 7641-;2019) 225

Figure 5.4 Pairs of students in the design studio having social reflective discussions with each other around their (De)constructed Archives. (Author's photograph – still frame from film) 226

Figure 5.5 Manifesto Poster of 10x10 project drawings arranged in a narrative format (Drawings by student0098-2020) 227

Figure 5.6 Personal Spatial Memory drawing (Funani, student1902-2021) 229

Figure 5.7 Personal Spatial Memory drawing and the resultant Manifesto following a reflection on the memory and the (De)constructed Archive, which starts with "a conversation between light shape and form" and ends with "I want to take this theme forward and see how far I can push it." (Photograph of student sketchbook, student2260-2023) 231

Figure 5.8 Nomvelo's drawings: the personal spatial memory of her bunk bed (left); her sketches of Mapungubwe Interpretation Centre by Wits alumni Peter Rich (middle two); the drawing on the right her exploration of the inside/ outside theme in a third-year project that explored a new South African parliament under a tree, echoing traditional leaders meeting under a tree to discuss important community matters (right) (student3992-2022) 234

Figure 5.9 Graphical comparison of race and gender breakdown of the South African Institute of Architects (SAIA) Awards of Excellence recipients (top graph) and the jury panel (bottom graph) (Author's construct based on statistics from SAIA) 235

Figure 5.10Figure 5.10 Personal Spatial Memory drawing: My bunk bed. "I am sceptical to draw parallels, but one could see how my spatial memory is linked to my innate desire to separate public and non-public... one learns to respect what is private. Boundaries are set using very architectural means: level changes, thresholds, colour, position, time of day, size, materials" (student6755-2022) 240

Figure 6.1 Drawings showing the parallel-engaged architectural design pedagogy in action with students and educators sitting together in studio on left and walking alongside each other on the right (drawing by author).. 255

Figure 6.2 Pie -graph showing weighted Social Media survey results of a search "qualities of an architect": inner most tier shows the categories of skills/qualities; the middle tier lists the skills associated with the categories; the outer tier lists the qualities of an architect (graph by author) 257

Figure 6.3 Menti-meter app word cloud of third-year student survey of "qualities of an architect in South Africa" – the most often a quality is repeated the bigger the font in the word cloud.(by author) 258

Figure 6.4 Drawing showing the loop of reflection between pairs of students in the practice-based design research - reflecting on/into/about past practice through the personal design archive moves to a reflective dialogue in the present, culminating in reflecting for future practice (drawing by author) 262

Figure 6.5 Drawing of the expanded social dialogue where educators and students reflect on their personal design archives in studio with colleagues and the whole class. (drawing by author) 264

Figure 6.6 Figure 6.6 Drawing over photograph of the parallel pedagogy in studio. Me drawing my personal design archive in the foreground alongside students drawing their archives in the background (drawing over photo from film by author) 265

Figure 6.7 Colour study façade drawings above some photographs from the photographic design archive showing a fascination with colour, texture, pattern and materiality, the roots of which lie in memories of playing with fabric as a child – drawing on right (drawings and photographs by author) 271

Figure 6.8 Drawings by a student exploring the experience of light living in a Zulu hut. On the left the plan, and the right a sectional drawing showing the limited light penetration from the single opening, and the low opening. (Drawings by Student1902;2021) 272

Figure 7.1 Ritual and tradition (an echo of the ancestors) expressed through brickwork rhythm in the façade of the Injana African Commons Project (Student4774-2023) 291

Figure 7.2 The breakdown of Manifesto themes (Author's construct) 294

Figure 7.3 Pie graph showing assessment of Manifesto Revisited, indicating the assessed impact on conscious practice (Author's construct) ..... **Error! Bookmark not defined.**

Figure 7.4 Personal Spatial Memory Drawing: My bunk-bed within the Manifesto Poster (Student6755-2022) 298

Figure 7.5 Making Meaning Sculpture: 'Duality' (left) and a perspective of the student's University Commons design project (right) (Student6755-2022) 299

Figure 7.6 Manifesto Poster with the Personal Spatial Memory Drawing of Ponte in Hillbrow, Johannesburg, surrounded by sketches of people (Student 7260-2023) 305

Figure 7.7 The Artefact student design project, which explored music and African drums as the connection between African cultures (Student 7260-2023) 306

Figure 7.8 Manifesto Poster and detail of Personal Spatial Memory from the centre of the poster (Student 4070-2022) 311

Figure 7.9 Drawing indicating the different human activities designed for in the building envelope – the threshold between the campus and the building (University Commons design project, Student4070-2022) 312

Figure 7.10 Personal Spatial Memory drawing of high-density communal living in Hillbrow (Student7260-2023) 321

LIST OF TABLES

Table 3.1 Comparing McNiff and Whitehead's (2011) steps to the questions asked in this thesis 99

Table 3.2 The number of students in each year, including the percentage of students who took part in the research; student numbers are further broken down by demographics (data sourced from the ARPL3005 course students registration data and survey data) 101

Table 3.3 Pedagogy and curriculum changes from cycle to cycle from 2018 to 2024 107

Table 3.4Survey sample size: number of students who completed the surveys 131

Table 3.5 T-SEL surveys reliability test results (refer Appendix) 133

LIST OF ACRONYMS

AKAD	Academy for Practice-based Research in Architecture and Design
BAS	Bachelor of Architectural Studies
BBBEE	Broad-based Black Economic Empowerment
CA²RE	Community for Artistic and Architectural Research
FAUP	Faculty of Architecture of the University of Porto
GIFA	Gauteng Institute for Architecture
GSA	Graduate School of Architecture of the University of Johannesburg
PbDR	Practice-based Design Research
RMIT	Royal Melbourne Institute of Technology
SAIA	South African Institute of Architects
SECA	Social Emotional Competency Assessments
SEL	Social Emotional Learning
SoAP	School of Architecture and Planning of the University of the Witwatersrand
Soweto	South Western Township
T-SEL	Transformative Social Emotional Learning
UFS	University of the Free State
Wits	University of the Witwatersrand

GLOSSARY OF TERMS

#FeesMustFall and #RhodesMustFall: University student protests from 2015 to 2017 . The protests started by demanding free higher education for all students and coalesced into demands for a transformed decolonised education and curriculum and greater access to universities(Jansen 2019;2022).

Academy for Practice-based Research in Architecture and Design (AKAD) is a collaboration between Swedish schools: the KTH School of Architecture in Stockholm, the Lunds Tekniska Högskola School of Architecture in Sweden and the Chalmers School of Architecture in Gothenburg.(Grillner and Stahl 2003)

Apartheid (Afrikaans: "apartness"): The policy that governed relations between South Africa's white minority and non-white majority for much of the latter half of the 20th century, sanctioning racial segregation and political and economic discrimination against non-whites. Although the legislation that formed the foundation of Apartheid had been repealed by the early 1990s, the social and economic repercussions of the discriminatory policy persisted into the 21st century ("Apartheid",2025).

Bachelor of Architectural Studies (BAS): An undergraduate degree at the School of Architecture and Planning, University of the Witwatersrand, Johannesburg, South Africa.

Broad-based Black Economic Empowerment (BBBEE): A South African affirmative action policy where 'black' means any person of colour that was previously disadvantaged under Apartheid.

Community for Artistic and Architectural Research (CA²RE)[1]: A community developed through bi-annual conferences at different European institutions since 2017.

Course: A single subject within a year of study in a degree.

COVID-19: Coronavirus disease is a worldwide pandemic, which started in 2019, that forced universities in South African (and globally) to move to emergency online learning, which lasted two years at the University of the Witwatersrand.

Curriculum: The content taught in a course; in the context of the decolonisation of South African universities, it is seen more broadly as "a codification of knowledge that is assigned value and legitimacy through well-established institutional

[1] https://ca2re.eu

processes, such as the external accreditation of professional bodies and the internal validation of academic senates" (Jansen and Walters 2022, 2).

Decolonisation: Used sometimes interchangeably with transformation in the South African context, decolonisation is a deeper, more radical concept that seeks a fundamental shift in mindset, education and identity to dismantle colonial structures, ideologies and epistemologies. In the South African higher education context it means: "(1) changing the curriculum, or syllabus or content (this mostly applies to the humanities); (2) changing the criteria for defining what texts are included in, or excluded from the canon; (3) changing student demographics while recruiting more black staff and transforming the academic and administrative bodies; and (4) recalibrating the activities of teaching and learning in such a way as to institute a different teacher-learner power relation" (Mbembe 2019, 241).

Gauteng Institute for Architecture (GIFA) is the Gauteng branch of the South African Institute of Architects, both voluntary associations.

Graduate School of Architecture (GSA) is based at the University of Johannesburg, South Africa.

Habitus is "a system of dispositions, that is of permanent manners of being, seeing, acting and thinking, or a system of long-lasting (rather than permanent) schemes or schemata or structures of perception, conception and action" (Bourdieu 2005, 27). It can also be described as "a representation of one's cultural value, and includes a variety of traits and behaviours, such as posture, dress, language, preferences, academic credentials and social networks" (Payne 2015, 10).

Practice-based Design Research includes "processes and outcomes of inquiries and investigations in which architects use the creation of projects or broader contributions towards design thinking as the central constituent in a process which also involves the more generalised research activities of thinking writing, testing, verifying, debating, disseminating, performing, validating and so on" (Fraser 2013,1)

School of Architecture and Planning (SoAP) is based at the University of the Witwatersrand, Johannesburg, South Africa.

South African Council for the Architectural Profession (SACAP) is a statutory legal body where all architects and architectural professionals must be registered.

South African Institute of Architects (SAIA) is a national voluntary association with regional bodies, for example the Graduate Institute for Architecture.

Soweto, an acronym for South Western Township, the largest township in Johannesburg, was formed by Apartheid planners to house miners and black workers under Apartheid.

Transformation: In the South African context, transformation is rooted in the political discourse following the end of Apartheid in 1994. It encompasses various aspects of societal change, including economic, social and political transformation to address historical injustices, redress inequalities and empower previously disadvantaged groups. There is a proliferation of meanings and uses, including interchangeably with decolonisation (Muraina et al. 2024). The University of the Witwatersrand's Transformation Strategy post #FeesMustFall laid out eight principal objectives in transforming the University: "diversify the academy and student admissions; curriculum reform; promote diverse and cosmopolitan residence life experience; institutional cultural change; institutional renaming informed by both Western and indigenous traditions; develop competence in South African languages; insource outsourced services" (Jansen and Walters 2022, 32).**Transformative Triggers** are moments either in the pedagogy or reflecting on the pedagogy, causing immediate change or triggering changes in the following year's pedagogy. These are listed as text boxes within the text as TT#. The term, borrowed from Blythe and Stamm (2017b, 59), "serves to induce reflection both into the dynamic and possible transformation of a practice and into the roots and causes of potential shifts and changes observed in a practice".

University of the Free State (UFS): One of 20 public universities in South Africa, based in Bloemfontein, Free State province.

University of the Witwatersrand (Wits): One of 20 public universities in South Africa, based in Johannesburg, Gauteng province.

PART A: INTRODUCTION

1 CHAPTER ONE: INTRODUCTION



This thesis intention, Desiring Change, outlined in Chapter 1.1, was both personal, for myself, for my design practice, but also for my pedagogy practice and by extension for students' practice. The change sought, a more conscious, critical and careful practice, is defined, reviewed and explored in Chapter 1.2. The theoretical frameworks and methods through which this more conscious, critical and careful practice were explored and developed, namely autoethnography, practice-based design research and transformative pedagogy are reviewed in Chapter Two.

Chapter Three outlines the action research methodology of the research. The action research investigated third-year students from 2019 to 2025 of the Bachelor of Architectural Studies degree at the School of Architecture and Planning of the University of the Witwatersrand. Students' shifts in design practice were assessed through Transformative Social-Emotional Learning (TSEL) Surveys, focus group discussions and interviews with students and teaching staff. The action research cycles included conference/ symposium presentations that provided research clarity, pedagogic reflections on each cycle and began to articulate the research contributions through both local and international peer review.

The value of this peer review process contributed to the decision to follow the PhD by Publication route by presenting the findings of the research through three published papers. The PhD by Publication structure includes the aims, context, literature review, theoretical framework and methodology of the research in Part A: Chapters One, Two and Three, as per above. The core of the findings in the principal areas of research, namely Autoethnography, Practice-based Design Research and Transformative Pedagogy are articulated in published papers in Part B: Chapters Four, Five and Six. As Chapters Four, Five and Six are published papers that each required articulation of the research context, literature review, and methodology, there is inevitably some repetition of Part A in these chapters. Part C is the final discussion and conclusion chapter which analyses the findings, articulates the contributions to knowledge, delineates the limits of the research and posits future avenues of research leading from the thesis.

1.1 Desiring change

Mid-career pause…

What do I know through my practice?

How do I practice?

How do I know what I know?

Where and when did I learn how to practice in this manner?

Pause…

The questions I sought to answer emerged from desiring change in my design practice—from unconscious architectural design practice to one that is more self-aware, confident, conscious and critical. My design practice questions were explored through autoethnographic practice-based and practice-led design research, unearthing tacit[2] knowledge of my design practice.

> "Autoethnography widens/ blurs/ disrupts the boundaries of qualitative research. It interweaves the personal and the social… links pasts, presents and futures… redefines old spaces and opens up new spaces." (Coffey 2009, 326)

Autoethnography was used to redefine my old design practice and open new spaces within it. It critically situated me—'auto'—within a local architectural culture and context—'ethnos'—and is both a method based on writing—'graphy'—and an outcome (Ellis and Bochner 2000). The 'graphy' in this thesis includes writing and the architect's

[2] Tacit knowledge was first introduced by Polanyi (1958) as knowledge embodied, known and felt rather than described or articulated—"one can know more than one can tell"(Polanyi 1966, 8). Tacit knowledge involves intuition, perception and practice.

tools of drawing, modelling and photography. The drawings are not just representational, but they are ways of reflecting upon, unpacking and, more deeply, understanding some of the conceptual relationships within the research.

The autoethnography drew on practice-based and practice-led design research. Practice-based design research is quite a broad area of research, including practice-led research focusing on new understandings of practice and practice-based research in a narrower definition where the creative projects are the basis of the contribution to knowledge (Candy 2006). In this research, the umbrella term, practice-based design research, is used to describe practice-based and practice-led research, where creative design projects and *Personal Spatial Narratives* are reflected upon to produce new understandings of design practice.

Why does unearthing this tacit practice knowledge matter, and how can it transform design practice?

It is self-evident that architects need new ways of thinking about architectural practice in the context of the global crises of ecology, economy and health. Normative architectural practice with fees based on building cost does not incentivise architects to practice with care for the environment, ecology or health, nor for the impact of the building process on labour and local economies. Understanding how design practice can address these crises necessitates an understanding and critical awareness of the personal and contextual drivers of design practice. Design practice occurs at the interface between the personal habitus[3] of the designer and the design practice context (Figure 1.1).

[3] Habitus is "a system of dispositions, that is of permanent manners of being, seeing, acting and thinking, or a system of long-lasting (rather than permanent) schemes or schemata or structures of perception, conception and action" (Bourdieu 2005, 27). It is "a representation of one's cultural value, and includes a variety of traits and behaviours, such as posture, dress, language, preferences, academic credentials and social networks" (Payne 2015, 10).

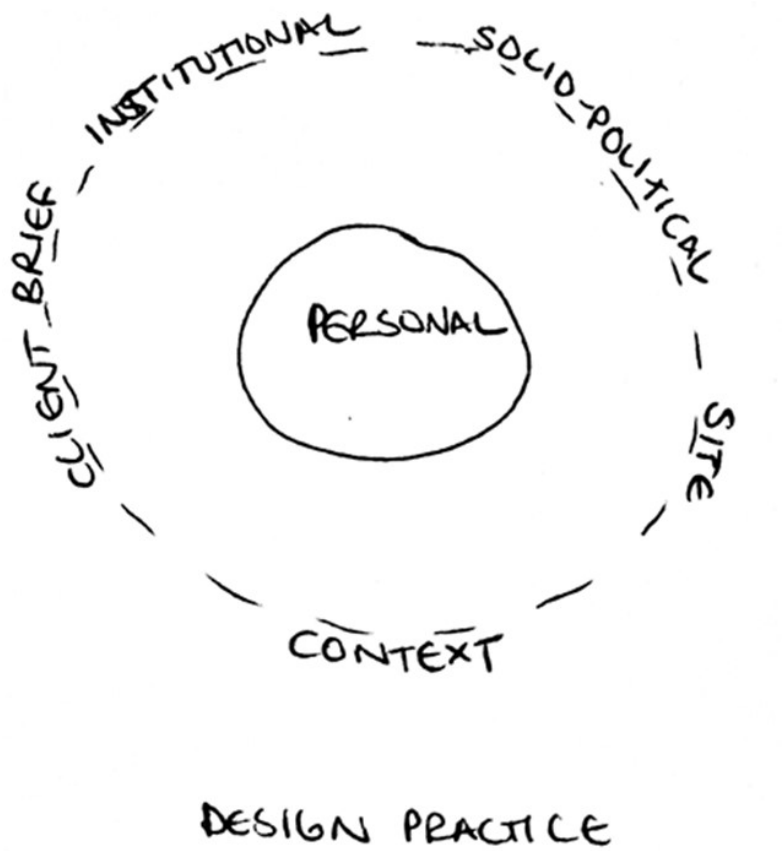


Figure 1.1.1 Design practice at the intersection of personal habitus and institutional/ contextual habitus (Author's drawing based on Payne's (2015) habitus research)

Drawing further from Bourdieu (2002, 101), "[(habitus)(capital)] +field = practice", architectural practice is formed from the personal dispositions of the architect, habitus, their cultural, social and economic capital, and how these relate to their position in a field of local architectural practice with its norms and structures.

Within the local South African context, the norms and structures of architectural practice are still struggling with colonial and Apartheid legacies. Thus, to transform architectural practice, tacit practice knowledge needs to be unearthed through reflecting on the individual architect's personal habitus and capital and critically situating architects within this transforming context, thereby challenging the context and field of practice. Focusing on the individual habitus validates multiple and diverse ways of being in the South African context, which is in itself transformative[4] as it breaks with coloniality and Apartheid's singular narrative and culture. Therefore, in transforming design practice, decoloniality was supported.

[4] Transformative in the South African context has a particular socio-political meaning (refer to the Glossary of Terms).

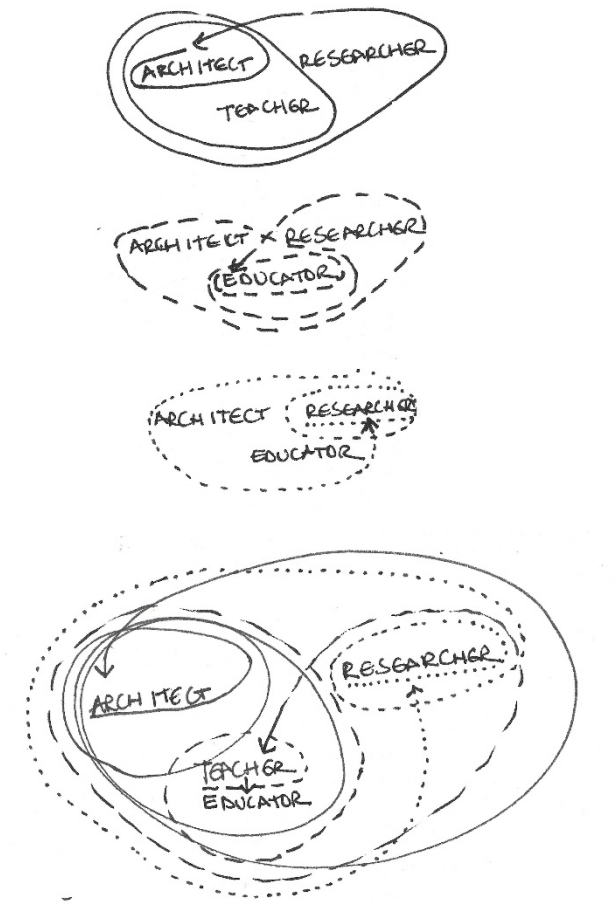


Figure 1.2 Reflective loops across the architect-practitioner-researcher-teacher es where each role is parallel to the other roles—separate but connected (Author's drawing)

On a personal level, in desiring change, I moved from being an architect to an architect-teacher-researcher (Vaughan 2017), or rather a teacher-architect-researcher, as architectural practice is central to the other two roles (Figure 1.2). I have practised as an architect for over twenty-five years and became an architect-teacher when I commenced teaching at the School of Architecture and Planning (SoAP) at the University of the Witwatersrand (Wits) in the third year of the undergraduate programme of the Bachelor of Architectural Studies (BAS) degree. The researcher role emerged through this thesis, reflecting on my architectural and teaching practices.

Figure 1.2 explores the roles of an architect-teacher-researcher happening in parallel from the architect at the centre, with reflective loops moving from one role to another at different points in the research. The reflection loops through my different roles and comes back to the centre—to me as an architect and to my practice. This reflection takes place on multiple levels, looking at myself and looking and reflecting on myself. I, the architect, am at the centre, and all reflections start at the centre and return to the centre.

Teaching design elicited other related questions:

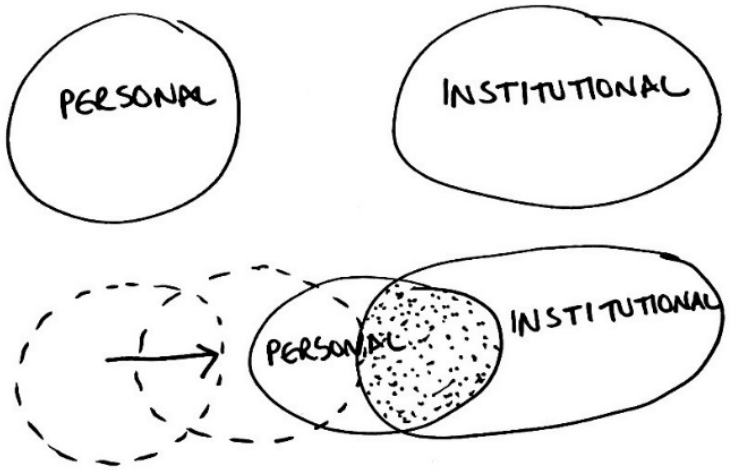


Figure 1.3 Personal versus institutional habitus (Author's drawing adapted from Payne (2015))

Could autoethnographic practice-based design research be as transformative for students' design practice as it potentially was for me as a mid-career architect?

Students expressed their desire for change through the #FeesMustFall and #RhodesMustFall protests of 2015 and 2016 in South Africa (Jansen 2017). Students desired a change in their practices and, therefore, demanded changes in universities' epistemology. The change desired by students was not only fees related but also validation of their knowledge and value systems and thereby a change in the institutional habitus—"a curriculum that somehow reflected them, that reflected their identity, their history before it was interpreted by the white colonisers" (Lange 2019, 80).

This research tries to critically situate the student within the institution and bring the habitus closer (Figure 1.3), echoing Payne's (2015) research in America, that the greater the correlation of an architectural student's personal habitus to the institutional habitus, the greater success students achieve.

Could reflective-diffractive practice-based design research validate differences that shift students' perceptions of the value of their personal habitus and act on the institutional habitus?

To try to effect change in the design practice of students, reflective-diffractive methods act on the students' personal habitus, as well as the student's context of learning—the institutional habitus. Thus, students not only change their perceptions of the value of their practices but also their perceptions of each other's values.

The autoethnographic practice-based design research scaled from my autoethnography to students' autoethnography. The research was designed as a study within a study, with the results and outcomes of my autoethnography informing the transformative design pedagogy, which includes the autoethnography of students and vice versa.

Autoethnography reveals tacit knowledge of design practice, but it can also be myopic and self-referential and lack relevance to broader societal issues. Therefore, the filter through which the research outcomes were tested is whether the reflective-diffractive practice-based autoethnography could be the catalyst for more conscious, critical, careful design practice considering design practice's responsibility towards society and the environment. The value of the autoethnographic practice-based design research to a greater architectural discourse will be demonstrated through its application to design pedagogy.

Therefore, the research questions were to unpack the 'auto' (mine and students'), and critically situate it within a local architectural and educational culture and context 'ethnos' and write and draw this research 'graphy'. Underpinning this first autoethnographic question were further questions on how practice-based design research methods could be adapted from postgraduate research to undergraduate pedagogy, and what type of pedagogy could support these research questions. The participants in this research are myself and architectural students in the undergraduate program of the School of Architecture and Planning of the University of the Witwatersrand. In the context of African philosophy, the very notion of autoethnographic research is a complex terrain which presupposes an individualistic

Western worldview. In the African philosophy of Ubuntu, you become a person in relation to your service to others, "I am because we are" (Mbiti 1969,108, Ramose 2003). There is no individual auto that can be seen as separate from the community. Thus, the inherent tension in this research is that in exploring students' individual ways of being and seeing, and in making space for their diverse worldviews, those very worldviews are being challenged. The 'I' , the 'auto' becomes dominant over the 'we', thus contesting some of their worldviews. In doing autoethnographic practice-based design research with my students my own worldview is confirmed, and yet those of some of my students may be threatened. This research does not retreat from this tension, it inhabits it. The knowledge created explores how and what we know through our design practices, and yet this knowing is ontologically configured by our own worldviews, the essential figure ground to all knowledge produced. Ontology is understood as the structuring of meaning in everyday life, but it is the often-silent unacknowledged lens through which research presents itself. Ontological limits are acknowledged throughout the thesis, not to put into question the assumptions and research that has been done, but rather to make clear that knowledge is not universal but always situated. The knowledge produced and explored in this thesis is situated within my own particular worldview, explored at the confluence of white South African and European culture, of being both and yet neither South African nor Portuguese.[5]

[5] Reading this thesis through this ontological lens is a direct response to the review of one of my readers, Sechaba Maape, whose careful, generous and detailed response to my PhD must be acknowledged.

1.1.1 Personal and institutional context—University of the Witwatersrand and University of Porto



Figure 1.4 A watercolour perspective of the John Moffat Building, which is home to The School of Architecture and Planning (SoAP) at the University of the Witwatersrand by John Fassler, circa 1955 (SoAP archive)

The questions posed above on architectural design practice are rooted in a very specific socio-political, personal, institutional and practice context. I commenced and completed my formation as an architect at the SoAP, with a period in-between at the Faculty of Architecture of the University of Porto (FAUP) in Portugal.

My formative years as an architectural student were spent at the intersection of these two institutions, with the period at FAUP bringing the context of architect formation and pedagogy at Wits into sharp focus.

My architectural education began in 1991 at the John Moffat Building (Figure 1.4). Designed by a group of architects who lectured at the Faculty: Prof. J.Fassler, W. Howie, G. Herbert, J. Shunn, U. Tomaselli and J. Morgenstern ('John Moffat Building' 1959), the building expresses the strong modernist heritage of the then Faculty of Architecture, where a pedagogy firmly rooted in the Beaux-Arts tradition of design, theory and history was established—with practising architects teaching at the Faculty over the years.

Design practice and pedagogy had strong links; therefore, as per Hill (2013), architectural design research was implicitly present.



Figure 1.5 Smiling Lion Building painting by Pancho Guedes (https://africanah.org/pancio-guedes-1925-2015-artist-and-architect)

In 1991, A*partheid* was ending, Nelson Mandela had been released from prison the year before, and South Africa's first National democratic elections were about to be held. The student protests of the 1980s[6] had ended, but it was clear from an overwhelmingly white cohort of students at Wits that the effects of Apartheid were still in force. I was a white woman student from a working-class immigrant family in an Anglo-Saxon men-dominated Faculty; therefore, I identified more with those students on the periphery—the few non-white students in the Faculty at the time.

I arrived at Wits just as a creative fifteen-year period under the influential Southern African architect Pancho Guedes had ended in the early 1990s, but his legacy lingered through the lecturers who were first taught by him and then became his colleagues (Figure1.5).

Guedes, first a student at Wits under the modernists at the Faculty, was persuaded that architecture was, above all, an art, integrating

[6] The 16 June 1976 student uprising in Soweto, spread to university campuses including Wits with numerous protests on campus resulting in running battles and teargas confrontations with Apartheid security police. Such protests continued from 1976 until the early 1990s. This student protest culture, seen as talking truth to power at Wits, has continued to this day, seen in the 2015 and 2016 #FeesMustFall protests.

other plastic and design arts such as painting, sculpture, interior, landscaping and urban design (Figure 1.5).

This creativity included the fusion of local artistic, craft and material vernacular culture with modern architecture that was turning towards the post-modern in terms of a plurality of architectural languages and influences. As one of his students noted, "Pancho taught us to invent buildings from dreams; to go beyond working consciousness into the realm of magicians and sorcerers. He inspired us with buildings he'd dreamt into reality" (Guedes et al. 2003, 2). Pancho claimed "for architects[,] the rights and liberties that painters and poets have held for so long" (Guedes et al. 2003, 20).



Figure 1.6 Siza Vieira's Faculty of Architecture of the University of Porto campus buildings on the banks of the river Douro in Porto (https://www.archdaily.com.br/br/805973/faculdade-de-arquitectura-da-universidade-do-porto-pelas-lentes-de-fernando-guerra)

After spending two years in the Guedes' inspired Wits Faculty of Architecture, I moved to the FAUP, Portugal, a Faculty very much under the influence of Alvaro Siza Vieira and Eduardo Souto Moura. The Faculty had just occupied a new series of buildings designed by Siza, who had recently received the Pritzker prize (Figure 1.6).

Siza's renown had grown as much from his regionalist and poetic modernism as from his revolutionary involvement in Serviço de Apoio Ambulatório Local, a local programme that attempted to solve the serious housing problems in Portugal. The programme understood that

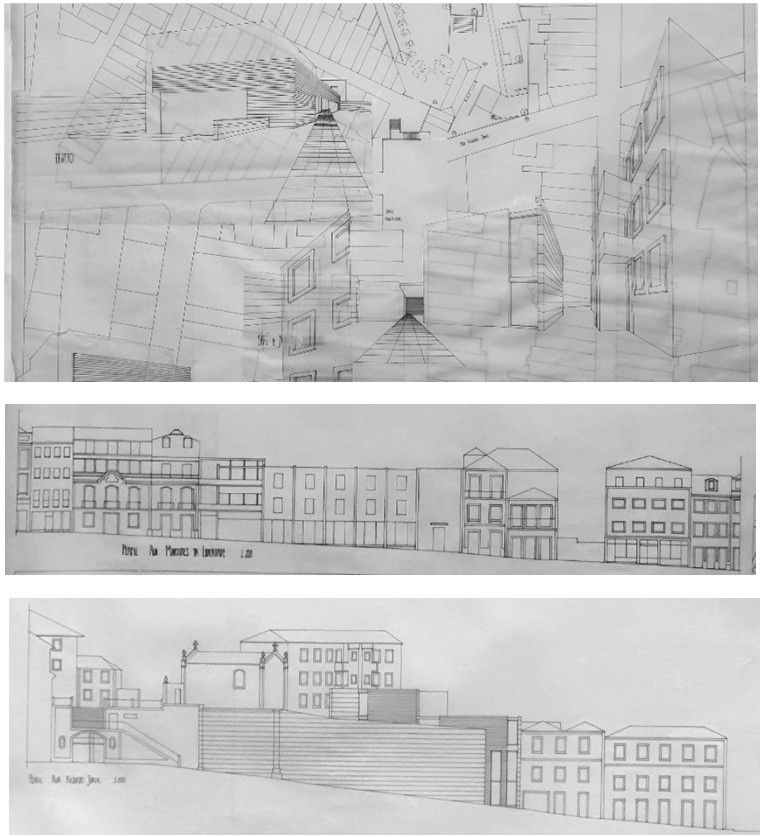


Figure 1.7 Streetscape drawings of Porto for a design project at the Faculty of Architecture of the University of Porto (FAUP) (Author's drawings while a student at FAUP, 1993-1994)

housing was socially constructed and "concerned not only about the definition of the space but also about the factors that produce it… [and]… the inhabitant not as a receiving object of a house, but as a fundamental element for its definition" (Oro 2013, 96).

It was a shock to me coming from the Guedes' dream world at Wits, where "poetry, fantasy and art were seamlessly brought together" (Fassler Kamstra in Guedes et al. 2003, 8). FAUP took the madness of Guedes' Wits and disciplined it, making it more rational.

FAUP also gave me an appreciation for the city as an organism and the collective responsibility for the quality of its places. Every project began with intense drawing sessions of the city (Figure 1.7). Every line on the drawing needed to be defended in terms of what it contributed to the embodied experience of the city.

This particular focus on the drawing as one of the outcomes of practice and not just the building was an extension of Guedes' assertion that "Architecture is art and that making buildings is less important than making drawings" (Herbert Prins in Guedes et al. 2003, 10).

Upon my return to Wits after South Africa's first democratic elections in 1994, Wits' pedagogy had become more socially and politically active—a resurrection of the modernist social discourse that architects could change the world.

I commenced my architectural practice in this era of political and economic optimism, but in the ensuing years of practice, the socio-economic and political context slowly changed.

As a white woman and practising architect, I was both privileged and challenged. My privilege was undercut by my diverse cultural background and my socio-economic status as the product of immigrant working-class parents. However, in the context of South Africa, the lingering advantages of whiteness, even post-Apartheid, were and are still structurally evident in the architectural profession.

Over the last twenty-five years, this has slowly changed, with public works being reserved by Broad-based Black Economic Empowerment (BBBEE)[7] procurement rules for architectural practices with higher BBBEE scores. However, commercial and private clients are free to procure architectural services without the need to comply with BBBEE. This has created two avenues of architectural practice: firms that target public works and have high BBBEE scores and firms with low BBBEE scores who work for private or commercial clients across the economic spectrum. The bulk of my practice was for private or commercial clients, with some public works completed in association with fellow women[8] architects.

[7] See the Glossary of Terms for an explanation

[8] The term woman/man' instead of female/male is used in most cases in this thesis, as 'female/ male' is defined as the sex of a species, whereas 'woman/man' is an identity construct that goes beyond mere sex, and is defined by culture and upbringing.

I returned to Wits mid-career to teach and conduct research while continuing my design practice. This afforded me a certain proximity to the cultural and institutional context, partly shaping the architect that I am.

Returning to academia, I was confronted with the ongoing transformation of both the architectural curriculum and pedagogy and staff complement, reflecting the concurrent transformations in architectural practice. The SoAP has had a demographic shift in staff and student numbers. From a 100% white, majority men staff complement and a majority white student cohort in 1991, the School has transitioned to a student and staff cohort more diverse and representative of the population demographics in 2023. I was faced with teaching a diverse cohort of students. Despite the ties that bind us, I was and am very keenly aware of all the ways in which we are different.

The complexity of being othered in South Africa lies at the intersection of culture, class, race and gender. I acknowledge that my feelings of being an outsider as a student at Wits from a working-class immigrant family reflect only a small part of that intersection. I narrate these experiences to reflect on and understand how my lived experience as a student and my academic context have shaped the teacher that I am.

I also returned to teaching and research at a moment of inter-related global crises of politics, environment, economy and, more recently, health, with the necessity for architects to be meaningful practitioners in a world of change and take collective responsibility in all these arenas. The aims of the profession have evolved since I entered it in the late 1990s. Issues of sustainability have become central to practice, as is demonstrated in the centring of the UN17 Sustainable Development Goals at the International Union of Architects World Congress of 2023 in Copenhagen (International Union of Architects, 2022).

It is in this context that questions on architectural pedagogy were posited:

Why were students still largely taught in the same way as I had been taught? What needed to change in design pedagogy, noting the political, social and sustainability challenges both globally and locally since I had graduated, as well as the diversity of the student cohort and the transformation of architectural practice locally?

To answer these questions within architectural pedagogy, I turned to critical and transformative pedagogy (Giroux, 1995; Jones, 2019; Mezirow, 1997), which questions and addresses the underlying structural issues that could impede learning. Critical pedagogy arose from applying the critical theory of the Frankfurt School to pedagogy, seeing it "as a moral and political practice" rejecting the neutrality of knowledge, and " addressing matters of economic and social justice" (Giroux 2021,1-2).

The critical pedagogies of transformation and care of Freire, De Sousa Santos and hooks[9] were particularly instructive. All three deal with pedagogies that are relevant to the South African context: Freire's teaching of the marginalised and the oppressed in the global south, hooks' focus on the intersectionality of race, gender, class and sexuality in the United States and De Sousa Santos' understanding of the conditions of the global south, which offer different perspectives on epistemology. I asked how these could be applied to the development of a transformative design pedagogy that could support the exploration of autoethnographic reflective-diffractive practice-based research.

1.1.2 Transformative design pedagogy in South Africa

Higher education in South Africa has multiple legacies, post-colonial, post-Apartheid and post #FeesMustFall. Decolonisation and transformation are two imperatives that arise from a desire to change these legacies. In the South

[9] bell hooks chose to stylise her pen name in lowercase to focus the public's attention on her work as a feminist rather than on her (https://www.britannica.com/video/who-was-bell-hooks/-262271)

African context, decolonisation and transformation are related concepts sometimes used interchangeably and have a proliferation of meanings and uses. However, transformation was the term adopted in South Africa in 1991 for change that undoes colonial and Apartheid injustices in society and higher education (Muraina et al. 2024, 184). In the #FeesMustFall protests, students critiqued the liberal heritage of 'transformation' and introduced the term decolonisation instead. However, some institutions, such as Wits, have maintained the language of transformation even post #FeesMustFall. The Wits Transformation Strategy laid out eight principal objectives in transforming the University: "diversify the academy and student admissions; curriculum reform; promote diverse and cosmopolitan residence life experience; institutional cultural change; institutional renaming informed by both Western and indigenous traditions; develop competence in South African languages; insource outsourced services" (Jansen and Walters 2022, 32).

However, decolonisation, despite some interchangeability with the concept of transformation in South Africa, is seen as a deeper, more radical concept that seeks a fundamental shift in mindset, education and identity to dismantle colonial structures, ideologies and epistemologies(Muraina et al, 2024)"The significance of the decolonial turn is its critique of the politics of knowledge of the modern university. This critique comes in a variety of accents, emphases and registers. Holding it together is a rejection of the centring of Eurocentric forms of knowledge for understanding and explaining the world and the place of human beings in it." (De Sousa Santos et al. 2022, 1)

Decolonisation seeks instead to centre local African ways of knowing and being in the university. Therefore, the decolonisation of South African universities includes changing the criteria of what should be included in the curriculum or canon, changing student and staff demographics and recalibrating the power dynamics of learning (Mbembe 2019).

Notwithstanding the work done to improve access to historically white universities for all students of colour after the end of Apartheid, the #FeesMustFall protests exposed that the knowledge project had remained principally untransformed. The #FeesMustFall protests began by protesting against fee increases at South African universities that resulted in the financial exclusion of students. However, the protests quickly morphed into addressing the bigger issues of decolonisation, including dismantling the still visible roots of colonial power within universities in #RhodesMustFall (Jansen 2019).

In response to these protests, South African universities accelerated the transformation of the politics of knowledge, essentially "what is taught (knowledge content), how it is taught (knowledge hierarchies), and, for some, by whom it is taught (knowledge authorities)" (Jansen and Walters 2022, 7). Therefore, a transformative pedagogy builds on critical pedagogy by empowering students to question and challenge the curriculum, pedagogy and educators in their learning process. In this thesis, pedagogy is deemed more transformative than decolonising as it aims to reform the institution from within, but it has qualities of both.

A transformative architectural pedagogy rethinks the teacher-student relationship in the design studio, critically questioning traditional assumptions and norms. It seeks to reveal the studio, the central site in architectural education, as not neutral but "integral to social, cultural, and political relations that characterize real-life conditions" (Salama 2021, 25). Salama (2021) noted the urgency with which the reimagination of architectural education is required in the current context internationally.

The Helsinki Design Lab's *In Studio: Recipes for Systemic Change* notes similarly that "a successful education system in the future will be defined by how well it handles diversity and enables all students to participate and thrive" (Boyer et al. 2011, 54). Bell (2014; 2022) also posits a culturally relevant architectural pedagogy by unveiling the invisible cultures

in the design studio, developing positive ethnic and social identities to support students' critical consciousness and recommending diverse learning styles and critical race theory practices for staff and students. Jack Travis (2012) also draws from critical race theory for an architectural pedagogy that focuses on students' learning.

In the context of South Africa, the supposed neutrality of the studio is further questioned due to the views inherited from imported models of education:

> "[The] condition of architectural education and practice in Sub-Saharan Africa, where most educational models were imported from, when not even imposed by, colonising countries… need [a] reconceptualising curricula to allow for a plurality of different voices to be heard." (Berlanda 2017, 69)

The contestation of inherited colonial models of architectural education commenced towards the end of Apartheid in the early 1990s, with South African universities opening to previously excluded students of colour. At the time, Low and Smuts (1997) questioned whether existing South African universities could provide a transformative pedagogy, noting the depth of their institutional culture/ habitus based on these imported models. Berlanda (2017), on arriving at the School of Architecture at the University of Cape Town fifteen years later, noted that these models were still present. He questioned both the scholarly excellence of the imported models and the discrepancy between the formal aesthetics and the material living conditions of the people affected by the transformation of landscape" (Berlanda 2017, 69).

This was a problem across Africa, including at the then Ife University, now Obafemi Awolowo University, as echoed by Barbero and Saviddu (1981, 117), who wrote that "a choice has to be made between the interest of the institutional power and those of the population, between the imposition of an imported model and the pain-staking research for solutions that take into account the meaning and consequences of the problems".

Prior to the early 1990s, students of colour required special ministerial permission to study architecture in South Africa as it was exclusively available at white-only universities and not available to students of colour at historically black universities with limited curriculum choices. The first student of colour to study architecture with ministerial permission was Aziz Tayob in 1964 at SoAP. He was allowed to study; however, the campus was still segregated, so he was not allowed to eat with or socialise with white students outside of his course (Mothoagae 2023; Tayob 2024).

Towards the end of Apartheid, historically white universities began admitting students of colour, albeit with strict quotas. These quotas were abolished when Apartheid ended. At SoAP, the transformation of architectural pedagogy became an urgent imperative in the early 1990s, towards the end of Apartheid. Wits was one of the sites of student protests against Apartheid. Riot police were regularly on campus to quell the growing discontent among students and staff. Thirty years later, Wits is still regarded as the nexus of protest, as evidenced by the #FeesMustFall protests starting on Wits' campuses and spreading to other universities (Habib 2022, 375).

The different school systems for black[10] and white learners during Apartheid, with their unequal resources and quality of teaching, meant that using school academic results as the sole requirement for university entrance merely replicated that inequality. In the early 1990s, SoAP staff recognised the need to transform access to university and the support required by students of colour to succeed. To broaden access to the university in racial and socio-economic terms, the entrance requirements to SoAP were expanded beyond academic results achieved at school level by prospective students. From the beginning of 1990, other requirements were added to the entrance requirements, such as an interview and a creative work portfolio, which balanced out school academic results. This meant that students from poorly resourced and poorly performing schools, typically students of colour, could demonstrate their aptitude

[10] The term political term 'black' in the post-Apartheid South African context is used to mean all persons of colour that were previously disadvantaged under Apartheid.

for studying spatial design through other means. The result of these expanded entrance assessments was greater, more equitable access to SoAP (Interview 007, 2024).

Unfortunately, some students, no matter how suited to the study of architecture, were still falling short of minimum academic requirements in Maths and English mandated by the central university administration.

> "One student, I'll call him Thomas, arrived with a sturdy and meticulous model of his dream house, with walls glued together from hundreds of used matchsticks, gutters from spliced drinking straws and roof flashings made from cool drink tins. He had kept it intact over thirty miles of minibus taxi trips from Orange Farm, a sprawling informal settlement where the average household income is around $150 per month, [and] a place from which we were yet to have a student. Thomas aced his interview, giving quiet and focused responses, and when it was over he insisted that I keep the model. Thomas, unlike the young hero in a charity campaign, did not make it into the course and go on to become a licensed architect. He failed the math exams required for university entrance." (Le Roux 2014, 2)

The students from disadvantaged backgrounds who did manage to gain access through the expanded entry assessments still struggled to adjust to university. The SoAP teaching and learning committee ensured that students received additional tutoring and support, stigmatising those students who most needed the assistance. To formalise the assistance and remove the stigma, a new extended curriculum programme was put in place, with first-year students from disadvantaged educational backgrounds doing a bridging Maths course, as well as some of the first-year courses, but not the major Design and Construction courses. These students would complete the three-year BAS degree over four years. Although the extended programme had some success, as students continued into various

courses at university, it was deemed by Wits to have a low throughput rate and was discontinued (Interview 007, 2024).

The additional support offered to students reverted to the more informal additional tutoring offered by individual lecturers. There was, however, still a sense that transformation was imperative, with Janse Van Rensburg's PhD research continuing this emphasis. Her research formulated strategies to ensure that first-year students from disadvantaged backgrounds would receive sufficient support to succeed, including mid-year holiday camps and drawing and technical workshops. Importantly, these workshops were open to all students, ensuring there was no stigma attached to the additional assistance. Interestingly, the students who came to the workshops were primarily students who were failing and really needed the additional assistance or students who were doing very well and wanted to improve their marks even further (Janse Van Rensburg 2016).

Janse Van Rensburg (2016) also worked on the entrance assessments, fine-tuning them to ensure that deserving students from all socio-economic and educational backgrounds had the best chance of gaining access to the architectural programme. Writing and drawing exercises were added to the interview, portfolio and academic requirements.

Janse Van Rensburg's (2016) research on pedagogical transformation grounds the research in this thesis. She was also influential in the transformative pedagogical strategies developed by several of her younger colleagues at SoAP:

- Inclusive educational and professional access (Felix 2018)
- Care and support, especially for previously disadvantaged students (Janse Van Rensburg 2016; Felix 2018)
- Collaborative, socially and culturally sensitive interdisciplinary learning (Szentesi 2022)

- Embodied and lived experience of deep history as a way of knowing architecture (Maape 2018)
- Embodied and reflective material practices exploring diverse lived experiences (Bahmann 2022)
- Feminist perspectives on material knowing (Stone-Johnson 2022)

Other South African and African architectural pedagogy researchers not only questioned the existing model of architectural education, which they had inherited through colonialism but also put forward several strategies for an alternative transformative architectural/ design pedagogy at the intersection of class, race, gender and social inequality:

- Inclusive educational and professional access (Luckan and Pillay 2019)
- Student-centred approach: recognising students' indigenous knowledge, socio-cultural contexts, workload and lived realities (Olweny et al. 2021)
- Teachers as facilitators in an engaged pedagogy (Saidi 2005; Hendricks et al. 2020)
- Playful learning: "embracing local ways of knowing and being" (Cassim 2020, 524)
- Plurality of voices (Berlanda 2017)
- Multi-cultural curricula addressing a politically, socially and culturally changing society (Saidi 2005)
- Nurturing creative confidence (Gachago et al. 2024)

The transformative pedagogical research in this thesis is evolving, building on the strategies that came before and learning from them.

1.2 Aim: Conscious, critical, careful practice

This research aimed to change architectural practice—mine and students'—but not just any change was desired. Initially, the desire was to build confidence in myself through a better understanding of the roots and processes of my design practice. My lack of confidence in my design practice was not unique; other women colleagues felt much the same way (Women Architect Colleagues, Focus Group 1, 2024). Our collective experiences of architectural education were being othered due to our gender, race or socio-economic background and, in some cases, all three. Thus, confidence needed to be built, confidence in our divergent voices.

The term confidence used in this thesis is akin to Bandura's (2012) self-efficacy, which is the perceived ability to succeed in a specific practice or task. Thus, the confidence I initially wanted to build was my perceived ability in design practice. How does one build confidence? Bandura (2012) suggests that self-efficacy can be built through four avenues, which, when applied to design practice, would be:

- *Mastery experiences:* deliberate, conscious and repeated design practice, resulting in successfully completing projects, builds confidence
- *Vicarious experiences:* observing peers who are perceived as similar to ourselves and succeeding at tasks in the design studio enhance our belief that we can also succeed
- *Verbal persuasion:* receiving encouraging and positive feedback
- *Emotion and physiological states:* being aware of and managing social, emotional and physical responses to practice

Practice confidence in the vein of self-efficacy is different to self-confidence which can be seen as arrogance, conceit or boastfulness. These notions of self-confidence are in fact counter to African philosophical principles where the individual is seen as part of a community and elevating the individual's self-confidence can be seen as an ontological break. By contrast practice-confidence or self-efficacy focuses on skills confidence and epistemological confidence rooted in African excellence " beyond a dialogue with sites of European or North American knowledge production"(Auerbach and Dlamini 2019, 131).

To develop confidence in practice in students and myself required three essentially interrelated elements. Firstly, conscious design practice within a pedagogy that was encouraging and positive. Secondly, self-awareness and care with our social, emotional and physical responses to practice. Lastly, the critical agency in situating ourselves within communities of practice that demonstrate to ourselves that we can succeed.

Why conscious, critical, careful practice? Why are all three required?

Conscious practice is self-aware and deliberate. However, being self-aware of the drivers and origins of practice could lead to narcissistic practice. Therefore, adding a critical dimension to conscious practice recognises that the future can be different from the past—that practitioners have agency and could contest the social, spatial, political and economic norms within which the practice operates, thereby possibly transforming their context and, by extension, their world. Further, including a practice of care to a conscious critical practice injects care in the ways in which architects practice, care for themselves, care for others, care for the environment and care for the world.

The practice paradigm and the world into which students are graduating are very different to the one I encountered as a student. Issues of care and criticality are arguably part of this generation's zeitgeist. They also have much more

confidence in their diverse voices than we did, or do they? When asking a cohort of women architect colleagues of my generation about their confidence levels, it was clear there was a crisis of confidence among us, a lack of confidence in our design practices and in being heard and recognised (Women Architect Colleagues: Focus Group 1, 2024). This is echoed in recent research on the confidence culture and remaking of feminism (Gill and Orgad 2017), as well as in research noting that confidence can be lost before it is acquired due to various structural reasons like patriarchy (Ahmed 2016). However, when I asked a class of students in 2020 that same question, the crisis of confidence appeared to be a thing of the past, or was it? Due to the students' overwhelming response that they had confidence, I questioned the focus of my research, having initially titled the research 'Building Confidence'. The doubts about whether students' levels of confidence were real came later, after analysing the results of the student surveys and discussing these outcomes with them. It was clear from these findings (discussed in 3.2.1 and 7.2.4) that students were projecting confidence in public that they did not necessarily feel. However, at the time of the initial question on confidence, the research focus pivoted to understanding the core ingredients of confidence, especially since students did not appear lacking in confidence. At that point, my research intention was that in teaching, I would also be taught—that together, we could build a justified confidence in our diverse design practices by becoming more conscious, critical and careful.

1.2.1 Conscious practice

Conscious design practice is self-aware, deliberate, intentional and reflective. To be conscious is to be both self-aware, reflecting inwardly on the self and socially aware, reflecting outwardly onto the context. To practice consciously means to be aware of both the self's intentions and processes. as well as how these relate to the task at hand, the context of practice, and the practice's impact on its community. Conscious practice is therefore both self-awareness and other-awareness, fitting within relational African philosophies.

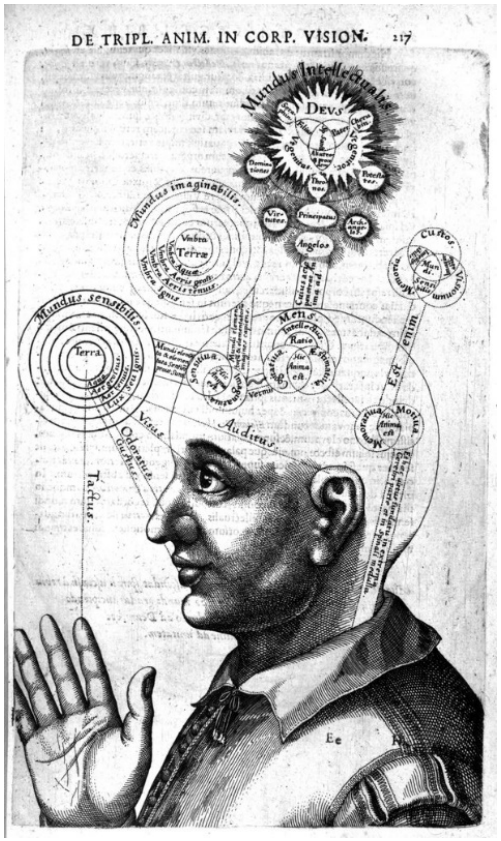


Figure 1.8 Diagram of consciousness, from Robert Fludd's Utriusque Cosmi Historia edition published in 1629

Consciousness as essential to the concept of self and personal identity was described by Locke in his essay *Concerning Human Understanding*, first published in 1690(1726).

In contrast, Fludd's Diagram of Consciousness from 1629 (Figure 1.8) depicts it as a complex process dependent on the senses and linking three levels of the mind—the body, soul and spirit—with different parts of the brain and three different worlds—the intellectual, imaginary and material. However, by the 1960s, consciousness was seen to be more than self-conscious introspection, including broader notions of awareness of both inner and outer worlds (Sutherland 1989).

Consciousness and self-awareness have been a subject of interest in various fields, including psychology (Silvia and O'Brien 2004; Sutton 2016), neuroscience (Block 1996), philosophy (Dennett 2018), management studies (AbuJbara and Worley 2018) and education (Hando 2014; Ramani et al. 2017; Kern and Wehmeyer 2021).

Research has spanned various applications such as personal development (Grant et al. 2002), identity formation, performance improvement (AbuJbara and Worley 2018), mindfulness, adult development (Klimoski and Hu 2011; Carden et al. 2022) and developing multi-cultural awareness (Bezard and Shaw 2017).

Self-awareness and Social awareness are also core social and emotional competencies in T-SEL programmes (Oberst et al. 2009; Durlak et al. 2011; Carter and Yeo 2014; Jameson et al. 2015; Stillman et al. 2018; Jagers et al. 2019; Kern and Wehmeyer 2021).

Conscious practice aligns with mindfulness practice and mindful education, including Mori Akiras' education for self-awareness, where self-awareness or 'jikaku' is seen as an awakening to one's social identity—"Who I am in society" (Sevilla-liu 2021,253). This echoes Freire's 'conscientização', variously translated as conscientisation or critical consciousness(1998). Through this consciousness-raising, an individual's awareness of their social, political and economic position cultivates a critical perspective within them, enabling them to question the status quo and engage actively in change and social justice (Freire 1998). Conscious practice, as opposed to consciousness, is the purposeful application of critical consciousness towards developing a specific skill or practice, for example, design practice.

It is similar to "deliberate practice", where experts become highly skilled through engaging in highly focused, intentional practice designed to address specific challenges and improve performance (Ericsson et al. 1993,363). However, deliberate practice falls short in explaining practices that produce cultural artefacts, such as design practice.

Webster (2011), in unpacking the relevance of Bourdieu for architects, noted Bourdieu's account that culture was assimilated by individuals in unconscious processes and how this culture is then enacted through the architect's choices.

> "His most conscious intellectual and artistic choices are always directed by his own culture and taste, which are themselves interiorizations of the objective culture of a particular society, age or class." (Bourdieu 1969, 112)

Therefore, architects need to become self-aware and conscious of these choices within a local and regional practice field. Only then can they practice deliberately, intentionally and consciously.

How would conscious practice fit within design practice and education?

Conscious self-awareness in design practice has been researched by various scholars. Hakio and Mattelmäki (2019) explored and implemented awareness and mindfulness in design for sustainability. Van Schaik (2008, 57) says, "architecture is necessarily a product of mental space - the accumulated histories of individuals in space" and that it is important for architects to design with a consciousness of how their spatial intelligence was developed and is enacted in design practice.

Conscious self-awareness and social awareness are seen as significant for architectural or design education (McLaren and Stables 2008; Malik 2016; Ten Brink et al. 2022), acknowledging and reflecting on students' habitus before entry into the institution (Webster 2008) and developing "self-awareness and confidence… as necessary attributes for 'creative design action'" (Lecanides-Arnott 2014, 1085). Furthermore, it challenges "architectural educators to think consciously of their work and experiences in political terms" (Dutton 1991, xv-xvi; Feigenberg 1991), developing students as reflective practitioners (Britton 2014; Turner 2021) and linking self-awareness and empowerment in architectural education (Aldrich 2005).

Conscious design practice " promotes the emergence of places that have an awareness of and responsibility towards people, communities, and ecosystem" " (The Centre For Conscious Design n.d., https://theccd.org/conscious-design-principles/) However, conscious design practice should be more than focused on the participants and users. Designers should also be aware of their particular ways of seeing and their aspirations

and how these complement or contest the design process of a particular project with a particular programme, brief and site and with a particular group of participants and users. Therefore, conscious design practice suggests a high level of self-awareness and relational social awareness that together contribute to a more intentional, careful, reflective practice.

Reflective design practice was put forward by Donald Schön (1984; 1985; 1987), who identifies two concepts of reflection: "reflection-in-action"(1984,21;1987,141) and "reflection-on-action"(1984,277; 1987,114). Reflection-in-action is reflecting in the act of designing or drawing, therefore in action, while reflection-on-action looks back, reflecting on the action already taken. These two, reflecting in the process of designing and reflecting on the past design process together produce a more conscious design practice. Nonetheless, feminist and critical pedagogy scholars critiqued reflective practice as too self-referential in not addressing the underlying structures, norms and power dynamics that underpin practice (Haraway 1988; Webster 2008; Barad 2014). Their critical reflexivity, and later diffraction, placed more emphasis on social awareness than self-awareness.

In the current research, conscious design practice aligns with Schön's self-reflective practice, developing self-awareness of the personal spatial origins of the designer's ways of seeing and being. However, it also includes social awareness and a critical understanding of the designer's position within their socio-economic, practice and institutional context. However, in doing so, conscious practice overlaps critical practice.

1.2.2 Critical practice

Critical practice in this research refers to two interrelated aspects. The first aspect relates to critical theory, which posits an understanding of the social-spatial order of design practice through the lens of subject and object, the architect/ designer and their practice context. This contextual understanding of practice relates to Haraway's (1988) critical

reflexivity, critically situating the architect within a paradigm of local practice. The second takes this understanding of context further by asking how architects can destabilise the existing socio-spatial orders within which they are situated through notions of "critical spatial practice" (Rendell 2012,92; 2018,3; 2020,xi; 2021,7). This "critical spatial practice" is then viewed through a feminist practice lens, which seeks to build a broad new vision incorporating the rights of all bodies, identities, voices and viewpoints.

The first aspect of critical practice in the current research follows from the critical theory of the Frankfurt School. German idealism noted critique as a separate form of knowledge, which is aware not only of the object of knowledge but also its context and the subjective ways in which that context determines the knowledge of the object. Distinct from the descriptive analysis of traditional theory, critical theory seeks an explanation and evaluation of the object, as well as the agents and context of that object (Thompson 2017). The context of knowledge in the current research is architectural practice and education within the last thirty years, from the end of Apartheid in 1994 to present-day 2024 in Johannesburg, South Africa. Critical practice in this context seeks to understand how the socio-spatial and historical context shapes the architect and architectural student both in practice and education. These thirty years of architectural practice and education in Johannesburg, South Africa, are explored through personal experience—mine and students.

This requires architects, or architectural students, to critically situate or position themselves within their context. By doing so, they gain "situated knowledges" (Haraway 1988) from their particular position, context and viewpoint. Through critically situating themselves, architects and architectural students gain knowledge about themselves, their design process, their design outcomes and architecture itself.

When I commenced autoethnographic practice-based design research upon my return to academia in 2018, questions arose about whether mainstream architectural practice, which loosely defined my practice, could adequately address global and local crises. What kind of practice could attempt to provide a counter-narrative?

"Critical spatial practice" (Rendell 2012,92; 2018,3; 2020,xi; 2021,7) could provide that counter-narrative, forcing me to ask myself how my practice and my students' practice could and should change. Critical spatial practices question and critique existing socio-economic, spatial orders compared to mainstream or commercial practices that reinforce and maintain them (Rendell 2012). However, they go further than the Frankfurt School's critique or Haraway's (1988) "situated knowledges" by not only critiquing existing order but also "aim[ing] to change, transform or alter [it]" (Rendell 2018, 16). Rendell (2018, 13) noted that a feminist approach to critical spatial practice incorporates the qualities of "collectivity, subjectivity, alterity, performativity and materiality" and is suited to our current epoch of a "three-stranded collapse of ecology, energy and economy".

Feminist critical spatial practice was explored as an alternative type of practice that could posit new futures (Petrescu 2007; Stratigakos 2012; Schalk et al. 2017; Rendell 2018). Positing that architecture has never been neutral, every practice either affirms existing values or counters established values, striving for divergence and transformation, even in the most mundane projects the practice undertakes (Schalk et al. 2017). Thus, feminist critical spatial practice not only questions established orders but is generative and "projects, activates and enacts alternative norms", re-framing and reconstructing "our present practices and even more radically our desired futures" through the methods of "action research, backcasting, future studies, historiography and discourse analysis" (Schalk et al. 2017, 15). These methods were incorporated into the current research's methods, exploring new critical ways of practising and teaching architecture.

Critical practice in this research thus integrates these notions. Firstly, critiquing and understanding the context of practice, then critically situating myself, the architect, within my practice and institutional context, and lastly, asking how I can alter, change and transform my practices and, by extension, my contexts.

Stratigakos (2012, 6) references Muf and Meta Brunzema as architects who have enacted this transformation through their "desire to destabilise hierarchies to create more inclusive and experimental approaches".

> "Feminism remains an inherently positive approach: it insists not only on the necessity but also on the possibility of change. Feminism weds theory to practice and encourages us to rethink the relationship between architecture schools and the larger professional world. By linking individuals to systems, feminism allows us to perceive structural limitations and envision dissolving barriers. And feminism's attention to practice — and not just to practitioners — fosters new ways of understanding and experimenting with process." (Stratigakos 2012, 15)

Critical theory processes involve "self-reflection and desire for social change"; "they seek to transform rather than to only describe" (Rendell 2020, xi). Critical design practice, therefore, places agency and positionality at the centre of practice, asking designers to understand their position within their local culture of practice and critically question what changes they need to effect.

1.2.3 Careful practice

Having unpacked the meaning the current research attributes to interrelated conscious and critical practice, careful practice must also be explored. Architects and architectural students can practice critically and consciously, but without incorporating care, their practices and contexts may change for the worse and not for the better. Care for

themselves, for others, for the environment and for their socio-political worlds is imperative in ensuring that the desired change is beneficial for all.

Gilligan (1982) introduced the "ethics of care" as a critique of traditional moral theories like Kohlberg's, noting that women often approach ethical dilemmas focusing on relations and care, whereas Kohlberg's moral theory is based on reason and abstract notions. The ethics of care was then taken up by various feminist scholars such as Tronto (1998; 2013), Tronto and Fisher (1990) and De La Bellacasa (2012). Care has a dual meaning; it is a mental disposition of concern and a practice as a result of that concern. Care is

> "a species activity that includes everything that we do to maintain, continue and repair our 'world' so that we can live in it as well as possible. The world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web." (Tronto and Fisher 1990, 40)

This definition includes action and puts care into practice. Tronto and Fisher (1998,16-17) further identify four phases of the practice of care: "caring about", "caring for", "caregiving" and "care receiving". Tronto (1998; 2013) also states the qualities of care: attentiveness, responsibility, competence, responsibility, plurality, communication, trust, respect and solidarity.

However, it must be noted that ethics of care has a complicated past:

> "Historically, care has been a morally ambiguous word given that much oppression has been wrought in the name of care, as in, for example, colonialism. Care can be applied in harmfully paternalistic ways, bringing coercion to repressed communities." (Flower and Hamington 2022, 11)

In counterpoint to this, the "philosophy and praxis of care" and an " Ubuntu… poesis of care" (Diouf et al. 2023,35) is embedded in the African relational philosophy of Ubuntu, variously called " 'umuntu ngumuntu ngabantu' or 'motho ke motho ka batho'" (Ramose 2003, 272) which has been variously translated into "I am because we are" (Mbiti 1969), the most commonly used translation or, "that to be a human be-ing is to affirm one's humanity by recognizing the humanity of others and, on that basis, establish humane relations with them" (Ramose 2003, 272), or "I am because you are, you are because I am" (Ngubane and Makua 2021, 3)

What would a practice of care in architecture and architectural education look like?

Researchers have explored the many facets of care in architectural practice (Nordwall and Olofsson 2013; Imrie and Kullman 2016; Krasny et al. 2019; Guersenzvaig and Ventura 2022), including care's relation to awareness (Yalçın and Ulusoy 2015), care and well-being in practice (Rawes 2013), the connection between care, empathy and design (Pallasmaa 2016), maintenance and care(Mattern 2018) and that "the ethics of care is tied to real circumstances of life rather than to formal and abstract moral conditions" (Cohen and Fenster 2021, 281).

Krasny et al. (2019, 16) see architecture and urbanism as practices situated between the bodies and the environment and the practice of critical care in architecture as "responding to the interconnectedness of economy, ecology and labour" Further, they see the four practices of care as applied to architecture and urbanism as care for land and water, care for the repair of buildings and environments, care for skills and labour and care for production.

> "In developing the 'architectures of care' that are now even more urgently required by today's complex cities, integrated sexed and ethical aesthetic ecological methods are essential 'technologies'. With these criteria,

architects, urban designers and spatial practitioners may be more enabled to cultivate and protect today's and future generations' social well-being and biodiversity." (Rawes 2013, 53).

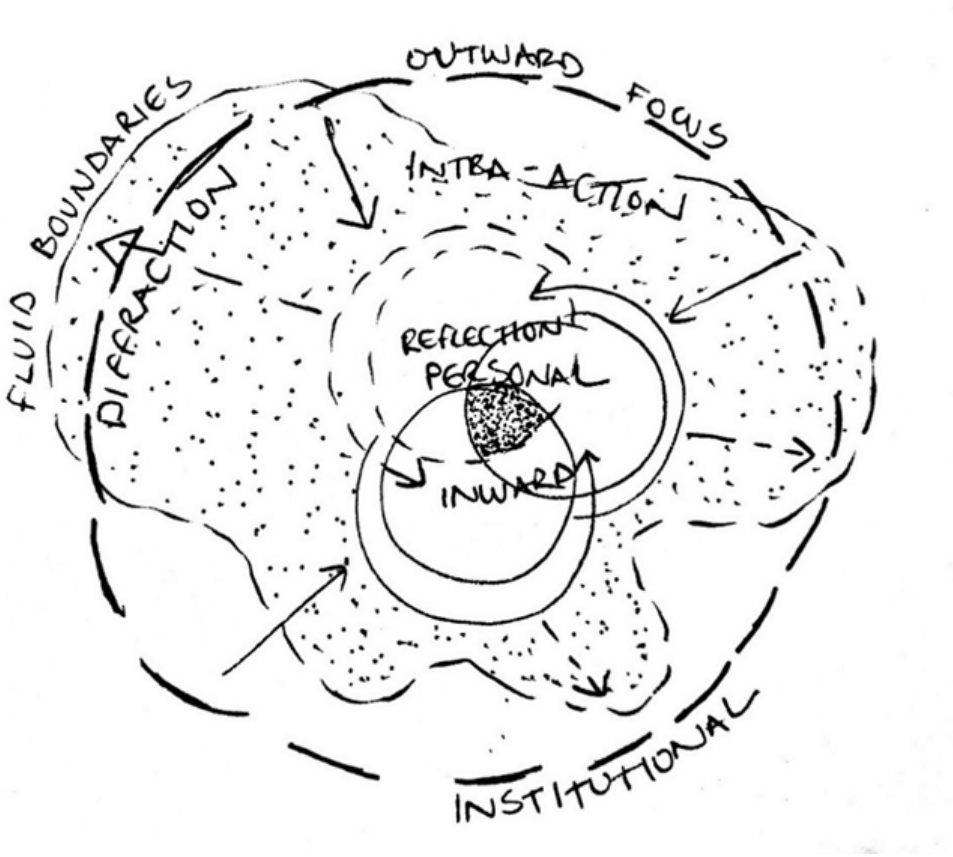
Various researchers have also demonstrated the central role that care should play in education (hooks 1994) and, generally, in design and architectural education (Tan 2019; Thompson 2019). Further, researchers have also focused on the relation of care to students' well-being in architectural education (Holgate and Jones 2011; Rice et al. 2021; Stead et al. 2022). The importance of the affective domain in building students' value systems (Savic and Kashef 2013) has also been demonstrated to be important, as well as the related values of nurturing students (Charalambous and Christou 2016; Gachago et al. 2024; Duong and Brew 2021; Rice et al. 2021), especially in African design education (Olweny et al. 2021; Gachago et al. 2024).

Careful design practice, therefore, requires designers and students to take care of themselves, each other, others in the building process, the environment and their world. This is done through the actions of caregiving, care receiving, caring about and caring for (Tronto and Fisher 1990). However, for students to develop that care, they need to feel cared for and receive care from their teachers and educators. They cannot develop careful practice in a vacuum. It is not something that can be taught cognitively; it needs to be learnt effectively. The nurturing and concern with well-being and the caregiving demonstrated by educators in a careful pedagogy is the first step towards building an ethics of care in architecture. In the South African context, this pedagogy of care is deeply rooted within the local relational philosophy of Ubuntu:

"Ubuntu pedagogy draws from the Ubuntu philosophical values of compassion, care, cooperation, respect and dignity to provide a learning environment that brings together students from different cultural backgrounds to

> value each one another's cultures, opinions, ideas and learn to cooperate and to coexist." (Ukpokodu 2016, 155)

The research in this thesis aimed to change my and my students' design practice to become more conscious, critical and careful, thereby changing the context of architectural education and practice, both professionally and institutionally. The research aimed to effect this change through autoethnographic practice-based design research embedded in a decolonial, transformative pedagogy.


OUTWARD FOCUS
INTRA-ACTION
REFLECTION
PERSONAL
INWARD
INSTITUTIONAL
FLUID BOUNDARIES
DIFFRACTION

The three main bodies of literature relevant to this research are autoethnography, practice-based design research and transformative pedagogy.

The first is autoethnography due to the research starting from a personal place of desiring change in design practice through greater self-awareness and an understanding of the drivers, roots and context of my design practice. Autoethnography evolved from anthropology (Ingold 2018) and ethnography (Clifford and Marcus 1986; Van Maanen 2011) as anthropologists turned their research inward to themselves (Chang 2008). In turning the autoethnographic research inward, subjectivity and the context of the knowledge were foregrounded, thus rejecting the concept inherent in ethnography and anthropology that research should be objective and neutral (Reed-Danahay 1997). Autoethnography critically situates the self, 'auto', within a culture, 'ethnos', and is a method based on writing, 'graphy', and an outcome (Ellis and Bochner 2000).

> "Autoethnography is a postmodern, poststructuralist method that functions within the interpretive and/or critical paradigms." (White 2012, 26)

Autoethnography is a broad field; however, there are emerging categories of autoethnography along a continuum from the interpretative, narrative and evocative through the visual to the analytic (Ellingson and Ellis 2008). There is even a suggestion for the symbiotic combination of the above categories (Beattie 2022).

The autoethnography in this thesis combines various categories, including the narrative and visual, in autoethnographic pedagogy where autoethnography is scaled from myself to a group of students. The autoethnography situates the self—myself and students—within a complex and transforming South African practice and educational context with all its socio-political issues.

The second body of literature is practice-based design research, which forms the basis of the autoethnography. Practice-based design research is seen as "its own genuine research paradigm, independent of the sciences, the humanities and the arts, one that is appropriate for dealing with purposeful change in complex, ill-defined, real-world situations" (Grand and Jonas 2012, 10).

As previously noted, the umbrella term practice-based design research incorporates various approaches, including practice-led and practice-based. Practice-led is "research initiated by practice and carried out through practice" (Malins and Gray 1995, 3), "involving the researcher as participant/ observer ('reflective practitioner')" (Malins and Gray 1995, 8). Practice-based is a broader term that includes all research that uses "practice as the basis of investigation" (Yee 2010, 5). It should be further noted that various researchers use the terms creative practice research or design research interchangeably with practice-based research and that this type of research has been carried out in various creative and arts fields, including but not limited to architecture, arts, fashion, design and music.

In this thesis, the research is a combination of practice-led and practice-based, with the research initially led by investigations into past practice to unearth tacit knowledge on practice, which is then tested through current practice. The broader term practice-based research is used throughout.

Practice-based research started to emerge in the late 20th century, with various researchers in the creative fields trying to define it (Frayling 1993; Archer 1995; Cross 1999; Malins and Gray 1995). When looking at their various taxonomies, it is clear, however, that they are describing a similar process. As Gray and Malins (2004, 25) put it, "practice-based research is like the Hindu story of several blind men attempting to describe a mysterious creature, the elephant, that was so large each could only have a partial experience". Whether they were directly or indirectly describing their

fellow researchers and themselves as blind, it is clear that they are defining a research process from their viewpoints, but which includes different processes.

Formal postgraduate programmes in practice-based design research in architecture arguably commenced at the Royal Melbourne Institute of Technology (RMIT). These programmes spread to Europe with the Adapt-R and later the Community for Artistic and Architectural Research (CA^{2}RE) programmes. In parallel, there was emerging research at various European and British universities, including The Bartlett, University College London (United Kingdom), University of Leuven (Belgium) and Scandinavian universities with the Academy for Practice-based Research in Architecture and Design[11] (AKAD). In South Africa, the first formal programme of practice-based design research commenced in 2018 at the Department of Architecture at the University of the Free State (UFS) in Bloemfontein. However, in all these institutions, practice-based design research was mainly the preserve of postgraduate programmes. The research in this thesis adapts the methods from these postgraduate programmes for undergraduate architectural students.

The practice-based design research methods used are reflective and diffractive, reflecting inwardly on the self and outwardly situating the designer/ student in their context. Some of these methods originated before the commencement of formal programmes of practice-based design research, such as Schön's (1984; 1985; 1987) research on reflection in practice. Diffractive methods emerged from feminist critical theory largely as a critique of reflection's singular focus, emphasising relativity, multiplicity and difference (Haraway 1988; 1997; 2013; Barad 2007; 2014; 2017).

[11] Refer to the Glossary of Terms

The third field of knowledge is transformative pedagogy, as the autoethnographic practice-based design research methods are applied in design pedagogy. Transformative pedagogy is part of a "significant paradigm shift in the theoretical underpinnings of educational learning theory from 'behavioural' and 'cognitive psychology' to 'humanist' and 'situated' theories of learning" (Webster 2008, 64). Transformative pedagogy emerged from the 20th century's critical pedagogy (Giroux 1985; 2007) to focus on 21st-century problems of the post-industrial world. Jones (2019) traced the roots of transformative architectural pedagogy from Kant's (1889) critical philosophy and the critical theory of the Frankfurt School through Dewey's social critique (Dewey 1922; 1933; Holdo 2023) to Freire's (2017) critical pedagogy and Mezirow's (1997) transformative learning.

Transformative architectural pedagogy seeks to "promote the transformation of life and inner perception of the learner and his/her community" (Jones 2019, 124). This is done through collaborative interactional learning between educators and students (Salama 2021, 20). Although these are important aims, transformative pedagogy has a further socio-political meaning in the South African context. In this context, transformative pedagogy assists in dismantling the lingering structures, legacies and ideologies of colonialism and Apartheid and is thus part of the decolonisation of the university.

Therefore, in this imperative to decolonise the university in South Africa, the application and design of a transformative pedagogy drew particularly from critical pedagogies actively involved in similar contexts, such as Freire's (2017) Pedagogy of the Oppressed, hooks' (1994; 2009) Teaching to Transgress and De Sousa Santos' (2014) Epistemologies of the South.

2.1 Autoethnography

In this autoethnographic research, the 'auto' in autoethnography refers to both myself and my architectural students. Participating in autoethnographic research on ourselves, we situated ourselves individually and collectively within the 'ethnos' local cultures of architectural practice and within an institutional and historical culture of architectural education. The 'graphy' includes writing and the architect's tools of drawing, photography and model-making as both methods and outcomes of the autoethnographic research.

There were various types of autoethnography: ethnographic memoir, autobiographical ethnography, personal experience narratives and reflexive ethnography. These different forms emphasise different elements of autoethnography, the self/ auto, the process/ graphy or the relation to culture/ ethno, and they "fall at different places along the continuum of these three axes" (Ellis and Bochner 2000, 740). My autoethnography is more reflexive ethnography, situating my teaching practice within the post-Apartheid institutional 'ethnos' and my design practice between two cultures, Wits and FAUP. The students' autoethnography varies between personal narratives and memoirs, at times more ethnographically focusing on their context or culture and at times more autobiographically focused on the self.

Chang (2008, 46) speaks of autoethnography as combining "cultural analysis and interpretation with narrative details" using various methods to collect autoethnographic data (process) and then turn that data into the product of autoethnography. However, this research foregrounds personal narrative details with some cultural interpretation. Thereby focusing on the self, unearthing the origins of the architect/ designer/ student's ways of seeing, which are often reflections of their culture. As per Chang (2008, 72, 80, 81, 84), there are different categories of collection methods: personal memory data, "self-observational data, self-reflective data and external data". The architectural

autoethnography in the current research uses drawing and reflective writing to collect personal spatial memory data and data on past design projects as "cultural artefacts" to "chronicl[e] the past" (Chang 2008, 72, 80, 81, 84).

Jones et al. (2016, 37–38) note four current themes in autoethnography:

- "*[R]eflecting and engaging*" is autoethnography as a reflection and engagement of life that contributes to understanding(Jones et al. 2016, 38).
- "*[M]aking and relating*" considers autoethnography as a way to "make meaning and construct relationships on the page and in the world… creates, marks, and makes visible various voices and ways of knowing" (Jones et al. 2016, 39).
- "*[R]epresenting, breaking and remaking*" offer a range of "representational practices… language… geographic, symbolic and embodied… used to intervene in systems and practices of bearing witness to and creating change within selves, communities and cultures" (Jones et al. 2016, 39).
- "*[Moving and changing*" sees "autoethnography as kinesis, a dynamic practice that creates movement and change" (Jones et al. 2016, 40). Sparkes (2016, 512, 513) sees this as both a "mode of knowing and a way of being… a way to critically act in the world and to understand the construction of the self".

The autoethnographic research in this thesis encompasses these themes interrelatedly; that is, they are not considered separately. The initial autoethnographic process is one of inward reflection and introspection, which then moves to engagement and relating with other students and tutors, making many diverse worldviews visible, and finally transforming and changing the self and others through the process. Therefore, the themes are seen as phases in the process; however, the autoethnography of every student does not necessarily include every phase.

Schouwenberg and Kaethler (2021) advocate for autoethnography in design, asking the designer to first look inward and situate themselves in the world before looking outward to clients, design briefs, markets or social or political issues. Looking inward prioritises design intuition. However, this is not prioritising stylistic intuition, which produces the 'starchitects' known for their architectural styles. This rather encourages designers to situate themselves critically within the project and situate the project within a socio-political or cultural context. Designers are seen not as mere mediators of a client's wishes but rather as taking a position, noting that "not taking a position is a problem of our times" (Schouwenberg and Kaethler 2021, 82).

In the autoethnographic research in this thesis, students and I engaged reflectively with each other to unearth tacit knowledge and an understanding of our practices as they are situated within a culture of architectural practice in South Africa. We used "personal memory …data" (Chang 2008,55) methods in collecting autoethnographic data, despite Chang's warning of over-relying on this subjective and selective data. We used free drawing to chronicle our past spatial attachment memories and architectural projects as cultural artefacts that revealed knowledge of our practices and their practice culture context. The autoethnography reveals diverse voices and ways of knowing through writing and various representational tools of practice: drawing, photography and modelling. Through the process, we constructed the educational relationship with each other on different terms, critically breaking with past norms of teacher and student, thereby "breaking and remaking… and moving and changing" (Jones et al. 2016, 39–40) our cultural educational and practice context.

2.1.1 Autoethnographic pedagogy

> "This is a moment of outing the personal as a component of an autoethnographic pedagogy; a pedagogy of not just teaching autoethnography but a means through which teachers share intimate aspects of lived experience

> with critical intention; breaking the fourth wall of an assumed objectified teacher/ student engagement." (Alexander 2016, 540)

Autoethnography has been shown to be important in education (McIntosh 2019; Payne 2020). Alexander (2016) situates autoethnographic pedagogy as a tool for subverting the power relations inherent in the teacher-student relationship. This is due to the reciprocity of both teacher and students sharing personal insights, thereby engendering trust and revealing each one's positionality. This subversion of educational power relations is inherent in the current research as educators and students engage with autoethnography alongside and with each other. Due to this parallel process, teaching autoethnography requires the educator and students to be willing to remain open and flexible (Tombro 2016). This further subverts the classical power relations in education, making both educators and students co-responsible for learning.

Sharing diverse personal narratives across the class, between students and between students and educators, is also seen by Camangian (2010, 1) as "essential for students of colour to have a collective understanding of themselves and one another… promote self and social reflection as well as establish compassionate classroom communities among youth with fractured collective identities". Camangian's (2010) research, situated in a diverse urban community in the United States, has relevance in demonstrating that autoethnographic pedagogy could be a powerful tool for educators in diverse settings to build multi-cultural understanding by enhancing "cultural understanding of self and others [with]… the potential to transform self and others" (Chang 2008, 51).

> "By being reflexive about their shifting status and relational positions, architects and architectural educators can create space for diverse voices and expertise to contribute to the design and production process...

Autoethnography serves as a device for architects to occupy the space of an 'inside-outsider', enabling the exploration of alternative practice and pedagogical models." (French and French 2024, 474)

2.1.2 Situating self

Autoethnography within the South African context is still fraught with the complexity of positioning the researcher within the racial and cultural categories and boundaries defined by Apartheid. Both myself and my students have to confront the complexity of how these boundaries and knowledge perceptions interact within our autoethnography.

Being a white woman in a transforming academic context requires recognising the attendant privilege still inherent in whiteness in South Africa. As per McIntosh (2019, 1), this white privilege is like an "invisible knapsack" that must be unpacked, full of "unearned assets" that can be cashed in every day. However, researchers have noted that McIntosh (2019) simplifies white privilege by not considering the intersectionality of race, class, gender, sexual orientation and culture. That racism is also structural, beyond the individual, calls into question whether merely confessing one's privilege changes anything (Lensmire et al. 2013). McIntosh's (2019) research is situated in the United States, but it is relevant to the South African racialised society, albeit the criticisms of oversimplification and lack of intersectionality acknowledgement are valid. My position as a white woman from a working-class immigrant background means my knapsack contains both unearned privilege and disadvantage, which must be unpacked daily.

Frizelle's (2019) critical autoethnography unpacks the position and whiteness of a lecturer at a South African institution, suggesting engaged listening as a strategy to deal with white fragility and discomfort. She further suggests that anti-racism is still racism if lecturers push this work onto students without acknowledging their complicity and becoming (Frizelle 2019).

Frizelle's (2019) experiences made me question my engaged listening and my complicity in the necessary anti-racism work. I also questioned my whiteness in terms of Frizelle's (2019) and DiAngelo's (2011) white fragility and discomfort and in terms of intersectionality. Am I regarded as white, not so white or white enough? My immigrant, working-class background sets me in a particularly complex position. White enough to have some of the privileges in the "invisible knapsack" (McIntosh 2019, 1), yet in some circumstances, still an outsider.

As Vice (2010, 323) noted, "South Africa is a strange and morally tangled place to live", and the position of whiteness should be "cultivated with humility and in (a certain kind of) silence" (VIce 2010, 324). However, Davis and Steyn (2012) advocate listening, focusing on a careful dialogue that is not overpowered by dominant voices rather than silence. Buckland (2018) takes it further, suggesting learning another language and situating projects within marginalised communities to interact and learn from their worldviews.

However, I do not need to go that far to encounter diverse worldviews, as these are apparent in the current Wits SoAP classroom. I see and understand the world through a particular worldview shaped by my hybrid culture, South African and Portuguese, and by my urban, working class, immigrant upbringing. In the context of South Africa, this worldview overlaps more with white urban ontology than with the black rural worldviews of many of my students. The research in this thesis is therefore implicitly a meeting of diverse worldviews, how they interact within the South African classroom. This meeting of worldviews is not however a meeting on equal ground, despite my best intentions my worldview holds more power, in every brief issued, every interaction, every value judgement and in every mark. Despite trying to make space for students' worldviews this unequal meeting is messy, complicated and complex. Clashing and sharing at the same time, we are all South African, but also in some respects foreign to each other.

Humility is arguably required in this meeting of worldviews, but silence (Vice,2010) assumes that, as an educator, one should abdicate from sharing knowledge and from sharing one's autoethnography as a way for everyone to learn. Silence is complicated. However, in a design studio, a certain level of silencing of my design voice is required to let students' diverse ways of seeing and knowing come to the fore. If my design voice is too loud, students will assume they need to, as per Schön (1985), imitate my design practice. However, they need to develop their voices, and, therefore, I quieten my design voice. In some ways, the studio master versus student model of Schön's (1985) design studio is inverted. I validate the cultural and personal ways of seeing and knowing that students bring to the design studio by not judging it but rather by working with it. In so doing, I bring students' autoethnographic way of seeing to the fore and begin to learn new and diverse architectural and spatial languages from them. Perhaps Buckland's (2018) exhortation to learn a new language has not gone unheard.

2.1.3 Scaling autoethnographic research

Scaling autoethnography is the process of expanding and adapting autoethnography across larger contexts. The current research commenced as autoethnographic practice-based design research on my practice at the intersection of the roles of architect-educator-researcher. This autoethnographic practice-based design research was then scaled through transformative design pedagogy, where students completed their reflective-diffractive autoethnographic research (Figure 2.1).

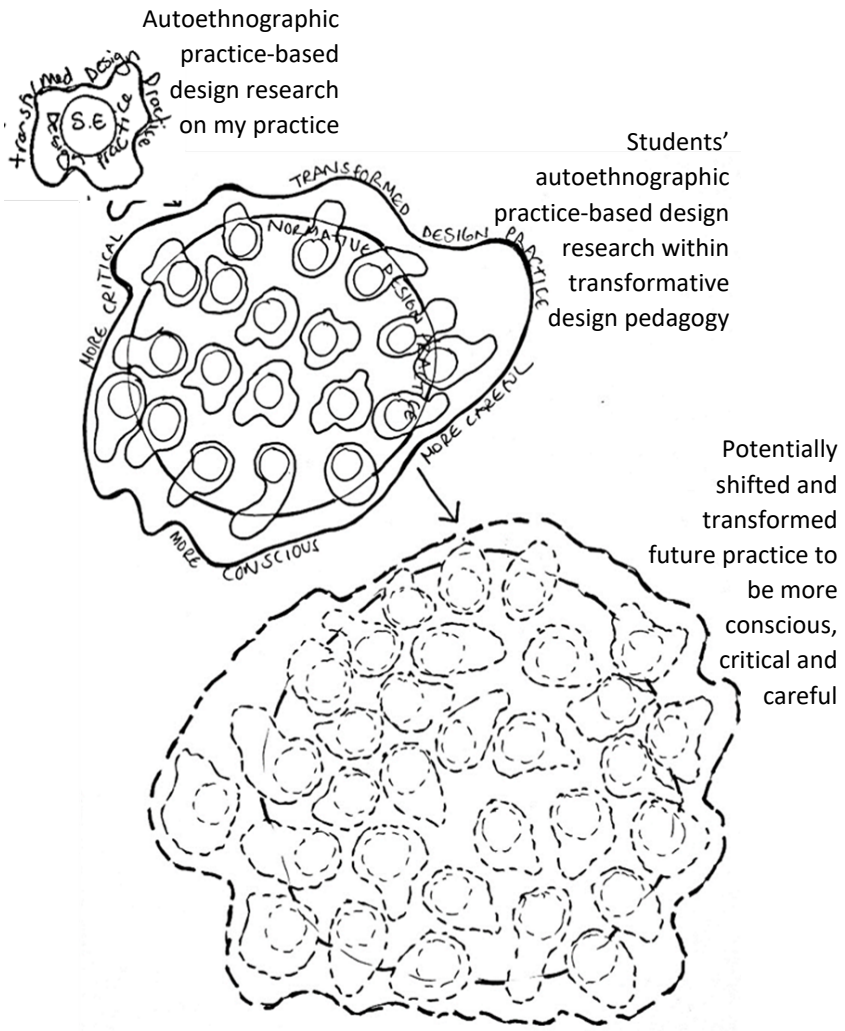


Figure 2.1 Scaling Autoethnographic practice-based design research– from my own autoethnographic research to students' autoethnographic practice-based design research within a transformative design pedagogy (drawing by author) (figure 2.1 is embedded within Figure 4.2)

This scaling of autoethnography fosters diverse narratives, embraces contextual realities and contests power relations at multiple levels. By scaling the autoethnography, there is a broader impact beyond the personal. At the personal level, researchers, both myself and students, shift their design practice, gaining self-awareness. At the class level, students gained new understandings of multiple and diverse worldviews and ways of being and seeing, actively forming the "pluriversity" (Guilherme and De Sousa Santos 2015; Mbembe 2016).

At the institutional level, educators were no longer seen as the repositories of knowledge but rather the facilitators of transformative development. At the practice level, validating different ways of practicing slowly changed the paradigm of local architectural practice.

On a meta-level, I reflected on my autoethnography and pedagogy, while the diffractive methods looked outward to the relevance of the research. I reflected in action on my work while doing the practice-based research exercises, but I also reflected on the other participants reflecting on their work alongside me. Therefore, I reflected as an architect on practice, as an educator on students and as a researcher on the whole process.

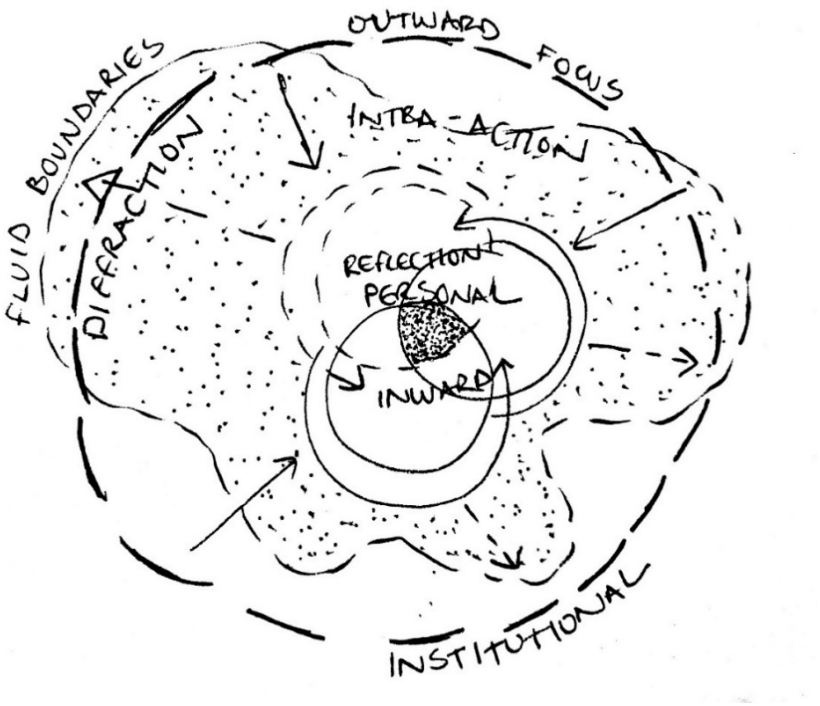


Figure 2.2 Reflective-diffractive practice-based and led research, focusing inward and outward (Author's drawing)

This autoethnographic practice-based design research consisted of an inward reflection on the self and diffractive research focusing outward on the context of the design practice (Figure 2.2). As a practicing architect, the reflection was on me, while the diffractive research focused outward from me to the origins and influences on my design practice.

As an educator, the reflection is on the design pedagogy and whether the ways of teaching are suited to the stated aims, whereas diffractive methodologies question the power dynamics in the design studio and the institution and how these can be countered.

The challenges to scaling autoethnography lie in maintaining the authenticity of the individual voices, foregoing the temptation to generalise. Also, the personal and the collective voices must be balanced, ensuring the institutional context does not overshadow the individual narratives. Lastly, there are ethical considerations to scaling autoethnography in a classroom and in its representation as research, ensuring confidentiality and privacy. These ethical considerations are discussed further in Chapter Five.

2.2 Practice-based design research

Lucas (2016, 43) confirms that "creative practice could be acknowledged as being an equivalent knowledge tradition to the conventional academic text", where the research question is the actual body of work, and that the "loop of reflective practice, acting and thinking as a continuum, is one way of marking out the field of practice-based research".

Frayling (1993; 2012) divided design research into three distinct modes. Firstly, research *into* design that includes historical, aesthetic or perceptual research and consists of research into theoretical perspectives on design, such as social, economic, political and cultural. Secondly, research *through* design, including materials research, developmental work, action research and research degrees by project, which include studio work and an extensive and substantial research report. Lastly, research *for* design where the end product is an artefact and the thinking embodied in the artefact, with the goal being visual, iconic or imagistic communication rather than verbal communication (Frayling 1993; 2012).

The practice-based design research in this thesis incorporates both historical research *into* past design projects, which can illuminate tacit knowledge on practice, as well as research *through* design, where that tacit knowledge is tested through new design projects (Figure 2.3).

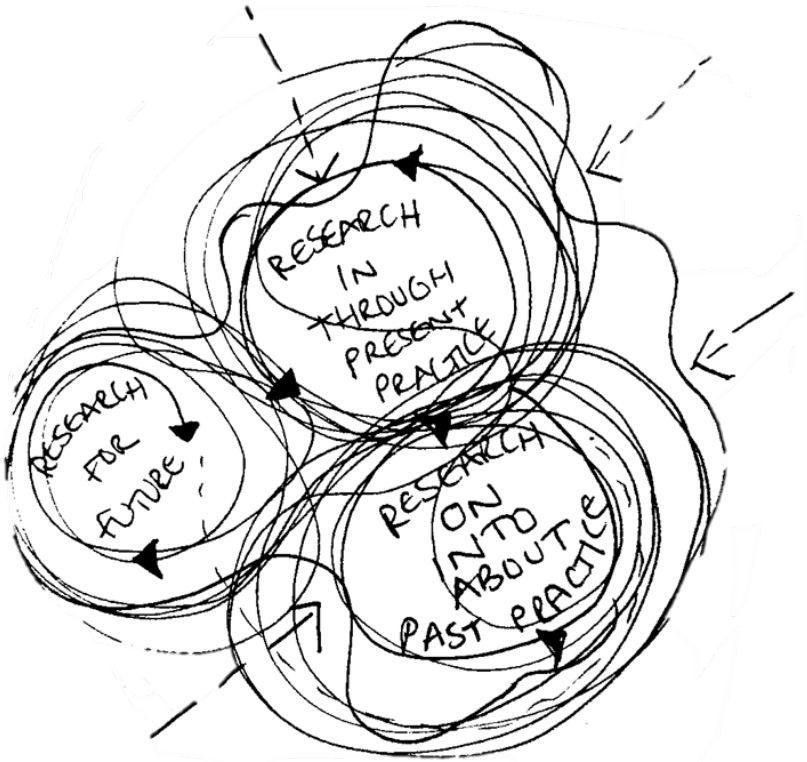


Figure 2.3 Iterative cycles of research, drawing on Frayling (2012), Archer (2012) and Cross (1999) (Author's drawing)

Archer (1995; 2012) framed these modes of design research slightly differently, speaking of research through practitioner action. Research *about* practice is design history or materials and processes, research *through* the medium of practitioner activity, which is action research that tests, embodies, enacts or constructs, and research *for* the purposes of practitioner activity (Archer 2012, 117–118) (Figure 2.3).

Archer (2012, 118) does, however, note the conditions attached to these modes in that it is only regarded as 'research' if it is "directed to the acquisition of knowledge, is systematically conducted, the findings are explicit and the record of activity transparent, and the knowledge is transmissible to others". With these conditions, Archer (2012) was trying to fit design research within a paradigm of scientific research, distinguishing the difference between design practice research and mere design practice.

Findeli (2012) went further when he articulated that the design question in practice must be converted into a research question in the context of academia and assisted by supervisors.

Cross' (1999) taxonomy of design research broke from that of Frayling (1993, 2012) and Archer (1995, 2012) by concentrating on the focus of the research: designerly ways of knowing, focusing on people; design praxeology, focusing on practices and processes of design; and design phenomenology, focusing on the form and configuration of artefacts or products of design.

Recent critiques on Frayling, Archer and Cross' taxonomies of practice-based design research highlight that while they were trying to define and carve out space for the emerging field by separating modes and types, research published since then displays a more hybridised format incorporating multiple modes (Galdon and Hall 2022). Gray and Malins (2004, 4) note that the debate around practice-based research should continue, albeit "acknowledging the pluralism and diversity of practices and research approaches".

More recent attempts at defining practice-based design research for architects display this hybridization and pluralism:

> "Design research [consists of] processes and outcomes of inquiries and investigations in which architects use the creation of projects or broader contributions towards design thinking as the central constituent in a process which also involves the more generalised research activities of thinking, writing, testing, verifying, debating, disseminating, performing, validating and so on." (Fraser 2013, 1–2)

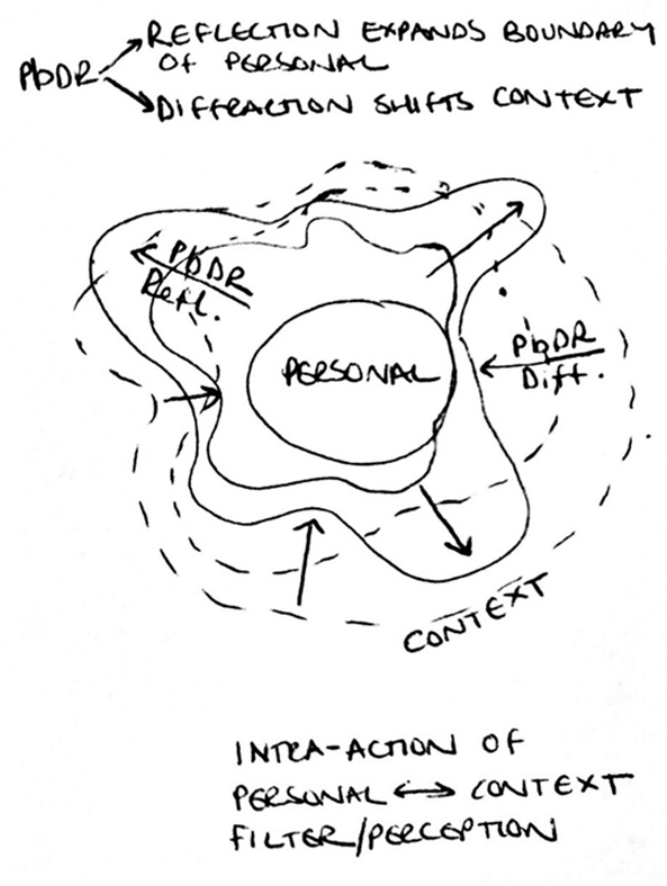


Figure 2.4 Intra-action of research, reflecting on personal and diffracting on context (Author's drawing)

The practice-based design research in this thesis, much like most research produced in this field, is a hybridised form. Research *into* (Frayling 1993, 2012) and *about* (Archer 1995,2012) past design practice focusing on the artefacts, people and processes of practice (Cross 1999), moving to research *through* present design and practice itself (Frayling 2012; Archer 1995). This iterative looping process, where research *on* past practice moves to research *in* the present through insight and questioning and, lastly, research *for* the future needs and hopes. This looping and iterative process of research includes both reflective and diffractive practice-based design research methods (Figure 2.4). **PbDR: practice-based design research*

Reflection focuses on the individual, revealing their personal habitus or cultural values, whereas diffraction focuses on the practice context, which, for students, is the institution and, for practitioners, is both the institution of prior learning and the practice context. Therefore, when looking at the different temporal stages of research, into the past, through the present and for the future, it is important to note that, at each stage, the research moves inward and outward—an intra-action between the personal and the context.

This reflective-diffractive research thus expands and shifts the personal and contextual boundaries, ultimately impacting and changing both the institution and the field of practice.

In the South African and African philosophical context, this reflective-diffractive research has particular meaning. African worldviews echo Ubuntu philosophy in integrating the individual with their community, they are not seen as separate. Therefore, combining both reflective and diffractive research is imperative in unearthing the individual's position and practice in relation to their context, their communities. For students these communities are both their familial, cultural communities and their institutional community. Therefore, Ubuntu African philosophy resonates with post-materialist and feminist critiques of reflection ((Haraway 1988; Barad 2014) that imply that the ontological and situated underpinnings of knowledge need to be revealed through diffraction.

2.2.1 Reflective

Reflection's etymological root is to bend back upon oneself. Reflection is thus rooted in an anthropocentric epistemology, which centres the researcher—the person—and echoes the physics of reflection, returning a representation of the object back onto itself after light has struck a surface (Bozalek and Zembylas 2017).

Reflective practice-based design research arguably commenced with Schön's (1984; 1985; 1987) writings on the reflective practitioner. However, Dewey (1922; 1933) explored reflective thinking in the early 20th century as the interaction of reflection and experience in education. Nonetheless, Schön (1984, 68) recognised practice as a type of research, noting that "when someone reflects in action, he becomes a researcher in the practice context". Schön (1984, 55) revealed a practitioner's "capacity for reflection on their intuitive knowing during action", which he termed "reflection-in-action". He further highlighted "knowing-in action" (Schön 1984, 54) as uniting theory and research with practice, thought and action. He went on to reflect on how to educate reflective practitioners through real-time

coaching and encouragement and distinguished "reflection-in-action", which is reflection in the process of practicing, to "reflection-on-action", where the practitioner reflects on and analyses their actions afterwards (Schön 1987,114). This reflection in and on action was part of a design studio process of learning, which he termed "reflective imitation", where students perceive what the studio master does, imitate the studio master's actions, and then reflect on their performance in relation to that of the studio master (Schön 1985, 74).

Webster (2008) contests some of Schön's thinking, speaking of the need to situate reflection within an institutional and studio context fraught with Foucault's (2008) micro-technologies of power. She notes that Schön's reflection in or on action is based on a very reductive studio master example, where the studio master effectively tells the student what to do, reflecting the power dynamics (Webster 2008).

Similarly, this thesis seeks to extend Schön's reflection in and on action to include *reflection before action*, acknowledging and validating students' habitus and ways of seeing and being before entering the institution of learning. Through developing their personal design habitus, students also engage with the field's habitus and form and deform it. This *reflection before action echoes* Cowan's (2006,36-38) looping "reflecting for… in …[and] on action" and Francis and Cowan's (2008,340) "action-reflection".

Further, Schön's (1985, 72) notions of "reflective imitation" in the design studio are challenged, as this assumes that students should think and design like the studio master. Rather, through reflective practice-based design research methods, students develop their ways of seeing and doing, effectively challenging the studio's power dynamics as Webster suggested.

The current research explored two reflective practice-based design research methods. The first originates from the research process itself, exploring and reflecting on *Personal Spatial Narratives*. The second method, the *(De)constructed Archive*, reflects on past design practice.

The *Personal Spatial Narrative* is a type of reflective method unearthing personal spatial memories, firstly explored as a sketch drawing and then fleshed out into a narrative. This personal spatial memory draws on Bachelard's (1994) primal images or archetypal spaces.

> "… each one of us, then, should speak of his roads, his crossroads, his roadside benches; each one should make a surveyors' map of his lost fields and meadows… Thus we cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalized on the mode of our inner space." (Bachelard 1994, 11–12)

Personal spatial memory focuses on the phenomenological qualities of archetypal places. When exploring archetypal spatial memories, home and experiences of belonging and place attachment come to the fore, echoing Pallasmaa's (1995) writings on home, its affective qualities and its relation to identity.

These personal spatial memories are drawn and explored in written narrative form. Thompson (2019, 2) notes that becoming an architect is a meaning-making process where the most effective strategy is narrative—where "personal stories find new ways of connecting past, present and future selves". He sees narrative as how students evoke psychological resilience and develop it through meaning-making, a process where individuals locate their personal and social identities within their social context.

The *Personal Spatial Narrative* method arose from reflections on my and students' autoethnography—an experimental and explorative method that unearths a personal design voice or a particular way of seeing. After its initial implementation, I became aware of other similar methods implemented within design programmes.

The first is Cooper Marcus' "memory-sketching" (Sarvimäki 2017, 74–82), where landscape design students drew spatial or "environmental memories" (Marcus 1992,88; 1995) revealing "environmental autobiographies" (Marcus 2014,32). The object of the exercise was to validate each student's spatial autobiography, unearthing a sense of identity and revealing the students' spatial values and biases. Marcus (2014, 35) noted the transformational effect the project had on her students, with one student noting, "This is the first time in my whole student experience that anyone has said my life is of any consequence." This transformation, similar to the aims of the *Personal Spatial Narrative*, works on the level of the personal—the individual—making students more self-aware about the origins of their way of seeing and designing. The difference was that Marcus, as a landscape design educator, was more focused on the environment—the landscape in a broader sense—whereas the *Personal Spatial Narrative* focused on places—how architecture, buildings and natural environments formed archetypal memories and how these revealed an architectural way of seeing.

Another similar method is Aldrich's (2005,178) "repertory grids…[which] originate from Personal Construct Theory… based on the assumption that all of our judgements in every-day life are based upon implicit personal theories that we hold about ourselves and the world". The repertory grids uncovered place attachment in students through a list of 22 places from a student's past experience, including places with positive and negative attachments. For example, the list of places included: "Your ideal home place. The place you feel most sheltered by… The place that is most like you… A place you disagree with… The worst workplace you have experienced" (Aldrich 2005,). Aldrich's (2005)

research focuses on developing cognitive process skills, including care, empathy, insight and confidence, that contribute to self-awareness and empowerment of students as humane designers. Interestingly, whereas Marcus' "environmental autobiography" and the *Personal Spatial Narrative* focus on one memory, Aldrich's "repertory grid" of memories forms a broader view of the students' design values.

Similarly to *Personal Spatial Narratives*, Marcus (1992; 2014) and Aldrich (2005) explored these memories through drawing, although Aldrich also used photography and collage. Ten Brink et al. (2022) also used photographs to develop self-awareness through reflexive interactions. Their "Photovoice" methodology was used as a trigger for reflexive processes of "'bending back' thoughts and emotions upon oneself and one's intentions… examining of own values, beliefs and opinions, i.e. self-awareness" (Ten Brink et al. 2022, 162). The process included reflexive learning through exercises of Photo profile, Photo story and Photo position on self-made photos, thereby revealing tacit and 'ineffable' knowledge of the object made, its maker and their context (Ten Brink et al. 2022).

Daitch et al. (1996, 20) also investigated environmental histories as expressions of self and place, hoping to "build a lexicon of themes common to environmental life histories and to explore patterns of individual differences and similarities". However, rather than through photography or drawing, they did this through a series of survey questions in interviews.

An architect or designer's development is influenced by connections to several significant physical environments beginning in childhood, as demonstrated by Cooper Marcus (1995) in her book *House as a mirror of self* and by Aldrich (2005). The relationship between place and people is so intimate that Bachelard (1994, 8) even suggested that "topoanalysis… the systematic psychological study of the sites of our intimate lives" would reveal more about self-identity than psychoanalysis.

The *Personal Spatial Narrative* method unearths this personal place attachment—the bonding to a particular place in our past. Place attachment is defined by several multi-dimensional models. Scannell and Gifford (2010, 1) have a "three-dimensional person-process-place organizing framework" where people develop individual or communal place attachment through "affective, cognitive and behavioural" processes that attach meaning to the physical or social characteristics of a place.

Raymond et al.'s. (2010) place attachment model has five dimensions: place identity: the physical, built or natural character of place; place dependence; and nature bonding and social bonding, which is split into family bonding and friend bonding.

In most of these models, environmental psychology researchers suggest that place attachment is formed principally by social and cultural bonding to a place (Low and Altman 1992; Raymond et al. 2010).However, a growing number of environmental psychology researchers are acknowledging that the physical characteristics of place shape and form socially and culturally constructed meaning and bonding to place (Stedman 2003).

Architectural researchers, on the other hand, have focused more on the physical characteristics of place attachment as generative for design. Through unpacking their place attachment, Aldrich's (2005, 4) students "articulate[d] their current personal relationship with architecture and their agendas and aspirations for architecture".

Moulay and Ujang (2020, 22) similarly suggest that "in addition to the social and physical components of any project, the place attachment attributes help to generate an evolving affective tie between people and places. It includes meaning, emotion, and behaviour."

Hashem et al. (2013, 101) note further that place attachment reflects "identities, differences… in different groups based not just on gender, class, race, ethnic, and culture but also individual political tendencies, power, liberty, social system". It is this reflection of difference that is particularly interesting in using an exercise like *Personal Spatial Narrative* to unearth differences in students' place attachment and use this newfound awareness generatively in design.

However, this assumption of differences in place attachment was debunked by Daitch et al. (1996), who found that the personal environmental history transcripts were markedly similar in thematic types despite the diverse group of respondents in their research. Further, respondents could be categorised as 'active' "persons with comparatively greater awareness… more reflective, having already defined his/ her role within the social structures of his/ her many communities… and an openness to new ideas" or 'passive' "persons who accepted existing environmental conditions and were willing to alter their perspective of the environment to reduce or minimize the amount and source of conflict and stress perceived within that environment… less likely to have defined his/her place within the larger social structure" (Daitch et al. 1996, 28).

The *Personal Spatial Narrative's* application in a diverse classroom explores whether there are shared spatial experiences across cultures. The notion that we share collective patterns of thought and experiences from archetypal places, as suggested by Pallasmaa (1995) and Bachelard(1994), is questioned. Boys (2016) critiques these notions of a shared or similar experience of architecture, asking who is included and who is excluded.

> "[architecture's] phenomenologically informed approach [that] imagines both a detailed specificity to human experience (the feel of a door handle, the meaning of an attic) and a psychically shared unproblematic commonality to those experiences." (Boys 2016, 159)

The *Personal Spatial Narrative's* exploration of place attachment is a memory exercise which delves into past spatial memories, asking if they are generative for future design. Several researchers have explored memory and architecture.

Once again, Bachelard (1994, 5) was instructive, linking memory that looks back to the past with imagination which looks forward, "each one working for their mutual deepening. In the order of values, they both constitute a community of memory and image."

NoorMohammadi (2015, 76) questions how Bachelard can be applied in architecture, especially since the idea deals principally with qualities of inhabited space that "transcend the rules and disciplines of geometry". However, she notes the importance of Bachelard in architectural education to close the gap between "inhabited space and the space which architects are engaged in creating" (NoorMohammadi 2015, 77).

> [In the] "structure of inhabited space, not only are the intensity of images, dreams, and memories from childhood significant; the materials, colours, textures, and forms of the furniture, and the special implication of water, fire, land, and light are influential in creating the deep images." (NoorMohammadi 2015, 80)

Gero (1999) speaks about constructive memory in design thinking, where memories are not only passively retrieved but also situated in the present, in light of the reason the memory is sought by the designer who has evolved and grown since the remembered experience occurred. Therefore, constructive memory "produce[s] new memories but it also allows us to reinterpret our previous experiences and memories in the light of our current views: 'reinterpret the past through the lens of the present'" (Gero 1999, 34).

Till (2008, 101) also speaks of sense-memory in artistic practice as active, a "process, way of knowing and object of study"—that people "experience memory as multi-sensual, spatial [way] of understanding their worlds". This sense-memory constitutes a "'seeing' rather than a 'thinking' truth that registers 'the pain of memory as it is directly experienced'" (Till 2008, 107). Similarly, the *Personal Spatial Narrative* memory is not passive but an actively constructed sense-memory, which is a way of knowing and an active process that is generative for design.

The *Personal Spatial Narrative* method reflects on past spatial memories, constructing narratives of personal spatial values and perceptions borne of place attachment. But these are only one part of what makes a designer. Once inside the institution, the student learns the principles and skills of design and applies these to design projects. The second reflective practice-based design research method, the *(De)constructed Archive*, reflects on past design practice, which, for the student, is the body of work produced in the design studio.

(De)constructing an archive is the opposite of representing or compiling. It takes apart the objects that make up the architect or architectural students' archive, design projects and buildings, reworking and redrawing them, pulling them apart to see them differently, trying to understand the fascinations and ideas that materialised into them. The purpose of the *(De)constructed Archive* is self-curation, with the researcher becoming conscious of their processes—"what had been instinctive and intuitive became conscious and accessible" (Ling in Van Schaik 2004, 215).

The (*De)constructed Archive* did not, like the *Personal Spatial Narrative*, arise from the research process. This method has been used as part of practice-based design research in postgraduate programmes across the world. First initiated at the end of the 20th century at the RMIT and later in the Adapt-R European funded Masters and PhD programmes, their so-called "venturous practice case studies" deconstruct a practice's archive as a record of practice that ventures new futures for the practice(Blythe 2016, 67). In these postgraduate programmes, these case studies covered

an entire body of professional design practice and were divided into three orders of knowledge. Firstly, the body of work was grouped into similar fascinations or preoccupations; secondly, reflection was used to unearth "transformations and shifts in practice" (Blythe and Stamm 2017b, 55); and the third order of knowledge situated the researcher/ practitioner in a field of practice alongside or in contrast to other practice case studies (Blythe and Stamm 2017a; 2017b).

In this thesis, the *(De)constructed Archive* method was used as per the RMIT and Adapt-R programmes for my autoethnography, as well as adapted for undergraduate students who have a much smaller body of non-professional design practice.

In the second order of knowledge, the reflection on the design archive is carried out in various ways. It included Blythe's (2013, 61–63) synthesised reflection model with different types of reflection happening simultaneously: retrospectively reflecting on the body of work; reflecting in the act of making or designing where reflecting and designing are simultaneous; reflecting for next works happening in the act of designing current works and lastly, "social reflection, a learning that takes place in non-hierarchical and multiple iterations and exchanges between body, world and language and by social means".

This "social reflection" (Blythe 2013, 61) is a collaborative dialogue which seeks to answer questions about past practice, transforming practice by the insights gained. It builds on Finlay's (2003) introspective self-dialogue but takes it one step further as it is a "reflective conversation" that moves from the private self-dialogue to a public dialogue articulated with others and, in so doing, "emerges out of the unconscious into conscious forms of knowing" (Ghaye and Ghaye 1998).

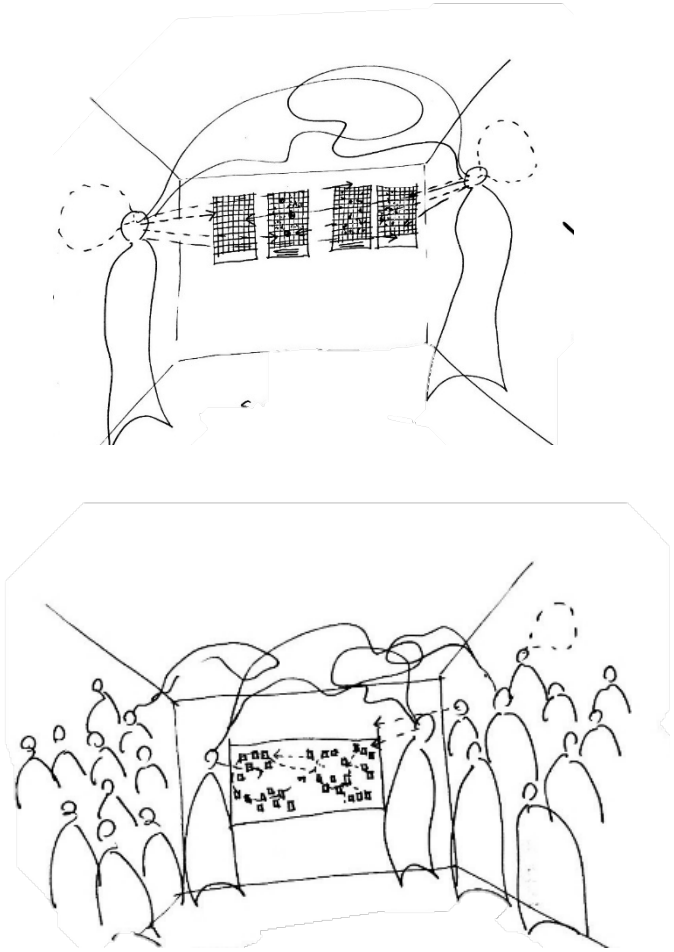


Figure 2.5 Social reflection: reflecting on each other's personal deconstructed archives of reflecting-in-action (Author's drawing, 2022)

In this social reflection, the educator provides the scaffolding or framework for the learning process, but the educator and the learner "co-construct knowledge and meaning in a collaborative interaction from which both take away new ideas, knowledge, skills and understanding" (Hughes 2012).

In this thesis, reflection in the *(De)constructed Archive* is taken one step further, as the social reflection is filmed (Figure 2.5). This allows the architect-practitioner-researcher-educator to reflect on the process—reflecting on themselves in the act of reflecting and reflecting on the readings of their work by others in this social milieu, echoing "radical reflection", which is "reflection, not only in operation but conscious of itself in operation" (Merleau-Ponty 2013,254).

Reflection is, therefore, embedded in the current research on multiple levels and in multiple ways. The iterative looping reflection-before-practice, reflection-on-practice and reflection-in-practice combine in the process of the research, as well as in the more focused practice-based design research reflective methods of *Personal Spatial Narrative* and *(De)constructed Archive*.

2.2.2 Diffractive

Architectural practice, drawing from Bourdieu's theory of practice, is formed from the architect's interaction of personal habitus and cultural, social and economic capital with a field of local architectural practice with its own context, norms and structures:

"[(habitus)(capital)] + field = practice" (Bourdieu 1979/1996, 101)

Reflection focuses on the personal habitus of the architect and architectural student. However, situating and positioning the researcher within their socio-political-cultural context and field of practice requires more than self-reflection. In the African philosophical context reflection with its focus on the individual is not sufficient. Reflective-diffractive bifocal research is required to reveal the African ontological worldview which situates the individual as an entangled member of their community, never seen as an entirely separate being. This diffractive research highlights how the knowledge produced reflects the researcher's position within a particular social context and the condition s within which the knowledge was produced, essentially "situated knowledges" (Haraway 1988).

Haraway critically re-assessed reflection as too centred on the researcher, first extending it to critical or strong reflexivity and then to "situated knowledges" (Haraway 1988). Haraway then moved firmly into a relational ontological perspective (Haraway 1997), reinforcing Barad's "diffraction" (Barad 2007), which decentres the human subject altogether and sees the human as one agent within an entangled network of human and non-human agents, which include objects and materiality.

Barad (2007) contrasted the two optical metaphors: reflection and diffraction. Reflection, by its nature, reflects a representation of the object being reflected. It focuses on similarities and sameness. Diffraction, by contrast, exposes

the patterns of difference within the objects studied and defines the boundaries and intersection of objects, asking questions about the conditions that produced the original works (Barad 2007; 2014).

Therefore, the reflective-diffractive social dialogue suggested in this thesis breaks apart the cyclical looping processes of reflection. It reveals the material conditions and entanglements that shape practice, both its personal and conceptual underpinnings, as well as the systemic, structural socio-political-cultural context. It also reveals the boundaries and intersections of the different worldviews of students. We are all African, by birth, residence or culture, or combination of all three. The diffractive research reveals how our worldviews converge and diverge in complex interweaving ways.

The architect-practitioner-researcher-educator is decentralised when critically assessing the anthropocentric nature of reflection through Barad's (2014) "diffraction" and Haraway's (1988) "situated knowledges". Reflection, through a largely internal mental process, links the mind to the hand—the thinking hand—and centralises the position of the researcher and, in this case, the architect. Barad's (2007; 2014) diffraction moves away from a self-reflective ontology, positing that materials have as much agency as humans, suggesting an entanglement of the human and non-human (Barad 2007; 2014).

This critique on reflection shifted the research in this thesis to include more diffractive methods that researched and revealed these entanglements with context. Once again, some diffractive methods (*Communities of Practice*) were adapted from postgraduate programmes, while others (*Institutional Influence* and *Questioning Mastery*) originated from the practice-based design research process itself.

The *Communities of Practice* method, originating from the RMIT and Adapt-R programmes, was used to contextualise practice-based design research. It "expand[ed] on the idea of a literature search to establish a field of knowledge… the researcher's immediate creative community" (Blythe 2016, 67). *Communities of Practice* are "critical communit[ies] of inquiry", whereby researchers "differentiate their research from that of seemingly neighbouring peers: divergence and dissent become as important as possible confluence and resonance" (Blythe and Stamm 2017b, 58). It allows researchers to establish a field of knowledge of creative works around their practice, seeing this field as a creative community critical for innovation in practice.

The practice-based design researcher reveals "situated knowledges" (Haraway 1988) by situating their practice within a community of practice/ field of knowledge/ network of ideas. This also enables the practice to venture into future potentialities of their practice through identifying the influences or the contestations/ gaps that their communities of practice reveal. For students, their communities of practice are, first and foremost, their institution of learning, with its particular socio-political context, an institutional habitus.

Students arrive at university with a personal cultural capital or habitus that "includes a variety of traits and behaviours, such as posture, dress, language, preferences, academic credentials and social networks" (Payne 2015, 10). Payne applied Bourdieu's theory on cultural reproduction to the architectural design studio and revealed that the closer a student's personal habitus correlated with the institutional habitus, the more educators viewed the student as higher functioning:

> "… schools 'misrecognize' elevated levels of cultural capital as 'natural' talent and in turn reward such students for simply being cultured and having a privileged family background". (Payne 2015, 10)

Payne's (2015) research investigated the extent to which architectural institutions culturally reproduce themselves by examining students' socialisation process into the institutions' subculture during formal architectural education. Specifically, the correlation of two factors was examined: a student's cultural capital or habitus and the institutional habitus of the architecture school. Although Payne's (2015) research was in the United States, it dealt with issues of class, race and gender diversity, access and equity in both architectural practice and education, which are pertinent to the South African context. The relevance of Payne's research and findings on habitus in higher education is confirmed by research on the role of habitus in the broader South African higher education context (Naidoo 2004; Jones et al. 2008; Fataar 2012; Czerniewicz and Brown 2013; Pather and Chetty 2015). However, there are some dissenting voices that find the application of habitus in the South African context of higher education to be reductive (Cross and Atinde 2015). Nonetheless, the notion of habitus informed the architectural pedagogy in this thesis as a way to understand and unpack students' ways of being and seeing before they entered the university and critically position their habitus in relation to the institution. This confirmed Payne's (2015) research, as well as other research internationally on the role of habitus in architectural education (Webster 2008; 2011; Stead et al. 2022).

The *Communities of Practice* method in this thesis asks students to not only situate their design practices within a field of practice but also to interrogate *Institutional Influence* and situate themselves critically in relation to it, aligning themselves to the architectural habitus of the institution or contesting it. This is particularly relevant within a South African post-colonial, post-Apartheid and post #FeesMustFall institution. In the same vein of interrogating *Institutional Influence* is *Questioning Mastery* within the South African architectural profession. Or rather, it is questioning ways of thinking about design that have historically privileged singular mono-cultural definitions of mastery. This draws on Singh's (2018) way of "unthinking mastery" by critically unpacking the ways in which mastery operates in the South African architectural profession.

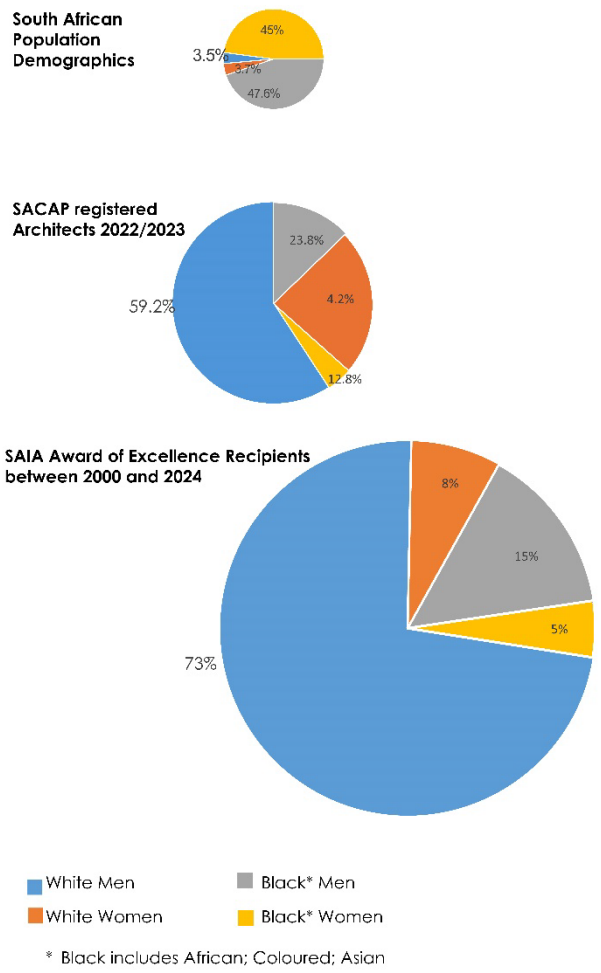


Figure 2.6 Graphical comparison of race and gender breakdown of the South African Institute of Architects (SAIA) Award of Excellence recipients (bottom) compared with registered architects and South African population demographics

South African Architects whose projects have been published or won awards can be considered to have established acknowledged mastery. Taking a closer look at the bi-annual South African Institute of Architects (SAIA) awards of excellence over the last twenty-four years revealed that 73% of award winners were white men (Chapter 5 and Figure 5.9 for longer discussion). Comparing these statistics to the makeup of the jury panels for these awards revealed that the lack of diversity in terms of race and gender also applied to the jury. In the 2000 to 2018 iterations of the Awards, only 14% of the jury were women architects, including in some years where there were no women architects on the panel. (Figure 2.6)

However, even when in 2020 and 2022, when the jury was composed of majority black women architects, the awards recipients were still majority white men, with only one woman architect receiving an award. Therefore drawing a simple causal link between the jury and award recipients ignores the complex legacy of Apartheid and post-Apartheid architectural education and practice.

The current numbers of registered professional architects are still highly skewed towards the practice ways that have traditionally dominated the profession.

In 2023, 59% of registered architects were white men, 28% were women, and only 4.8% were women of colour (South African Council for Architectural Profession 2023). Therefore, the smaller number of women award winners,13% in total from 2000 to 2024, might be partially explained by lower registrations, but 13% is less than half of the 28% of registered women architects.

The reasons for women's underrepresentation in the awards were discussed in the focus groups, with some women architects attributing this to a perennial lack of confidence, while others had no intention to enter due to the perceived historical bias in SAIA.

Still others noted that they did not need the external validation (Colleagues Focus Group1 & 3, 2024). Clearly, the reasons were both personal and structural, noting the complex heritage of SAIA post-Apartheid.

The disproportionate role that white men play in the architectural profession in South Africa, both historically and currently, is highlighted by comparing their over-representation as award recipients at 87% to the fact that white men only represent 59% of registered architects (South African Council for Architectural Profession 2023) and only 4% of the South African population (Statistics South Africa 2023).

> "Mastery is not an international currency. What passes for mastery in one city can look suspiciously empty to the practitioners from another city even when they are at first impressed." (Van Schaik 2004, 15)

However, in the South African context, architectural mastery is not only defined by locality and city, as Van Schaik (2004) describes, but is further circumscribed by complex patterns of gender, race and culture in ways that are difficult to separate. The question of what defines mastery in a given context is built up over time through competitions, awards and publications.

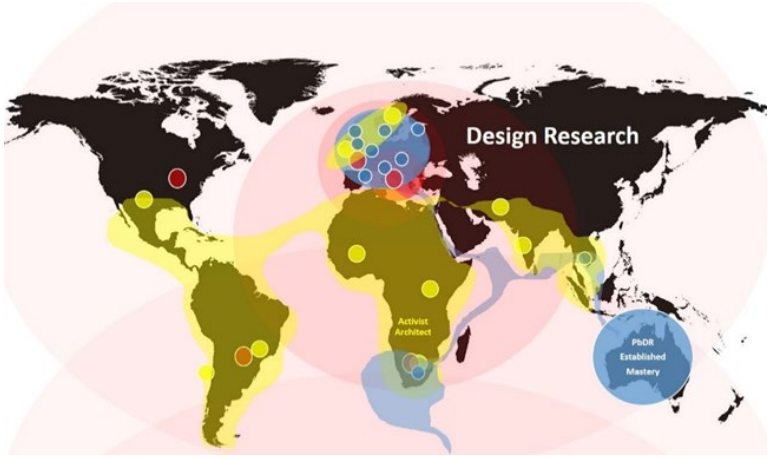


Figure 2.7 Map tracing practice-based design research globally (Author's drawing)

However, it also has its genesis in architectural education and the architectural projects, processes and practices regarded by educators as worthy of study. The choice of this list of precedent projects to study is highly political and can be seen as an act of decolonisation—"of undoing colonial mastery by producing new masterful subjects" (Singh 2018, 2). *Questioning Mastery* as a diffractive practice-based design research method unpacks the state of architectural mastery in South Africa and attempts to expand notions of mastery that were defined during colonial and Apartheid times.

2.2.3 Practice-based design research internationally

Postgraduate programmes of practice-based design research in architecture started at several institutions in the late 20th century. Their approaches differed, depending on the institution. Fraser outlined these different approaches in the UK, Australia and Europe, comparing the reflective practitioner-oriented model of RMIT with the historical approach of Jonathan Hill at The Bartlett (Fraser 2013) (Figure 2.7).

For the purposes of this thesis, some of the methods and insights from RMIT's reflective practitioner-based programme are merged with AKAD's more diffractive societal impact research. However, SoAP's approach aligns with Hill's (2013) historical and venturous approach. Thus, these three approaches were investigated and explored. Nonetheless, in investigating these postgraduate programmes, questions on their adaptability both to undergraduate study and to the South African context were asked.

RMIT commenced with formal postgraduate masters programmes in reflective practice-based design research in the 1980s, which developed into the current international PhD programmes run in Australia, Asia and Europe, as well as the European-funded Adapt-R programme (Blythe 2013). Van Schaik (2004; 2008; 2013; 2016; 2019b; 2019a; 2020), Vaughan (2014; 2017), Blythe (2013; 2016), Blythe and Stamm (2017) and others from RMIT have written extensively on their experiences in practice-based design research. RMIT initially invited architects with "established mastery" (Van Schaik 2004, 8) to "reflect upon the nature of that mastery within a critical framework" by speculating about the future directions of their practice by looking at their ongoing work (Van Schaik 2004, 8). Much like Lucas (2016), the research question is based on practice, essentially asking what is "the driving enquiry that motivates [it]" (Van Schaik 2008,8). The RMIT PHD (Design) programmes are structured by biannual Practice Research Symposiums where prospective and current students meet with each other and a cohort of supervisors to discuss the practice research field and ongoing research.

The model at the Sint-Lucas School of Architecture in Belgium commenced with similar Research Training Sessions founded by Nilsson and Dunin-Woyseth(2011). These Research Training Sessions, designed to foster a diversity of opinions, perspectives and methodologies, trained researchers in epistemological and scholarly foundations in

practice-based design research, including sessions on Communication, Knowledge, Reflection and Design Cognition (Nilsson and Dunin-Woyseth 2011).

> "Frequent contact with teachers coming from various intellectual 'schools' of research provided many opportunities for the participants to discuss their research interests from various angles." (Nilsson and Dunin-Woyseth 2014)

The Research Training Sessions were similar to the Practice Research Symposium sessions in creating a space, twice a year, to both train researchers and discuss ongoing practice-based design research. These Research Training Sessions were replaced by CA²RE conferences from 2017, formed by a consortium of European Arts and Architecture schools within the Architectural Research European Network Association, the European Association for Architectural Education and the European League of Institutes of the Arts. CA²RE followed the Research Training Sessions and Practice Research Symposium tradition with their biannual CA²RE conferences. However, these conferences were more inclusive, opening to participants from outside the consortium and further questioning the role of design in research, exploring multiple modes of design-led or focused research.

The feminist design research model emerged from the AKAD at Swedish architecture schools. AKAD intersected practice-based research with notions of societal impact and change. This model focuses on the "acute relevance of the research project in light of societal impact" and notes that the "direct link between research and actual transformation in the world is important" (Grillner 2013, 71).The feminist architectural pedagogy of Fatale and the Swedish Architecture in Effect group sees "architectures in a wider sense, that attempt to alter, through projective acts and fictions, specific societal conditions"(Schalk, Bradley, and Gunnarsson Ostling 2013,106) . In essence, it supports the development of theories and methodologies for architectural engagement in societal concerns.

> "Research is after all nothing if we do not in some way change ourselves as well as our buildings. The best architectural research is that which asks us to consider not only what we understand and undertake by way of architecture and buildings but also who we think we are and how we want to reside, play and work together." (Borden 2008,221)

In this sense, the current research is more diffractive, looking not only at the practitioner but their effect and impact on society. While contemporary discourse considers this type of reflective or diffractive practice-based design research as new and emerging, Hill (2013) contrasts this with a historical approach at The Bartlett. He notes that architects from Palladio to Corbusier and Koolhaas had a "productive relationship between drawing, text and building… multi-directional… drawing may lead to building, writing to drawing or building to drawing and writing", which in essence is practice-based design research (Hill 2013). This historical approach is venturous and diffractive in the sense that the focus of the design research is not solely on the practitioner but on a myriad of productive relationships with process and context. The outcome at The Bartlett is more venturous design-based than reflecting on the practitioner.

2.2.4 Practice-based design research in South Africa

Are these global practice-based design research precedents relevant to the South African context? What do these established modes have to offer for research in the global south's context? How does practice-based design research in South Africa differ from these more established models? *(Figure 2.8)*.

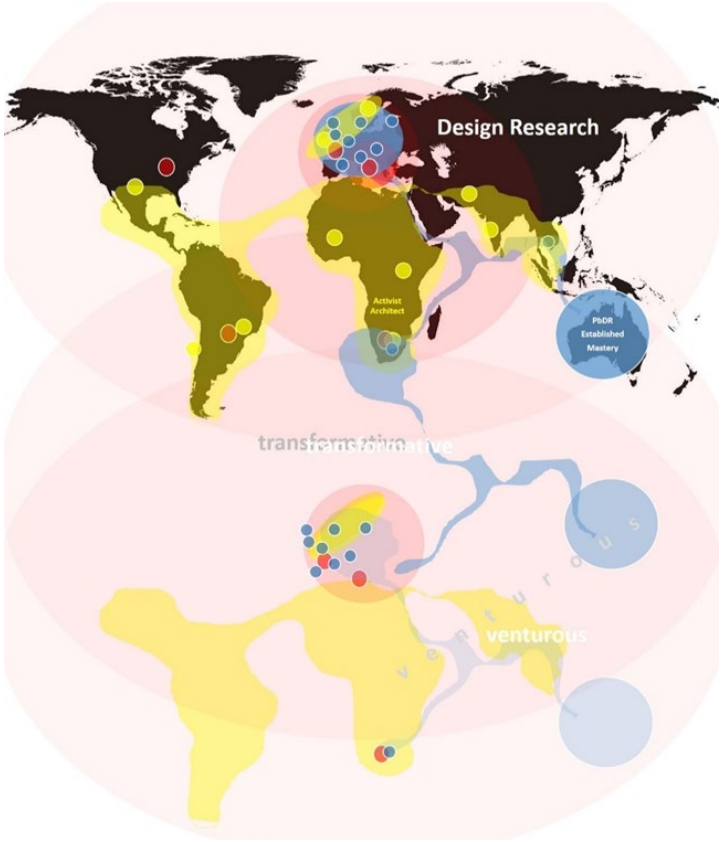


Figure 2.8 Map questioning the relevance of models of PbDR from the global north to south (Author's drawing)

In South Africa, practice-based design research in architecture varies according to the institution. Three schools of architecture in South Africa were analysed in terms of their particular practice-based design research culture. SoAP, the site of the current research, is compared to UFS's Department of Architecture and the University of Johannesburg's Graduate School of Architecture (GSA). These approaches to practice-based design research are then situated within the global field. (Figure 2.8)

SoAP, the first school of architecture in South Africa, has experienced different approaches to practice-based design research. From the early 20th century, SoAP had an extended period of practice-based design research as a "productive relationship between drawing, text and building… multi-directional" (Hill 2013). Practicing and award-winning architects who taught at the institution, including the early modernists Rex Martienssen (1941; 1964; 1974), John Fassler and later Pancho Guedes(1977; 1980; 2006; 2009), Jo Noero (2000;2006;2009;2011) and Peter Rich(1991), have a rich history of research and practice.

As Apartheid was ending, in the midst of ongoing student political protests, SoAP focused on its political, social and urban context, the city of Johannesburg. In this period, which extended post-Apartheid to now, urban researchers forged a path that was similar to AKAD. Lindsay Bremner(2010), Melinda Silverman (2003; 2014; 2023), Lone Poulsen(2002; 2007; 2012) and Hannah Le Roux (2014; 2017), among others, critically assessed practice's impact on the socio-political context and vice versa.

An emerging approach to practice-based design research at SoAP merges this rich heritage of foregrounding the socio-political context with validating the individual students' design voice. The "tension between what the individual brings to the design conceptually and theoretically and meeting the constraints of context and programme" (Colleagues Focus Group 2, 2024). This tension is explored in the first year of the BAS degree, where students' personal stories critically position and situate them within alternative worldviews inherent in indigenous knowledge systems (Maape 2018; Szentesi 2022). In the second year, these personal stories are extended through material and sculptural explorations of lived and embodied experiences (Bahmann 2022). Then, in third-year, the subject of this thesis, personal spatial memories validate students' ways of seeing and being and are explored critically and generatively within the local socio-political context.

Therefore, the primary approach at SoAP is both reflective and diffractive, focusing on the tension between the individual student's voice and their socio-political, ontological and economic context. The reflective-diffractive practice-based research in this thesis extends and formalises the past research streams at Wits, situating itself within the current foci of transformative design pedagogy. This research seeks to build confidence and self-actualisation in the individual student through reflective, personal narrative research, as well as reveal through diffractive research how the context—institutional, political, social and cultural—impacts practice.

In contrast to the hybridity of approaches at Wits, the UFS's Department of Architecture started the first formal practice-based design research programme in South Africa in 2018. Their PhD with Design programme followed the RMIT model of reflective practice-based design research, although with two streams, practice-based or practice-led. The practice-based design research stream focuses on mid to late-career architects with "established mastery" (Van Schaik 2004) and a celebrated body of work researching their practice through reflecting on and reconstructing their archive of practice (Noble 2018b). The practice-led stream is for younger, emerging practitioners to define their practices moving forward and is more venturous rather than reflective (Noble 2018b).

However, the UFS's initial focus on "established mastery" (Van Schaik 2004) meant that the possible candidates for the practice-based design research stream would be the SAIA award winners, who were 87% white men over the last twenty-four years (as discussed in Section 2.2.2). The practice-based design research stream in the PhD with Design programme is still, as of 2024, anecdotally dominated by white architects, with few, if any, applicants of colour (Interview 002, 2024). The reasons are complex, with one architect speculating that

> "most of the people that applied… over the years… have established themselves quite well… are well resourced in their practices, that someone else can carry on the work [while they do a PhD], and maybe it's the dynamics of the challenges mostly faced by all the older, experienced black architects to [either] abandon [practice] or to divide the attention between making sure the practice stays afloat and doing your PhD." (Interview 002, 2024).

The interviewee pointed to resources as a possible reason that black architects have not registered for this programme. However, at a 2018 mini-conference introducing the PhD with Design programme at the UFS, my own notes are revealing :

> "[The] audience [is] overwhelmingly white, male, middle-aged; students [are] 80% white." (Author's observations attending Noble's (2018b) presentation

The statistics cited in Section 2.2.2 show that the UFS's acceptance of "established mastery" (Van Schaik 2004) as a condition to register for the practice-based design research programme would result in a majority cohort of white men, further entrenching white men's dominance in the profession. It is, therefore, clear that commencing practice-based design research in South Africa has implications for the researcher, for the field of architectural practice and for society. This is why a purely reflective practitioner-based approach, which assumes that mastery is neutral, runs the risk of leaving the context that produced that mastery in the dark.

> "[K]nowledge – its origins, nature, purposes, and consequences – is never neutral." (Jansen and Walters 2022, 4)

> "Who produces knowledge, what knowledge is produced and what knowledge is 'left out' are central questions of inquiry within the politics of knowledge… that what is 'left out' in the choice of knowledge is consequential for both social and disciplinary learning." (Jansen 2019, 2)

This leads directly to the GSA at the University of Johannesburg, in Johannesburg. The GSA has followed the venturous path of The Bartlett with practice-led design research interrogating the nature of architectural practice within post-Apartheid South Africa. Founded by Lesley Lokko and colleagues, including Amira Osman and Finzi Saidi, the GSA attempted to deliberately break with other postgraduate programmes in South Africa that have historically been

based on the architectural education models of the last century: French Beaux-Arts, German Bauhaus and British RIBA. With the aim to create a transformative pedagogy of diversity, both in terms of the curriculum and the delivery thereof (open choice and content), the new African unit system was born (Lokko 2017).

It is, however, ironic that the 'new African' unit system is but another European derivative based on the unit system developed at the Architectural Association in London by Boyarsky in the 1970s. Following Boyarsky's exhortation for a "platform for free ranging souls" is laudable, but the "well-laid table"(Lokko 2017), as the unit system has been described, is still a colonially inspired construct.

It is noteworthy, however, that the GSA has transformed staff and student cohorts in terms of racial diversity much faster than other South African architectural institutions. The GSA created spaces of exploration for students and staff who have historically been othered and marginalised at other institutions to be able to redefine design research and practice on their terms.

The GSA Honours and Masters units explore theoretical and multi-disciplinary design research, focusing on "students' identity with no careful reading of site, context or program" (Colleagues Focus Group 2, 2024). Furthermore, these multi-disciplinary explorations didn't initially come back to making and architectural practice. However, the GSA's new director, Mark Raymond, recognising the disjunct, has attempted to integrate theory, practice and making, bringing the exploratory back to architecture (Interview 003, 2024).

Nonetheless, the perception remains that GSA students lack the "techne of putting a building together" (Coetzer 2024, 70) and thus struggle to become gainfully employed in the sector. Coetzer (2024) argues that personal

transformation should include economic opportunity, especially for students from under-resourced 'informal' contexts who are immediately expected to contribute financially to the family after graduation.

This thesis' practice-based design research at SoAP situates itself between the UFS and RMIT's reflective practitioner-based approach and the GSA and AKAD's diffractive transformative societal impact approach. It takes these postgraduate practice-based approaches and adapts them to my and undergraduate students' autoethnography. The methods, approaches and programme precedents of practice-based design research, both local and international, were studied with one goal in mind—how they might be relevant, right here and right now, for myself and for students.

Lastly, students' capacity for internal reflection in the South African context needs to be considered. This capacity is dependent on cultural ontologies which focus on communal relational ways of being rather than the individual. Socio-economic precarity, and the pressures of adapting to an institutional context with a very different habitus to their own also limit students' capacity for self-reflection.



Figure 2.9 The thinking hand—the tool of autoethnographic design practice research, linking drawing and thinking, clarifying and exploring (Author's drawing)

2.2.5 The thinking hand (Figure 2.9)

> "[D]rawing, diagramming and graphic representation are integral parts of architectural design practice and can be similarly important aspects of architectural research in modes that integrate the tools and approaches appropriate to how architects practice." (Lucas 2016, 184).

Architect/artist–educator–researchers have used the tools of their practice: drawing, photography, sculpture or film, to reveal and explore aspects of practice that resist linguistic description.

Cooper Marcus (2014) used drawing as a tool for students to access spatial memories. Aldrich (2005) used photography to explore the qualities of students' various spatial experiences and place attachments (2005). Ten Brink et al. (2022) used self-made photographs to develop self-awareness through reflexive learning processes. Butts (2019) used clay to access ideas about home that are pre-lingual or difficult to express through language. There are architect-teacher -researchers at SoAP using architects/artists' mediums and tools to explore architecture with their students.

Bahmann (2022) uses Plaster of Paris as a sculptural medium through which spatial atmospheres of charged spaces are explored, while Szentesi (2022) uses film as a medium for students to explore character-led architectural design.

The principal architect's tool of research used in this thesis was drawing. However, photography proved to also be instrumental in my autoethnography, and modelmaking appeared in a few students' autoethnography, as seen in the Manifesto Poster in Figure 3.8.

As a trained architect, practicing for over twenty years and engaging once again with academia as a design educator and researcher, I began to default to drawing as a method of research. Drawing felt familiar, having used it as a thinking tool in my architectural practice. Drawing alongside and between writing allowed me to explore complex non-linear relationships that were increasingly difficult to clearly articulate or explore through writing.

Writing typically requires narrative structures achieved by applying rules with a beginning, a middle and an end. Drawing, on the other hand, suspends temporality, showing relationships between what was, what is and what will be. Drawing and writing are complementary while challenging each other's boundaries, thereby forming a more holistic understanding, structured yet open, concise yet superfluous and descriptive yet obtuse. Drawing was used principally in three ways. Firstly, as an iterative and explorative tool, thinking and reflecting in the act of drawing reveals tacit knowledge. Secondly, as an analytical tool to unpack and evaluate processes and cycles that resist linear description. Lastly, as a communication and representation tool.

Drawing as an explorative tool was used in autoethnography. The architect's thinking hand drew to explore a past archive, reconstruct it and reflect on the artefacts of architectural practice through case studies. Designers use their sketches as more than just external memory; they use them as a basis for reinterpretation of that memory-making in unexpected discoveries (Gero 1999).

Autoethnography represents research into practice, but drawing was also used as research through practice. Reflecting and thinking in the act of drawing is a venturous becoming, focusing on designerly ways of knowing and processes of design. These ways of knowing are embodied and experiential and are not easily described through writing. The drawings in this thesis not only describe or explain the text but they were also used to understand key ideas and unpack them non-verbally. Drawing was used to understand non-linear cycles and processes, which cannot be described to their fullest with linear text but require drawing to fully explore and represent them.

The thinking hand is, therefore, critical to "the evolution and different manifestations of human intelligence and processes of thought" (Pallasmaa 2017, 98). Drawing develops, explores and represents spatial and existential intelligence. In this way, drawing is used as a tool to think about things unknown. "[I]t offers ways of knowing, thinking and doing that link cognitive, affective and practical modes of study" (Adams 2017, 248). Drawing is used, as per Ingold (2013), as a trowel to open up, feel one's way forward and explore the archaeological sites of past lived spatial experiences. Drawing is an embodied and phenomenological exercise that "echoes in the measurements of our body and in the memories of our minds… our relationship with the world but at the same time reinforces our self-identity" (Pallasmaa 2013, 76). However, drawing in architectural education is also taught to encode architectural meaning, value and knowledge in particular ways founded in the Beaux-Arts and Bauhaus traditions. Therefore in the context of South African architectural education, drawing is not the neutral prelingual tool that Pallasmaa(2017), Adams(2017) and Ingold(2018) suggest.

In design pedagogy, the thinking hand draws and diagrams the process of scaling the autoethnographic practice-based design research from myself to students to explore, understand and clarify the process and reflect on the outcomes. Students' use of drawing to unearth their spatial ways seeing and knowing potentially reveals the tension in using the Westernised architectural tool of drawing to unearth pre-institutional ontological ways of being.



Figure 2.10 Archive photographs of completed projects displaying the range of colour, texture and materiality (Author's photographs)

In the final stages of the research, when investigating the outcomes, word diagrams spatialise connections between outcomes, layering and articulating the research process as it occurred—a multi-layered parallel-engaged process which echoed the transformative pedagogy.

The writing teased out the research process into a linear narrative, but the word diagrams and drawings reflected that the process was not linear, occurring across modes of research, revealing embodied tacit knowledge. Lastly, it must be noted that if the reader is not conversant with the thinking hand—the language of drawing—this thesis will not be understood as a whole. The text requires the drawing as the drawing requires the text.

Photography was also used in my autoethnographic research as a tool to unearth tacit knowledge of my design practice (Figure 2.10). I photographed completed projects and collated these photographs with those from my archive. Reflecting on these photographs, I saw fascinations that were not unearthed when I redrew the projects—explorations of colour, texture, materiality and pattern came to the fore. I was not sure where these had originated. Delving into childhood memories, it became clear that playing with fabric alongside my seamstress mother was central to that development.

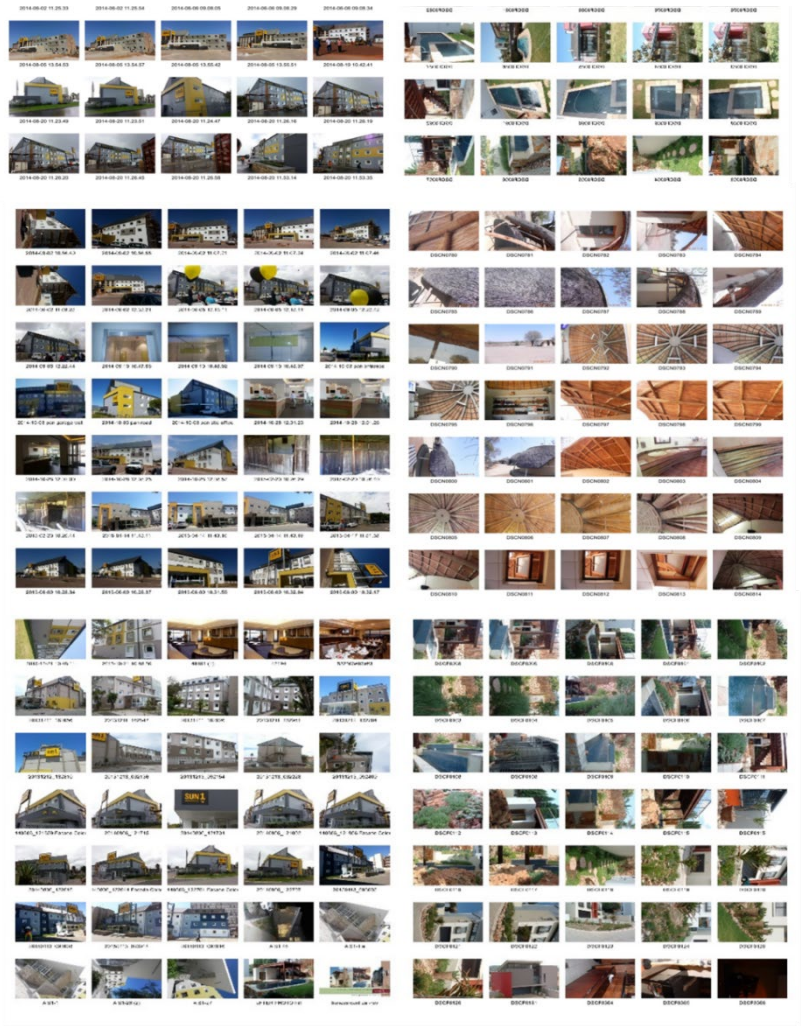


Figure 2.11 Archive photographs of completed projects displaying the range of colour, texture and materiality (Author's photographs)

Much like drawing, reflection happens in the act of photographing as well as afterwards, reflecting on the artefact, the photograph. As the photographer, I stepped outside of being the architect and experienced the space as an inhabitant, as an "ordinary user" (Petrescu 2007, 6). The projects are no longer abstract but embodied. Afterwards, the photographs were collated, arranged, grouped and reflected on both individually and as a collection.

Nonetheless, the tool used to explore practice-based design research determined the research outcome. The tool had agency, suggested specific readings and effectively "co-produce[d] the thinker" (Stengers 2013, 196). Drawing and photography were representative tools and tools of research, revealing ways of seeing, being and inhabiting that were particular to my design practice. Drawing focused on process, on form and on abstract relationships. Photography revealed materiality, light and embodied experience. In my design practice, drawing reveals a connection to topography and landscape through section, while photography reveals this connection through colour, materiality and texture (Figure 2.10 and Figure 2.11).

2.3 Transformative pedagogy

This thesis explores a transformative pedagogy that arose from the interrelation of the critical pedagogies of Freire (1998; 2017), hooks (1994; 2009) and De Sousa Santos (2014). This pedagogy supports and scaffolds practice-based design research learning in the post-Apartheid, decolonial context of higher education in South Africa.

The critical pedagogies of Freire, hooks and De Sousa Santos were seen as relevant to the South African context of decolonisation as these approaches were rooted in the physical or metaphorical contexts of the global south, with a particular focus on teaching oppressed, marginalised or diverse communities. These pedagogies, borne out of the constructivist mode, place the impetus of learning and understanding on the student. This relational learning is a collaborative, dialogical and engaged pedagogy, which insists on the ability to understand one's context and derive meaning from it.

Paulo Freire's dialogic pedagogy of "conscientização" Freire's *Pedagogy of the Oppressed* (2017) is a seminal work on transformative and critical pedagogy of the marginalised and oppressed and has some very pertinent principles that can be applied to a design pedagogy that attempts to address transformation, diversity and marginalisation. One of the central principles in Freire's (1998) work is the idea of "conscientização", which is learning to perceive and take action against the oppressive elements in the students' contextual reality, be they social, political or economic. This conscientisation is relevant to a desire for conscious critical design practice by proposing a critical dimension of consciousness.

The idea of praxis, which is "action-reflection", is important as Freire viewed the omission of action as verbalism and the omission of reflection as activism and posited that both are required in practice. He proposed that both students

and teachers become conscious makers of their culture through dialogue—a "problem-posing education" model where the teacher is also taught in a dialogue with students, and both are jointly responsible for a process in which all grow (Freire 2017,80).

The critique of Freire by South African researchers Ndlovu, Bitzer and Albertyn lies in the post-structural position that oppression cannot be simply defined and there are multiple systems of oppression which are context-specific within a world that is both interconnected and changing rapidly, resulting in super-complexity of power relations (Le Grange 2011). Le Grange did, however, note that to engage with Freire and question his assumptions is by its very nature Freirean, drawing on the work of Mbembe and Nuttall (2004) to posit that a defamiliarisation of prevailing views on oppression is required.

In revisiting the Pedagogy of the Oppressed, his seminal work, Freire redefined it as a pedagogy of hope, which Le Grange (2011) suggests is an ontological need, especially in the South African context. Ndlovu (2011, 42) perceives "'pedagogy of hope', (as)… not only to be resonating with a revitalized 'pedagogy of liberation', 'liberatory education', or a 'pedagogy of social justice' but also to be an antithesis of a 'pedagogy of domination' which was a defining feature of SA's apartheid legacy".

In the context of this research, this critique is acknowledged, and a transformative pedagogy is proposed that builds at the intersections of Freire, bell hooks and De Sousa Santos while, in a Freirean way, questions their applicability and adaptability to design pedagogy in a South African context.

2.3.1 bell hooks' "engaged pedagogy"

bell hooks' *Teaching to transgress* (1994) develops on the critical pedagogy of Freire at the intersection of anti-colonial, critical and feminist pedagogies, where the radical pedagogy includes recognition of differences of class, race, sexual practice, nationality, etc. She translated Freire's conscientisation to critical awareness and engagement, seeing education as a practice of freedom where the engaged voice of all active participants is not static or fixed but rather "always changing, evolving in dialogue with a world beyond itself" (hooks 1994, 11).

hooks focused on this engagement, noting, as Freire did, that for education to be the practice of freedom, everyone needs to labour in the field of knowledge. This "engaged pedagogy" (hooks 1994, 15) is thus more demanding than critical pedagogy; it is a holistic education that emphasises the well-being and self-actualisation of both student and teacher. As each student sees the value of their overall life experiences, their voices are validated. Students and teachers learn to accept different "ways of knowing, new epistemologies in a multi-cultural setting" (hooks 1994, 40).

The implementation of this "engaged pedagogy" (hooks 1994, 15) is through collaborative dialogue, which begins to cross the boundaries of race, gender, class or professional standing. In this collaborative dialogue, the teacher shares and is vulnerable and demonstrates to students how experience can illuminate academic material.

In the end, hooks still saw the classroom as a location of possibility despite all its limitations, perhaps analogous to Freire's pedagogy of hope:

> "in that field of possibility, we have the opportunity to labour for freedom, to demand of ourselves and our comrades an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom." (hooks 1994, 207)

The "engaged pedagogy" (hooks 1994, 15) in this thesis emerges from a specific contextual understanding of the potential relevance of hooks' pedagogy in South Africa, shared by other educators (Le Grange 2011; Davis and Steyn 2012). Researchers have found that applying hooks' "autobiographical narrative… offer[s] a critical analysis of experiences of marginalisation, particularly of race and gender", contributing to "recognition and affirmation that are important in [South African] education" (Carolissen et al. 2011,158). Cross and Atinde (2015, 309) borrowed from hooks in using "lived experiences of marginalisation" as generative for students to develop alternative cultural capital to negotiate South African institutions' habitus.

However, even though these educators have found hooks relevant to South Africa's context, Mbembe (2019) reminds us that the American context is different from that of South Africa, cautioning against overreliance on American theories of intersectionality.

2.3.2 De Sousa Santos – "Epistemology of the South"

De Sousa Santos' (2014) "Epistemology of the South" has some key ideas that are adaptable to design pedagogy in South Africa. It guides a broader project of transformation to empower diverse knowledge communities. This is relevant to the current project of design pedagogy in South Africa, where transforming pedagogy and valuing diverse knowledge systems is key to the ongoing challenge of transforming universities and knowledge paradigms.

Firstly, De Sousa Santos' (2014) idea of the global south is not a geographical concept but rather a metaphor for human suffering caused by colonialism and capitalism.

The "abyssal line" (De Sousa Santos 2014, 189) dividing societies decades after the end of historical colonialism, where whatever lies beyond that line is still largely invisible, still describes post-Apartheid South Africa to some extent. Post-

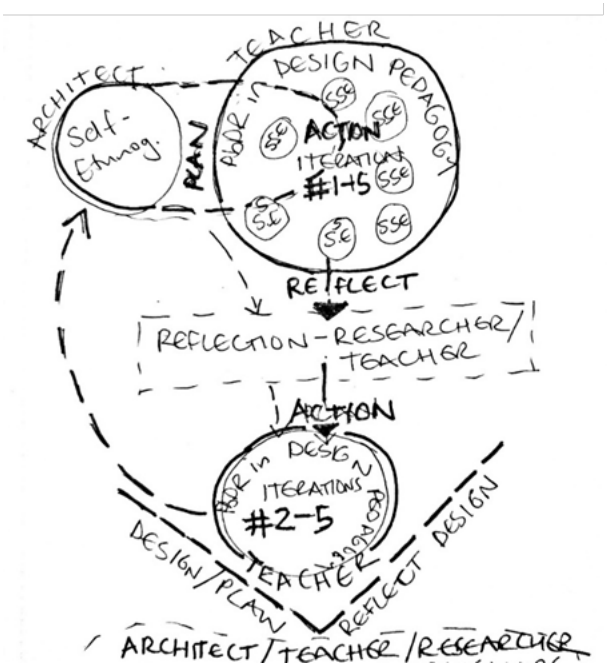
abyssal thinking posits a radical break with modern Western ways of thinking and acting. The global resistance against abyssal thinking acts against epistemicide, where colonial domination involves the deliberate destruction of other cultures' knowledge, memories, ancestral links, and manner of relating to others and nature (De Sousa Santos 2014).

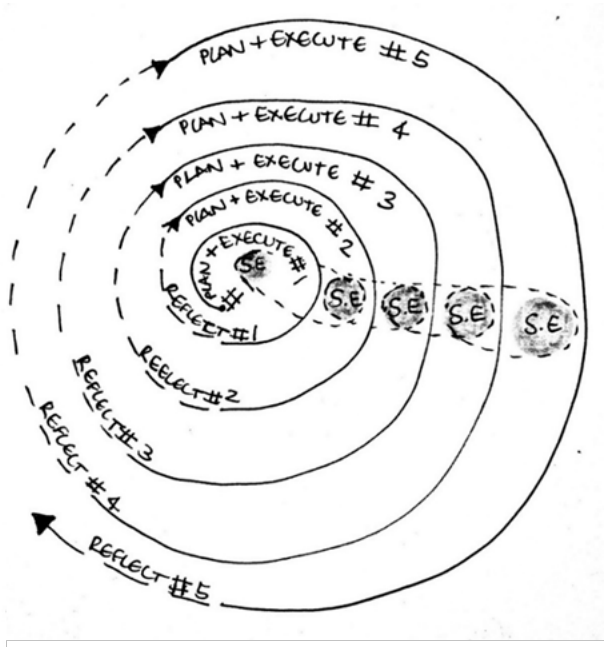
"Epistemology of the South" (De Sousa Santos 2014) requests an epistemological transformation, asking if what one is learning is valid and if what one has learnt should be forgotten or unlearnt. This transformation is based on a collective formation of knowledge and intercultural translation, which develops new hybrid forms of cultural understanding and intercommunication and asks for deep listening.

Living theory shows how an individual's social formation influences their practice and understanding. This "teoria povera [is] based on experiences of large, marginalised minorities and majorities that struggle against marginality and inferiority" and seeks a "knowing with, understanding facilitating, sharing and walking alongside" (De Sousa Santos 2014, 9).

Alongside the feminist epistemologies of Grosz (1995), De Sousa Santos also underlines the corporeality of knowledge, acknowledging that struggles are carried out by bodies; therefore, the body is a necessary mediation of our representation of the world.

The relevance of De Sousa Santos to South African architectural design pedagogy is in revealing the cultural conditions of architectural epistemicide that in the post-colonial context linger in cultural production. Further, working towards the coexistence and interaction of diverse knowledge systems, an "ecology of knowledges and intercultural translation" (De Sousa Santos 2014, 296).


ARCHITECT
TEACHER
DESIGN PEDAGOGY
Self-Ethnog.
PLAN
ACTION
ITERATIONS
#1-5
REFLECT
REFLECTION-RESEARCHER/TEACHER
ACTION
#2-5
TEACHER
DESIGN/PLAN
REFLECT
DESIGN
ARCHITECT/TEACHER/RESEARCHER


PLAN + EXECUTE #5
PLAN + EXECUTE #4
PLAN + EXECUTE #3
PLAN + EXECUTE #2
PLAN + EXECUTE #1
S.E
REFLECT #1
REFLECT #2
REFLECT #3
REFLECT #4
REFLECT #5

The research in this thesis had a 'designerly' iterative approach. Instead of a linear, logical approach, the research began in an architectural practice manner, broadening, asking many questions, incorporating many themes, avenues of exploration and competing issues. These questions were then tested and explored through several research iterations, bringing all these broad themes and issues into one multifaceted thesis. This iterative approach used an action research methodology with five full cycles of planning, action and reflection, and another two reduced cycles. Insights and reflections on the previous year's cycle informed the planning and implementation of subsequent cycles.

Action research as a methodology was chosen due to the inherent speculative and explorative nature of the research. There were many initial questions as seen in Chapter One but no initial clear idea of how to answer them. These questions included those on my practice, on students practice and on pedagogy. Action research as a methodology allowed the research to proceed in a designerly fashion. Pedagogic methods and tools were posited, and then speculatively explored for their outcomes and potential in answering the questions. These outcomes were analysed and then adjustments to the next cycle of speculative methods were made. The insights into my own autoethnographic practice-based design research impacted the pedagogic research and vice versa (Figure 3.1).

Qualitative and quantitative data were collected during these action research cycles. The qualitative data included student reflective self-assessments from the two Manifesto projects during the year; student design projects completed during the year; peer and tutor reviews; focus groups and interviews. The more quantitative data included T-SEL surveys and educational surveys. The reflective self-assessments were individual and thus focus groups and the T-SEL surveys were chosen as methods to assess both the class as a whole, and the racial and gender group dynamics.

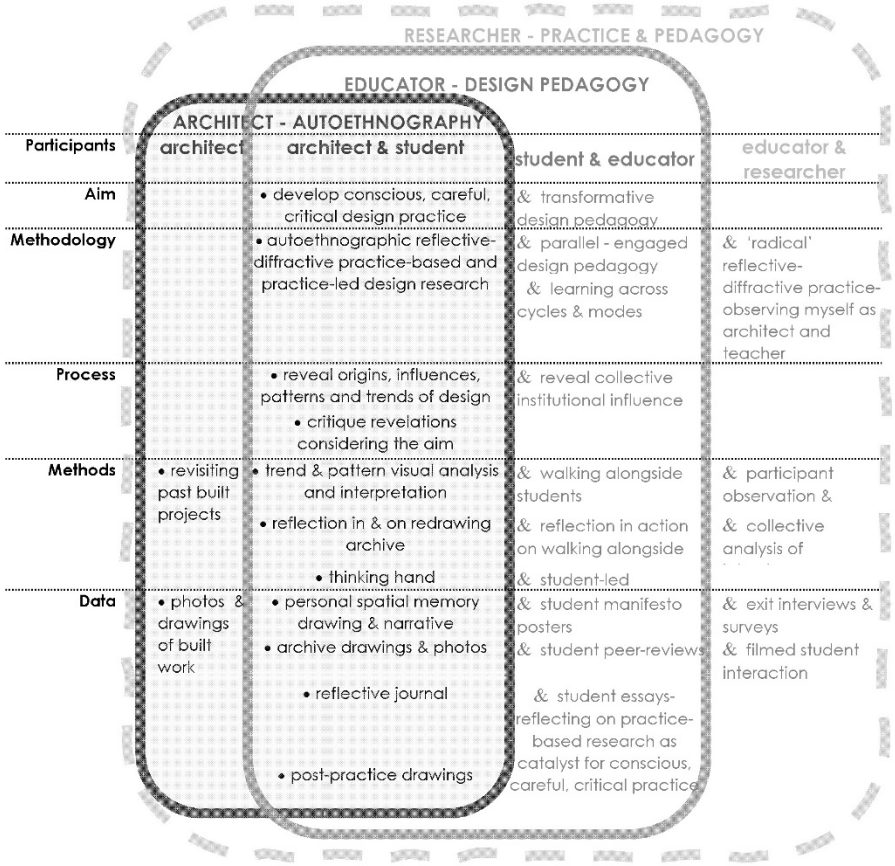


Figure 3.1 Scaling of autoethnographic practice-based design research from architect to design pedagogy (Author's construct)

This data was correlated and compared to ascertain the impact of the research on students' design practice, seeking to answer the initial research questions as to whether autoethnographic practice-based design research could contribute to a more conscious, critical, careful practice.

The process of reflecting in and on every action research cycle was assisted by peer reviews of conference and symposium presentations. In every cycle, the ongoing research was presented, and valuable feedback was received, which impacted the planning and action in the following cycles.

Finally, the three papers written and submitted in the last action research cycle were peer-reviewed, revised and re-submitted for further review (refer to PART B of this thesis for papers and their current publication/ review status). These peer reviews, especially the international journal reviews, were invaluable considering the limited research in South Africa in the field of design pedagogy and practice-based design research.

The relevance of the research at a local or international level was also revealed and discussed through the peer review.

Consequently, the revisions to the various papers articulated the impact and contributions of the research more clearly and contributed to the overall clarity of the thesis. Writing a thesis that tied together multiple publications in interrelated fields, provided opportunities to focus on the detail and synthesise a narrative across these fields. Some of the papers also were peer reviewed by both local and international reviewers, which upon analysis revealed different viewpoints. The international reviewers focused more on methodology and the relation to international literature whilst also providing a lens to the international contributions of the research. Local reviewers focused on the ontological nature of the research and wanted critical ontological positionality to be articulated more clearly within the decoloniality discussions.

Finally, this section will address both the limitations to the methodology, as well as the ethical issues, in research that included students in architectural education in a South African university setting.

Figure 3.1 summarises the research aims, methodology, process, methods and data as they pertain to the roles of architect- educator-researcher.

3.1 Action research methodology

The research in this thesis was carried out using action research, with participants being myself, other educators and students. Action research was chosen because the research was conducted over several years, from 2019 to 2025, with successive cohorts of third-year students of the BAS degree at SoAP. Action research allowed me, the educator, to reflect on and adjust the pedagogy from one year to the next. Action research has a long history in education,

especially adult education (Creswell 2012; Glassman et al. 2013). It has also been used in design and arts education (Rowe 2020; Seppälä et al. 2021; Ten Brink et al. 2022), as well as in design pedagogy at SoAP (Janse Van Rensburg 2016). It was, therefore, an appropriate methodology for research conducted in an education setting to test the impact of an autoethnographic practice-based design research curriculum and supportive pedagogy.

Although the research methodology was action research, parts of it could be termed participatory action research, as the participants, myself and my students, actively engaged in the action and reflection, although the planning was limited to myself as the educator. Participatory action research is the third stage in three stages, marking the development of action research:

> "The first stage consists of the identification of a process for addressing societal issues. The second stage turns toward practice and the need to involve practitioners, such as teachers, in the solution to their own problems. The third and most recent phase represents the participatory, emancipatory, or community action research approach in which groups assume responsibility for their own emancipation and change." (Creswell 2012, 1)

Participatory action research is a social participatory process, which is practical, collaborative, reflexive and dialectical, aimed at emancipating individuals and bringing change to communities and practices (Creswell 2012). In the South African context, participatory action research also has a social justice and decolonial imperative. Participatory action research is acknowledged by several researchers (Petras and Porpora 1993; Creswell 2012; Rowe 2020) as having taken its impetus from third-world critical pedagogies such as Freire (2017) and Fals Borda (Rahman and Fals Borda 1991; Fals Borda 2006). This is due to the emancipatory nature of this type of research, which seeks to improve and empower individuals' lives and practices, as well as society within a particular setting.

In the context of the current research, the emancipatory goal was to validate students' diverse design voices and worldviews, developing a more conscious, critical, careful practice. Students were active participants, and their reflections fed directly into the planning of the next cycle. However, as the planning was largely completed by myself, the research straddles the divide between action research and participatory action research.

Participatory action research can be implemented in several ways. Petras and Porpora (1993,107) note the range of models: the "parallel process model; the mutual engagement model", and an institutional engagement model named after the University of Central America model . In the "parallel process model", researchers pursue independent questions but, in some way, give back to the community studied. In the mutual engagement model, researchers are participants in the study, working side-by-side with other participants towards a common goal. The University of Central America model takes mutual engagement to an institutional level.

The action research in this thesis is between the parallel process and the mutual engagement models of participatory action research and more normative education action research. Both students and I were autoethnographic researcher participants, mutually engaged in learning new knowledge about our design practices through practice-based design research. However, as the educator, I had a parallel process of designing and planning the pedagogical engagement, asking if the process was shifting and changing the students' design practice. McNiff and Whitehead's (2011) action research steps were adapted to the parallel and mutually engaged participatory action research in this thesis, as outlined in Table 3.1

Table 3.1 Comparing McNiff and Whitehead's (2011) steps to the questions asked in this thesis

.McNiff and Whitehead (2011)	***Questions asked in this research***
Identifying the research issue and formulating a question	*How can the students and I become more conscious, critical and careful in our design practice?*
Gathering data to show the current situation	*Why is this improvement in practice necessary in the current architectural practice and education paradigm in a post-colonial, post-Apartheid South African university?*
Action taken to improve the situation, first through understanding the situation and secondly through bringing that learning to bear	*Exploring my and students' design practice through practice-based design research methods, which were adapted from postgraduate programmes*
Monitoring actions and gathering data to show the situation as it developed	*Implementing practice-based design research with students through a parallel-engaged pedagogy in monitored cycles/years of participatory action research; the knowledge unearthed from participants alters the following cycle of implementation.*
Generating evidence from data	*Analysing practice-based design research outcomes and collating survey data over the five years*

.**McNiff and Whitehead (2011)**	***Questions asked in this research***
Come to conclusions and subject these to critical scrutiny	*Testing conclusions drawn from the data with student and teacher focus groups and conference/ symposium presentations to colleagues*
Articulate significance of research	*The significance of this research is personal, pedagogical and institutional. The personal significance is a more conscious, critical, careful design practice for all participants (myself and students). The pedagogical significance is a deeper understanding of how to develop these qualities in students. The institutional significance is in extending a transformative and decolonial imperative.*
Articulate how practice has changed in light of the outcomes of the research	*Articulating the changes and shifts in my design practice and pedagogical practice*

3.1.1 Scope of study

Table 3.2 The number of students in each year, including the percentage of students who took part in the research; student numbers are further broken down by demographics (data sourced from the ARPL3005 course students registration data and survey data) Note 2024 data not available as I did not teach the course in that year

Year	**No. Students in class**	**Student demographic breakdown**											
		Female Students						**Male Students**					
		Black	White	Indian	Coloured	Asian	***Total***	Black	White	Indian	Coloured	Asian	***Total***
2019	87	16	17	9	2	0	*44*	18	8	12	4	1	*43*
		18%	20%	10%	2%	0%	*51%*	21%	9%	14%	5%	1%	*49%*
2020	81	14	17	6	2	1	*40*	20	16	4	0	1	*41*
		17%	21%	7%	2%	1%	*49%*	25%	20%	5%	0%	1%	*51%*
2021	57	9	16	10	1	1	*37*	7	7	4	1	1	*20*
		16%	28%	18%	2%	2%	*65%*	12%	12%	7%	2%	2%	*35%*
2022	55	6	12	4	0	0	*22*	15	11	5	1	1	*33*
		11%	22%	7%	0%	0%	*40%*	27%	20%	9%	2%	2%	*60%*
2023	55	18	10	2	2	0	*32*	8	5	8	2	0	*23*
		33%	18%	4%	4%	0%	*58%*	15%	9%	15%	4%	0%	*42%*
2024	56												
2025	81	26	19	7	2	0	*54*	10	10	4	2	1	*27*
		32%	23%	9%	2%	0%	*67%*	12%	12%	5%	2%	1%	*33%*

The research participants were the BAS degree successive cohorts of third-year students from 2019 to 2025 (Table 3.2). Almost all the students registered from 2019 to 2023 participated in the research (one student from 2022 and one from 2023 did not complete the year). However, using ethics consent forms, the students could elect not to have their data included in the analysis and choose relevant evidence to be published. In 2024, the scope of the research was limited to a T-SEL, which was voluntary. Although 41% of the class started the surveys, only 18% completed the final survey.

Table 3.2 notes the demographic breakdown by gender and race for each year as per classifications used in the latest 2022 South African Pollution Census (Statistics South Africa 2023). Initially, student demographics did not play a role in the research, as the aim of the autoethnographic practice-based design research was to validate individual design voices, supporting a more conscious, critical, careful design practice. However, towards the end of 2023, while presenting initial findings at a SoAP symposium, a colleague asked if there were differences in terms of gender or race across the diverse class, especially in the context of South Africa. This question was addressed by breaking down the data by gender and race (Table 3.2).

While during Apartheid this racial categorisation was legislated, it is used post-Apartheid to monitor the progress of the equity and transformation mission of institutions. Wits, a historically white university, required students of colour to gain special ministerial permission to study there during Apartheid. Since the end of Apartheid, in 1994, the typical class cohort at SoAP has increased in diversity. In 2024, the class cohort is made up of students from varying racial, ethnic, cultural and language backgrounds. Even during the five years of the research, the class transformed in terms of both gender and race; for example, an increase from 18% in 2019 of black women students to 35% in 2024. However, these demographic numbers belie cultural, linguistic and economic differences. Thirty-five languages are spoken in South

Africa, with twelve of them official languages. If language denotes cultural practices, the extent of class diversity is clear.

Therefore, considering the class averages only did not reveal the pedagogy's intersectional and intercultural impact. It was imperative in a diverse cohort to understand how the pedagogy was received across the class and not to make assumptions based on class averages. However, in some ways, analysing the data by race and gender, and later similarly dividing focus groups, felt like going back to the Apartheid past, a deeply uncomfortable feeling.

Much like "strategic essentialism" (Spivak and Grosz 1990, 11), the purpose of reading the survey data through the lens of race and gender was to "strategically… look at essentialisms, not as descriptions of the way things are, but as something that one must adopt to produce a critique of anything" (Spivak et al. 1990, 51). The critique, in this case, was not about reverting to the race classifications of Apartheid (the way things were) but rather about understanding on a more granular level how the pedagogy impacted students, especially in terms of equity and social justice.

3.1.2 Action research validity and reliability

Borrowing validity and reliability from quantitative research to lend credibility to qualitative research was rejected by some qualitative researchers in favour of rigour, "trustworthiness… credibility, transferability, dependability and confirmability" (Morse et al. 2002, 15). However, these two contrasting strategies are also considered differentiated in their implementation with ongoing process validity strategies versus post-hoc evaluation of research's rigour at completion (Morse et al. 2002).

Nonetheless, different types of validity have been listed by various researchers as important to establish the reliability and validity of action research: personal, social, process, content, democratic, catalytic, ironic, transformation,

formal, narrative, reflexive, methodological, outcome, dialogic, internal, external, construct and face (Lather 1986; 1991; Morse et al. 2002; Herr and Anderson 2005; Newton and Burgess 2008; McNiff and Whitehead 2011; Spiers et al. 2018).

Amidst this long list of ways to assess validity in action research, Lather (1986, 66) more narrowly reconceptualised the validity appropriate for "research openly committed to a more just social order" as construct, face and catalytic validity. Herr and Anderson (2005) echoed this by matching research goals with validity criteria. Newton and Burgess (2008) then adapted Herr and Anderson's model, suggesting that different types of action research require certain primary and secondary validity tests, differentiating between knowledge-generating, emancipatory and practical action research, although they included dialogic validity as the only validity required for all types of action research. Newton and Burgess (2008) echoed Lather by noting that catalytic and democratic validities were primary tests for emancipatory action research, further including process and outcome validities as secondary to this type of action research.

The action research in this thesis is situated between the emancipatory and the practical, seeking transformation in the South African university context, as well as improvement of students' design practices. Thus, the validity tests appropriate to this thesis' action research are:

- Catalytic/ transformational validity: Has the research been transformative, both personally for students and within the institution? Has it contributed to the kind of conscientisation that "re-orients, focusses and energises participants… to knowing reality in order to better transform it"? (Lather 1986, 67)
- Democratic validity: The research developed respect and discursive and collaborative practices between participants (Newton and Burgess 2008; McNiff and Whitehead 2011).

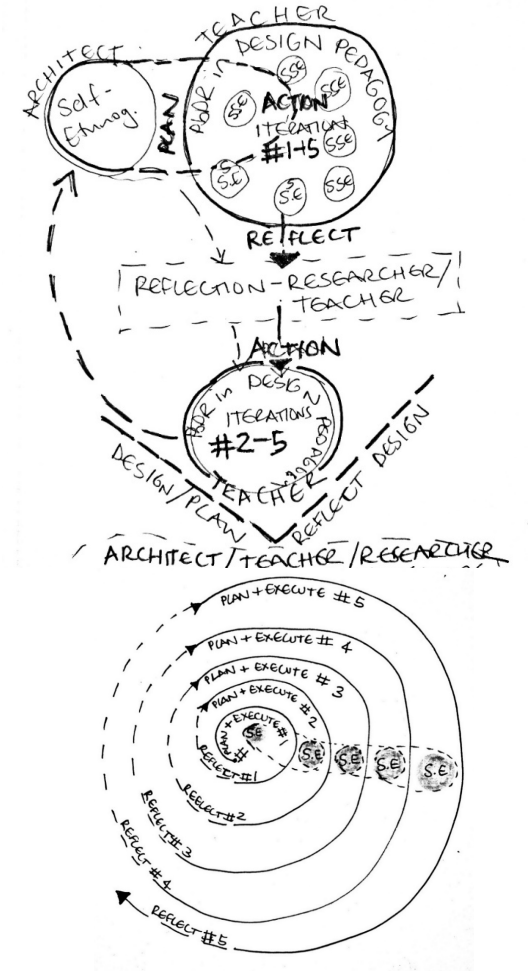


Figure 3.2 Action research: a typical cycle of autoethnographic practice-based design research and action research cycles from the first one spiralling outward in a loop of planning, action and reflection, with my autoethnography embedded in the process (Author's drawing)

- Dialogic validity: critical peer review and dialogue with other researchers and colleagues (Newton and Burgess 2008)
- Outcome validity: Have the aims of a more conscious, critical, careful practice been met? Is this demonstrated through triangulation of "multiple data sources, methods and theoretical schemes… [to] establish data trustworthiness" (Lather 1986, 67)?
- Process/ construct validity: The processes involved in the action research are demonstrated; "I understand what I have done and how" (McNiff and Whitehead 2011, 46), and these processes, in terms of emancipatory social theory, confront and are changed by students' learning experiences (Lather 1991).
- Face validity: The participants are engaged at the end of the process, discussing "what the results of the research meant to them" (Lather 1986, 72).

3.1.3 Action research cycles 2019 to 2025

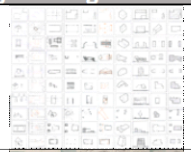
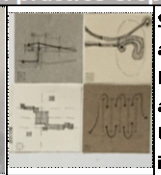
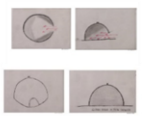
Most of the research was conducted through six action research cycles from 2019 to 2025. The action research cycles included planning, action and reflection across the different modes of architect, teacher/ educator and researcher (Figure 3.2). I began the cycle by researching and planning the autoethnographic practice-based design research.

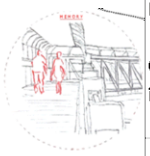
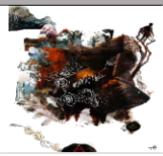
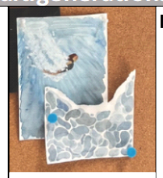
This moved to action in all modes of architect-educator-researcher. My reflections on this action as the educator-researcher impacted the next cycle's planning. The cyclical nature of the participatory action research involved the implementation of reflective-diffractive practice-based design research methods over six years of action research cycles of planning, acting and reflecting. Changes made to each subsequent cycle were based on reflections on previous cycles. Learning and reflecting occurred across cycles and modes, with outcomes of my autoethnographic research affecting the planning of design pedagogy and vice versa. In all cycles, the autoethnographic reflective-diffractive practice-based design research was embedded in two projects in the ARPL3005 Architectural Theory and Design course of the BAS degree: Manifesto and Manifesto Revisited.

This project evolved through cycles of participatory action research from 2019 to 2025 (Table 3.3 and Appendix A.2 for project briefs). The first five action research cycles were carried out from 2019 to 2023 with successive third-year student cohorts from the SoAP BAS degree. My colleague, Melinda Silverman, and I led the pedagogy and curriculum from 2019 to 2022. In the 2023 cycle, I led alone. The 2024 cycle, while I was on sabbatical, was led by Kevin Goncalves, who implemented a slightly modified curriculum without the pedagogical strategies developed over the previous five years. In the 2025 cycle, I returned to teaching with a clearer idea of the impact of the Manifesto projects on students. Table 3.3 outlines each cycle's changes in the pedagogy, curriculum, student work and my autoethnography in each cycle. What follows is a critical description of the action research methodology highlighting the "transformative triggers"[12] (Blythe and Stamm 2017b, 55) that caused changes in the curriculum and pedagogy from one cycle to the next.

[12] Transformative triggers were moments either in the pedagogy or reflecting on the pedagogy which either caused immediate change to occur or triggered changes in the following year's pedagogy. These are listed as text boxes alongside the text as TT#.

Table 3.3 Pedagogy and curriculum changes from cycle to cycle from 2018 to 2024

CYCLE #	Pedagogy	Examples of students PbDR		Curriculum			Own Auto-ethno-graphy
Year /Educator	Transformative triggers	Manifesto Poster	Detail	Manifesto Brief	Aim	Graphics	
CYCLE #1 - Reflective practice. Adapting existing curriculum							
2018 Ludwig Hansen				**Original brief** 10x10 drawings of own projects & other architects' projects – reference list issued	Develop critical thinking, ability to self-critique. Tools to better articulate your work	**Unarticulated grid** of analytical drawings	Research into PbDR precedents & methods
2019 Sandra Felix Melinda Silverman	Focus on reflective practice. TT#1 Pedagogy became more student led			**Reflective practice added** -reflection in practice -reflection through practice -reflection for practice -social reflection	**Evoking design fascinations through self-reflection** on own & other architects' design projects. Focus on graphics as generative for representation, reflecting	**Graphics reveal the design fascinations across the unarticulated grid**	Drew a few sketches in my design journal; did not share them with students and did not complete the exercise
87 students		Student7641,2019		**List of referenced architects**			
CYCLE #2 Parallel-engaged pedagogy - sharing narratives of practice & spatial memory							
2020 Sandra Felix Melinda Silverman	TT#2.1 Parallel-engaged pedagogy. TT#2.2 Institutional influence			**Social reflective dialogue added.** **Narrative of design journey added.** **Unpacking institutional influence.**	**Finding narrative** Students position themselves in relation to institutional influence	**Articulated narrative structure emerged**-journey of design practice	PbDR alongside students-narrative design journey between Wits & FAUP
81 students		Student0098,2020					
CYCLE #3 COVID pedagogy - more agile & caring. Personal Spatial Memory emerges							
2021 Sandra Felix Melinda Silverman	TT#3.1 Agile & caring pedagogy TT#3.2 Personal Spatial Memory			**Online whiteboards due to COVID** **Shared 'Playing with Fabric'** - own PbDR personal memories	**Finding narrative** Informal discussions on spatial memory	Narrative structure **Personal spatial lived experience** catalytic for a few students	Explored memory and different tools of research as generative for PbDR
57 students		Student1902,2021					

CYCLE #	Pedagogy	Examples of students PbDR		Curriculum			Own Auto-ethno-graphy
Year /Educator	Transformative triggers	Manifesto Poster	Detail	Manifesto Brief	Aim	Graphics	
CYCLE #4	Critical positioning through Personal Spatial Memory						
2022 Sandra Felix Melinda Silverman	TT#4.1 Personal Spatial Memory generative for critical positioning			**Personal spatial memory added** **Contesting institutional influence**	Personal spatial memories generative for design narrative Students **position themselves critically** within institution	**Personal spatial lived experience underpins** design project fascinations	Three educators participated in Personal Spatial Memory exercise
54 students		Student2390,2022					
CYCLE #5 Validating different worldviews through social reflection							
2023 Sandra Felix	TT#5.1 Different worldviews TT#5.2 : T-SEL surveys quantitative lens			**Social Reflective moment added at end** of the project- with educator **Sharing different ways of seeing across class** - pin-up at end	Personal spatial memory drawings centred in narrative design journey. Variety of worldviews and positions taken	Narrative structure with the memory at the center	Shared a client's spatial memory and its impact on their spatial desires for their home
56 students		Student2260,2023					
CYCLE #6 Reflective outsider							
2024 Kevin Goncalves	TT#6.1 Atmosphere TT#6.2 Independence focused pedagogy			Final Manifesto Reflective essay removed from the curriculum	No change in aims	Evocation of atmosphere and embodied experience in one student's submission	On sabbatical - reflecting on the previous cycles and writing
56 students		Student0001, 2024					
CYCLE #7 Expressing difference & situating within Wits' multigenerational ways of practising							
2025 Sandra Felix	TT#7.1 Expressive posters TT#7.2 Multi-generational Wits influence			No changes	Same	Expressive graphics reflected students fascinations and memories	Gained confidence and clarity in pedagogy through the writing of research.
81 students		Student0001, 2025					

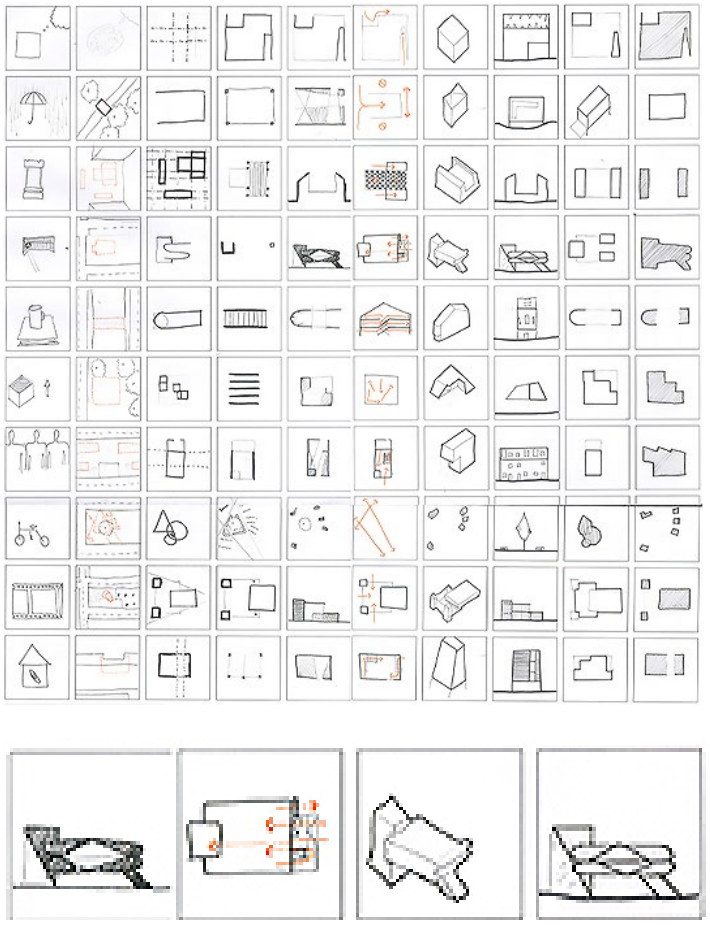


Figure 3.3 2018 Manifesto Poster and an enlarged portion showing the 10 x 10 sketches (Drawings by student001, 2018)

Research Cycle #1 commenced in 2019, analysing practice-based design research precedents and methods' relevance to the South African context, as well as to my practice. This fed into the planning of pedagogy in 2019: the first iteration of applying the practice-based design research to design pedagogy for 87 third-year BAS students, where I remained solely an educator in the design studio. The learning and reflection from this research were incorporated into the planning of Cycle #1's pedagogy, which involved the adaptation of the Manifesto project, which was already in the third-year design curriculum. The Manifesto project was inherited from Ludwig Hansen as part of the ARPL3005 curriculum (Figure 3.3). The project involved students drawing 10 x10 analytical sketches of ten of their past projects through ten categories: program, site, geometry, structure, enclosure, circulation, massing, façade and spatial relationships between primary and secondary spaces and between solid and void. Then, the students proceeded to draw another 10 x 10 analytical sketches using the same ten categories but of contemporary architects' projects drawn from an issued list. Students therefore produced a grid of 10x10 drawings of their own design projects and 10x10 drawings of other architects projects. (Figure 3.3).

Upon receiving this inherited brief, it appeared that some of the exercises within it were similar to the practice-based design research methods I had begun researching. However, Hansen later confirmed that he was not aware of these practice-based design research methods, noting the aims of the project were critical thinking and analysis and developing students' articulation of their work (Interview 004, 2024). The outcomes of the Manifesto project under Hansen were unarticulated grids of analytical drawings (Figure 3.3).

Wanting to lean into the more reflective practice aims of practice-based design research, reflecting on the body of practice work, reflecting in the act of drawing and reflecting for future practice were added to the Manifesto brief in 2019. These reflective methods drew from Schön (1984; 1987), Blythe (2013; 2016) and Van Schaik (2004; 2008; 2013). The self-reflection on the 10 x 10 drawings of their work and other architects' work developed critical thinking and unearthed students' personal design fascinations. Students were encouraged to express those unearthed design fascinations through graphic means on their final posters. Social reflection, "a learning that takes place in non-hierarchical and multiple iterations and exchanges between body, world and language and by social means" (Blythe 2013, 61), was also mentioned in the brief, but no concrete ways of achieving this were laid out.

The inherited list of reference contemporary architectural projects that students needed to analyse was almost immediately contested. Having uncritically accepted and issued the inherited list, Melinda and I realised, due to student protest, that there were no African architects, no architects of colour and no women architects on the list. Therefore, the list was immediately discussed and expanded in consultation with students.

TT#1: This was a critical learning moment as an educator. The choice of precedents is highly political, either reinforcing the status quo or contesting it. Workshopping this list with students also started us down a student-led pedagogy path, where students co-constructed the course with us.



Figure 3.4 2019 Manifesto Poster with enlarged portion showing sketches articulating a fascination with nature and landscape (Drawings by student7641-2019)

The 2019 Manifesto project poster graphics correlated with a more careful reflection on the unearthed fascinations, as seen in Figure 3.4.

Reflecting on Cycle #1 in 2019, two things became clear. Firstly, self-reflection had occurred but social reflection had not. Secondly, I had the unverbalised intent to complete the same project researching my practice in 2019, but this did not happen.

At the same time, outside of the design studio, my research continued, and I presented a paper at a 2019 CA²RE conference into the practice-based design research precedents and methods that could be venturous and transformative in the South African context (Felix 2019). At the beginning of 2020, research following Hill's (2013) definition of design research in the SoAP's historical context was presented at an Arts Research Africa conference at Wits (Felix 2020a).

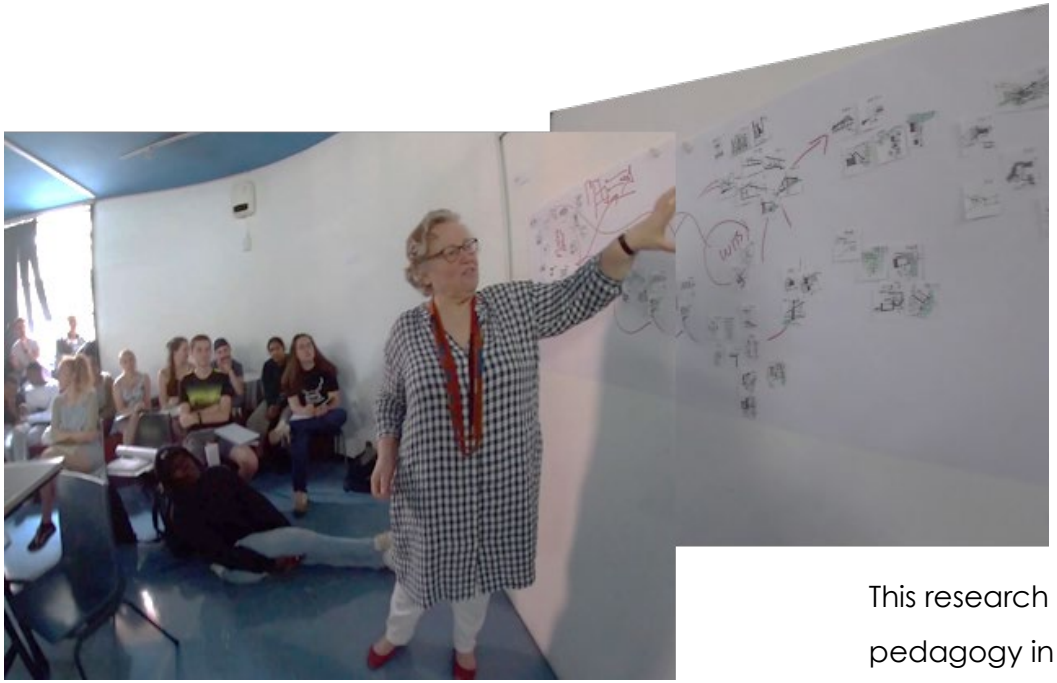


Figure 3.5 Melinda Silverman engaging with my Manifesto narrative poster in front of students in 2020 (Author's still frame from film)

This research merged with reflections on the previous cycle's pedagogy in the planning for Cycle #2, resulting in a more active role as both teacher and research participant. In Cycle #2 in 2020, I did the same practice-based design research methods as the next cohort of third-year design students. Further, to guide students on how social reflection can be enacted, I pinned up my drawings and spoke about my personal design narrative journey, reflecting on it with a colleague, Melinda Silverman (Figure 3.5). This experience of a more parallel pedagogy, with me completing similar practice-based design research alongside 81 students in the design studio, was filmed (Figure 3.5). My design narrative traced the development of my particular ways of seeing and being at the intersection of *Institutional Influence* from Wits to FAUP and back to Wits (refer to Chapter One).

TT#2.2: *Institutional Influence* on design practice was clear in my practice-based design research. Students were encouraged to similarly reflect on how SoAP had influenced their design practices.

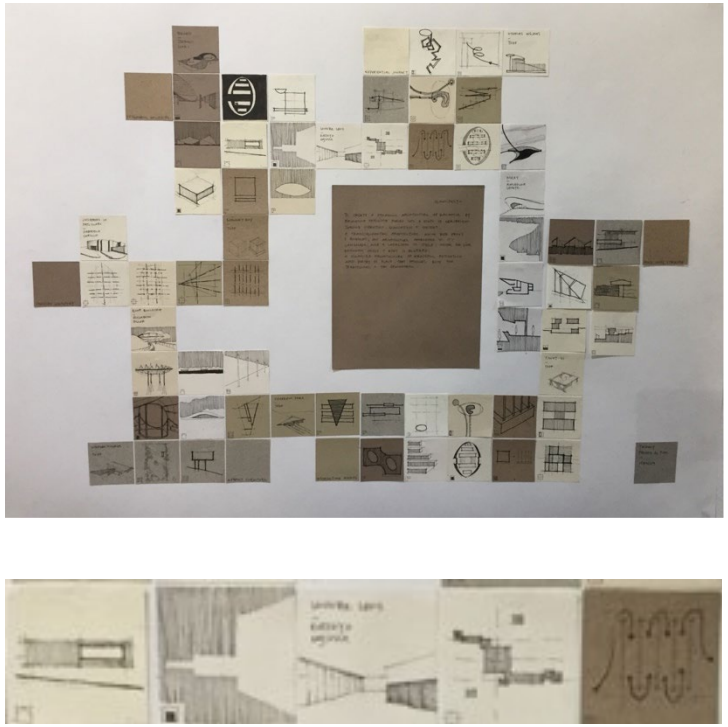


Figure 3.6 2020 Manifesto Poster and enlarged portion showing sketches, displaying the move to a narrative structure (Drawings by Student0098-2020)

To unpack the influence that SoAP had on students' design practice, the list of precedent projects to be studied needed to include Wits alumni. Students were further instructed to discuss their research with another student, much like Melinda and I had done. The student discussions were fruitful, with students learning more about themselves and their design practice through social reflection than by only self-reflecting. The 2020 Manifesto Posters displayed a turn to a more narrative structure from the articulated grids of Cycle #1, telling a story of how students' design fascinations developed and were explored in their past design projects over the course of their degree at Wits, relating to Wits alumni precedents (Figure 3.6). This echoed the narrative structure of my Manifesto Poster.

The research carried out in Cycle #2 in 2020 was reflected upon and shared at two conferences: a local South African Journal of Art History conference (Felix 2020c) and another international CA^{2}RE conference (Felix 2020b).

Locally and globally, 2021 was a strange year. The COVID-19 pandemic moved SoAP to online learning, similar to many institutions globally. I continued my autoethnographic practice-based design research, moving from using drawing as a research tool to de-constructing my archive of practice to taking photographs of projects completed over 25 years of practice. The photographs revealed something different about my design practice, my fascination with colour, texture, materiality and pattern. In trying to find the origins of this fascination, childhood memories came to the fore: playing with fabric at the foot of my seamstress mother's sewing machine.

I presented a paper at a conference unpacking this fascination, entitled "Playing with Fabric" (Felix 2021) and shared this presentation with students when Cycle #3 started in 2021 with the Manifesto project. Although the Manifesto brief did not change, personal memory as the origin of personal spatial intelligence proved to be influential.

Similarly to the previous cycle, in Cycle #3 in 2021, I completed the same autoethnographic practice-based design research exercises as the students. However, we were now online due to the COVID-19 pandemic, sharing drawings on an online Miro board. Melinda Silverman and I shared the agile, adaptable and caring pedagogical strategies triggered by the pandemic and online learning at a symposium (Felix and Silverman 2021).

TT#3.1: The COVID-19 pandemic shifted the pedagogy to be more agile, adaptable, student-led and caring.

The tacit knowledge unearthed from photographs and personal spatial memories was presented at yet another CA^{2}RE conference (Felix 2021). This research triggered changes within Cycle #3, where I encouraged students who were struggling with the autoethnographic practice-based design research to explore their personal spatial memories as potentially generative for understanding their practices.

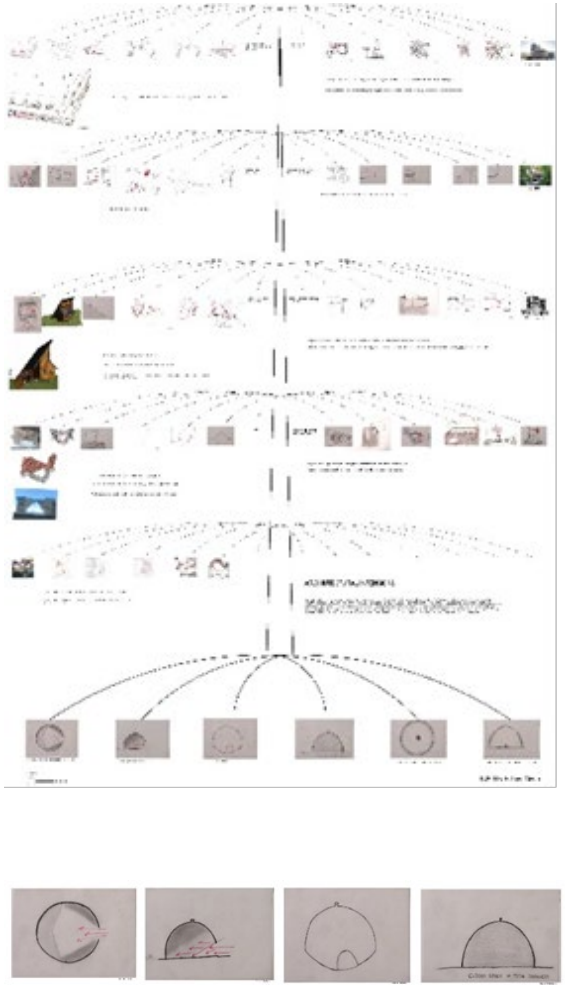


Figure 3.7 2021 Manifesto Poster showing the importance of past personal spatial memory on the project (Drawings by student1902-2021)

A few students struggled to unearth any design fascinations in their past work. I alerted them to how generative reflecting on my childhood memories had been for my autoethnography and encouraged them to do the same. This proved helpful, particularly for one student who linked memories of living in a Zulu hut with their fascination for light in their design projects (Figure 3.7).

TT#3.2: In 2021, personal spatial memories proved catalytic for my practice-based design research and that of a few students. Also, different tools of exploration would reveal different design fascinations; for example, photography or models.

The poster outcomes for 2021 were largely similar to 2020 in their more narrative structure (Figure 3.8), with the exception of the student who had delved into personal spatial memory, where that memory underpinned connections to his past projects (Figure 3.7).

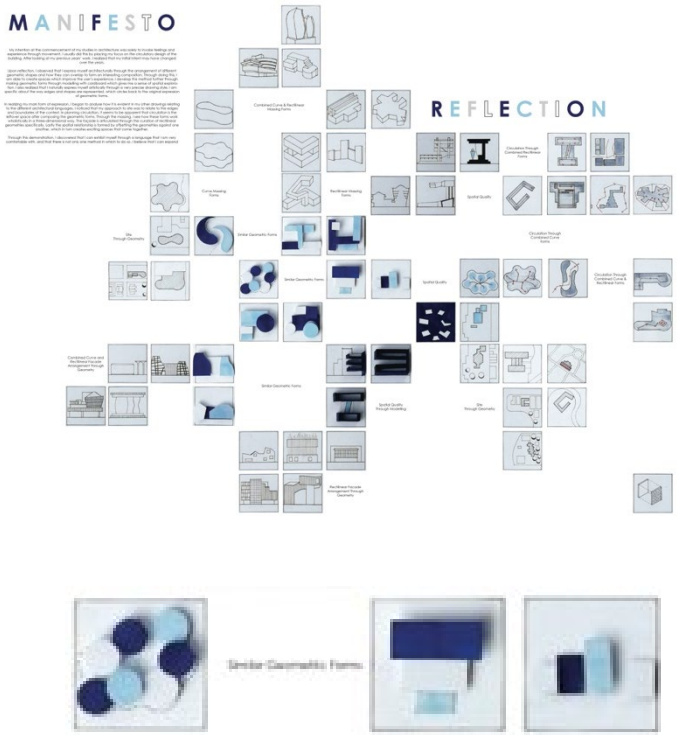


Figure 3.8 2021 Manifesto Poster with a narrative structure, exploring past projects through paper models, as well as drawing (seen in the enlarged detail) (Student453-2021)

However, having introduced the idea that different architectural tools reveal different fascinations, some students explored model-making and drawing as tools for practice-based design research (Figure 3.8).

Reflecting on 2021's transformative triggers, the Personal Spatial Memory was formally added to Cycle #4's Manifesto project brief in 2022:

> *"Each of us is an accumulation of spatial memories, both good and bad. Each of you is learning to be a spatial designer, and you need to understand where your perception of space comes from, accumulated layer upon layer from spaces you have lived in, experienced or studied, analysed.*
>
> *Sit quietly, close your eyes, and reach into your past.*
>
> *What is an early spatial memory that haunts you? A space to which you are personally connected? A home, a hearth, a window, sitting on a doorstep… the smell of your grandmother's house… the feeling of grass, or cold tiles, or soft carpet under your feet… a soaring roof… or a space that sheltered you, ensconced you like a womb.*

Step into that memory. What feelings does it evoke, good or bad? Experience that space in your memory, re-live it… Now open your eyes and draw that spatial memory, evoke it through drawing, try to make your drawing feel the same way that spatial memory feels to you." (Excerpt from Manifesto Project Brief 2022 [refer to Appendix A.2 for brief])

"Thus we cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalized on the mode of our inner space." (Bachelard 1994, 12)

Cycle #4 was enacted with the 2022 third-year class of 54 students. Three educators, including myself, participated in the Personal Spatial Memory exercise outlined above alongside the students. The memory exercise was carried out under trees in the Wits Amphitheatre. The educators shared their memory sketches and publicly reflected on what these memories meant for them in their design practices.

The class discussion that followed explored how these memories revealed ways of seeing and being, essentially worldviews, that might be very different from that of the institution. Students were encouraged to take a position and situate their worldviews critically in relation to the institution.

Personal spatial memory was generative for most students, but some failed to connect their lived experiences to their design projects.



Figure 3.9 2022 Manifesto Poster showing a narrative link between the personal spatial memory (bottom left), design practice and the student's position within Wits (Student2390-2022)

Seeing these still as separate, some students were sceptical that their personal lived experience could or even should influence their design practice. However, other students could not only see the relevance but also saw how their worldviews differed critically from the historical Wits worldview:

> "Growing up in a colonialized city much as Harare, I was attuned to resent the past-[A]partheid regime. The building geometries and arrangements of spaces were no longer applicable to me, it represented an unpleasant time in the country's history… Unconsciously I grew feeling a resentment to the city as it always felt daunting and grim." (Student2390-2022).

TT#4.1: Personal spatial memory was a catalyst for students to critically situate themselves in relation to the architectural habitus of the institution and practice within South Africa.

This student not only traced a narrative from their memory of the inhospitable places of their hometown to their current design practice but also positioned this worldview in relation to Wits (Figure 3.9).

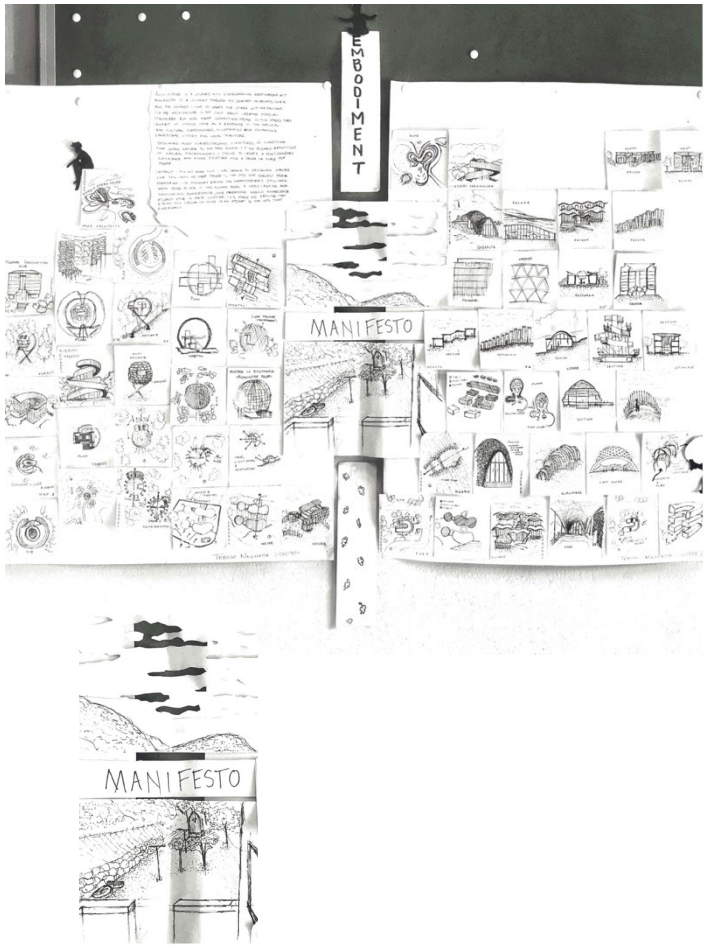


Figure 3.10 2023 Manifesto Poster with personal spatial memory on rural mountains being generative for this student's design practice (Student0903-2023)

This exercise was transformative, with many students finding it generative for new understandings of their design practices. I shared my reflections on the transformative potential of the practice-based design research methods within the parallel pedagogy at another local Arts Research African conference (Felix 2022).

When reflecting on Cycle #4, the 2022 iteration of the Manifesto Project, the only element that seemed to require reinforcing was a social reflective moment. Students were self-reflecting well and their social reflections in pairs were fruitful. However, students generally paired with other students with similar worldviews, which meant the social transformative potential of the exercise was not realised. Therefore, in 2023, a social reflective moment was added to the end of the project. Students displayed their work in the studio and saw the variety of worldviews and positions taken.

The careful exploration of scale in design projects was echoed from memories of rural mountainous landscapes reiterated and explored in their design projects (Figure 3.10).

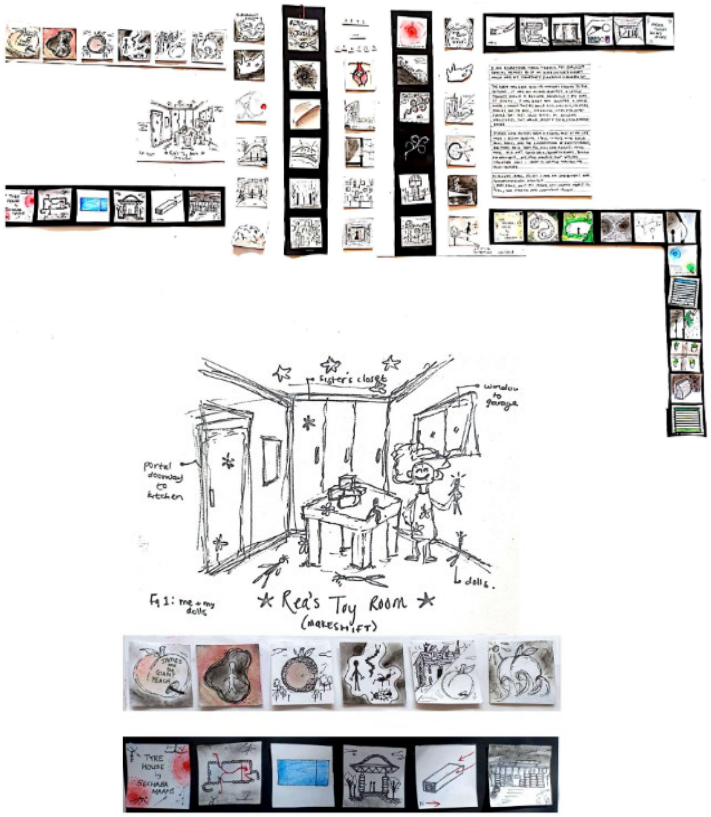


Figure 3.11 2023 Manifesto Poster with memory of imaginary spaces in a tiny closet (Student3233-2023)

To memories of dense urban living where imaginary worlds from childhood books were created in tiny closet spaces (Figure 3.11).

Cycle #5, with a cohort of 56 third-year students in 2023, continued the previous cycles of reflecting, planning and action, consolidating the previous cycles' learning. At this point in the research, I realised that although I could assess individual student's progress to becoming more conscious, critical and careful in their design practices through their two Manifesto projects, I needed a class-wide assessment. Therefore, T-SEL surveys were implemented in 2023. Three T-SEL surveys were carried out: an initial self-assessment (T-SEL Self1), a survey assessing class perceptions of each other (T-SEL of Other) and a second self-assessment survey (T-SEL Self2). Students' possible improvement in social and emotional competencies was assessed by comparing the T-SEL Self1 and T-SEL Self2 surveys.

Another conference paper was presented at an international Architecture, Media, Politics, Society (AMPS) conference on architectural education, which reflected on the transformative outcomes of the research in Cycle #5 that supported a more conscious, critical, careful design practice in myself and the students (Felix 2023).



Figure 3.12 2024 Manifesto Poster evoking atmosphere (Student0001-2024)

Cycle #6 in 2024 was different to the other cycles of research. I was on sabbatical, reflecting on the previous five cycles of action research and writing papers on my findings. In 2024, the third-year curriculum that had been developed during the previous five action research cycles was implemented with minor changes by a team of educators, all of whom had been part of the team for some of the previous cycles: Kevin Goncalves, Deborah Kirkman, Gustavo Triana Martinez and Avish Mistry. This team generously agreed to allow me to run the T-SEL surveys even though I was not part of the team. Therefore, Cycle #6 assessed the impact of the curriculum but without the parallel engaged pedagogy of care that had been developed. I had planned to compare the 2023 and 2024 T-SEL surveys; however, this comparison could not be completed as the sample size was too different. In Cycle #6, I was the outsider looking in on the third-year pedagogy, an observant researcher reflecting on the iterative learning across all the cycles and how the pedagogy was implemented without my direct involvement.

In 2024, Kevin Goncalves led the Manifesto project, using the same Manifesto brief as in 2023. Interestingly, one student took the Manifesto Poster in a more expressive direction (Figure 3.12).

The poster that evoked the embodied experience of the memory rather than just representing it.

TT#6.1: Atmosphere in the *Personal Spatial Memory* contributed to a more atmospheric poster

This reinforced the initial transformative trigger, highlighting that as a reflective student-led educator, I gained pivotal insights from students' interpretations and explorations of the brief. Going forward into 2025, the evocation of atmosphere and lived experience in the poster was added to the brief, as well as the possibility to explore more digital media as opposed to the hand drawings and or models of the previous cycles

Being a reflective outsider also allowed me to see the impact of some of the curriculum and pedagogy changes that Kevin Goncalves had implemented. A design-build project was included. Students were required to design, source funding and materials, and build an exhibition.

TT#6.2 Independence focused pedagogy & design-build

The pedagogy, as far as I could see as an outsider, echoed this design-build project by stressing independent work. The T-SEL surveys of 2024, showed that students' Self-management greatly improved through this combination of a more independence-focused pedagogy and the design-build project.

In Cycle #7, in 2025, I returned to teaching the third-year design class and emphasised the evocation of the personal spatial memory atmosphere and lived experience in the Manifesto poster. Students were encouraged to think carefully through the arrangement of their posters to ensure that the poster design reflected their spatial fascination unearthed through the *Personal Spatial Memory* and *(De)constructed Archive*.



Figure 3.13 2025 Manifesto Poster showing a close correlation between the Personal Spatial Memory abstract idea and the poster design evoking atmosphere (Student0001-2025)

This resulted in a shift from previous cycles' posters, becoming more expressive, reflecting the root of students' ways of seeing and being, as is demonstrated in Figure 3.13.

TT#7.1 Move from a narrative poster structure to an expressive one

In 2025, some students also critically situated themselves in relation to *Institutional Influence*. This unpacking of Wits' ways of practicing appeared to reach a critical mass in the class, with many students discussing how they saw their design practices as extending the tiered generational influence within Wits' ways of practising over the last fifty years, outlining Pancho Guedes' influence on Peter Rich, Peter Rich's influence on Sechaba Maape and Sechaba Maape's influence on their practices.

TT#7.2: Students seeing themselves as the next generation of Wits' architects tracing influence from Pancho Guedes to Peter Rich to Sechaba Maape, thereby tracing multi-generational Wits influence.

Reflecting on the action research cycles, it is clear that this methodology contributes to more agile and adaptable teaching, which considers student outcomes, as well as their reactions to the pedagogy, and adjusts accordingly.

The descriptive outline of these cycles draws only preliminary conclusions about the impact of this process on the conscious, critical, careful practice in students and me. The following section outlines how the research was assessed for these aims and the concluding discussion details what these assessments showed.

3.2 Assessing shifts in design practice

The research in this thesis aimed to assess if autoethnographic practice-based design research methods within a transformative parallel-engaged pedagogy of care could make designers, myself and my students, more self-aware, conscious, careful and critical. The outcomes were tested through triangulation of qualitative and quantitative data and assessments. The qualitative assessments included self-evaluation, peer and tutor reviews and focus groups comprised of students and teachers. The quantitative methods were three T-SEL surveys and assessments.

The initial qualitative assessments were students' reflective self-assessments of the completed practice-based design research exercises in the Manifesto project at the beginning of the year and the Manifesto Revisited reflective essay at the end of the year. These reflective self-assessments questioned whether shifts in design practice towards a more conscious, critical, careful practice had taken place over the course of the year.

The initial reflective self-assessment formed part of the first project, the Manifesto, which students completed in the ARPL3005 – Architectural Design and Theory III course. Students were tasked with completing a series of autoethnographic practice-based design research exercises and writing a short Manifesto statement. The Manifesto statement outlined who they thought they were as designers and the roots of their ways of seeing. Typically, this statement was succinct and approximately 100 to 200 words. This initial Manifesto was the first marker of a more conscious and self-aware design practice. The students completed the subsequent design projects cognisant of this new self-awareness.

At the end of the year, students returned to that first Manifesto, asking themselves how the outlined design intent in the Manifesto was explored in their subsequent design projects. This second reflective self-assessment took the form of a graphic Manifesto Revisited reflective essay. At this point, a critical lens was applied to their design practice throughout the year. They read their design projects through the lens of the initial Manifesto intent, assessing their progress towards that intent.

Both of these student reflective self-assessments, the Manifesto and the Manifesto Revisited reflective essay, were compared to the student design projects and used as data to analyse whether students' design practices were becoming more conscious, critical and careful.

The second qualitative assessments were peer reviews carried out on two levels:

- the researcher-educator's Manifesto findings were peer-reviewed by a colleague in front of students
- students peer reviewed each other's initial Manifesto findings

The first level of peer review was a review of my Manifesto findings. The exercise took place in front of the class, was filmed for research purposes, and the students, as my research peers, as well as a colleague, commented and reviewed my findings. This peer review was instructive both for me and the students. I learnt more about my design practice, and students learnt how to do a peer review of each other. The process also served to establish a new power dynamic in the design studio—the beginning of the parallel-engaged pedagogy.

The second level of peer review was part of the social reflection in the practice-based design research, where students' self-reflective assessments were peer-reviewed by other students to assess if the self-reflective outcomes

were visible to others. Students self-organised into pairs, with each student sharing their Manifesto reflections and reviewing each other's reflections. In this process, the focus was showing evidence of their Manifesto conclusions through the practice-based design research exercises.

The purpose of this Manifesto peer review was the first level of verification and triangulation of the Manifesto self-reflective assessment. Could a peer see evidence of the self-reflective findings? Or, could they see evidence of other design fascinations?

The third qualitative assessment was a series of interviews and focus groups conducted with colleagues, educators and tutors, unpacking the relevance and impact of the pedagogy. The teaching focus groups focused on the qualities that distinguished the parallel-engaged pedagogy from previous years' pedagogy, the impact that teachers felt the pedagogy had on students and the strategies that worked well and those that didn't.

Tutors gave ongoing feedback on the implementation of the curriculum and the pedagogy, recommending adjustments as and when they saw fit. Tutors at SoAP form an integral part of the architectural studio education. They are architects who take time away from their architectural practices for one or two afternoons a week to tutor students in the design studio. They share responsibility for student assessments and, in some cases, course design. Due to their one-on-one student interactions, they offered insight into student's development and response to the curriculum and pedagogy. Tutors and educators were also assessed by students through several anonymous qualitative and quantitative surveys where students were encouraged to give feedback on the teaching and the tutors.

To complement the reflective self-assessments and peer reviews, T-SEL surveys were conducted and the results were

collated. The T-SEL surveys assessed students' Self-awareness (conscious practice), Self-management (careful practice) and Social/ relationship awareness/ skills (critical practice).

The 2023 and 2024 third-year class completed the T-SEL surveys. In 2023, 76% (n=42/55) completed all three surveys, whereas in 2024, only 18% (10/56) completed all three surveys. Therefore, the survey samples were too small in 2024 to use the findings for any statistical purposes, and too different from the 2023 sample size to do a comparison. However, the T-SEL surveys were still useful in three ways. Firstly, students could benchmark their progress in these social and emotional competencies from the beginning to the end of the year. Secondly, the T-SEL surveys provided an overall view of the class's progress in developing a more conscious, self-aware, critical and careful practice.

Lastly, the T-SEL survey data was assessed by educators for trends and patterns that were used as the basis for the focus group discussions.

The focus groups were the last method of assessment, triangulating the other qualitative and quantitative assessments. The impact of the autoethnographic practice-based design research and the parallel-engaged pedagogy on third-year students was discussed during four student focus groups and two teacher colleague focus groups in 2024. The focus group discussions not only discussed the impact of the third-year pedagogy and curriculum but also sought to understand the reasons for the data outcomes and themes that emerged from the comparison and triangulation of the self-reflective assessments, peer reviews and T-SEL surveys.

The research data were qualitative and quantitative. The data originated both from the research participants—students, educators and myself—as well as informed outsiders—practicing architects and educators from other institutions.

Initially, each student's two Manifesto projects were compared to each other and to the student's design projects completed during the year to assess changes in design practice. Then, these individual analyses were situated within the T-SEL surveys, which tracked transformative trends in gender and race across the class as a whole. These trends were then discussed in student and educator focus groups to ascertain students' perceptions of the impact of the third-year design pedagogy and curriculum on their design practices and themselves personally.

In parallel with this process and to critically inform the research and the pedagogy's development, other focus groups and interviews with practising architects and educators were conducted, which contributed to the overall validation of the conclusions drawn.

The reflective self-assessments and peer reviews in the Manifesto projects, the T-SEL surveys, interviews and focus groups were cross-collated, analysed and triangulated to ascertain if the stated aims were achieved.

Have the various strategies of practice-based design research within a parallel-engaged pedagogy developed over six years contributed to my practice and students' design practices becoming more conscious, critical and careful?

3.2.1 Transformative Social Emotional Learning surveys

Social Emotional Learning (SEL) surveys started being used in the 1960s by James Comer at the Yale School of Medicine's Child Study Centre to improve students' emotional and social competencies (Comer 1988)Roger P. Weissberg and Timothy Shriver, also from Yale, continued the work in the late 1980s in two underperforming schools The outcomes showed that by improving their social and emotional competencies, students also began to improve academically to a point where the underperforming schools began to outperform the national average. SEL has grown in its implementation through the Collaborative for Academic, Social and Emotional Learning at both school

and adult levels (Edutopia 2011).Transformative Social Emotional Learning(T-SEL) programmes are a specific sub-set of SEL that focus specifically on social justice and equity aims in culturally diverse classrooms "to mitigate the educational, social, and economic inequities that derive from the interrelated legacies of racialized cultural oppression in the United States and globally" (Jagers et al. 2019, 163). Studies have found that universal SEL positively impacts learners across diverse student groups classified by race, gender, culture and socioeconomic status, potentially yielding "larger benefits among some racially marginalised subgroups… [and] buffer the negative impacts of internalized, interpersonal, and institutional oppression while creating more inclusive school environments" (Lee et al. 2023, 1011–1012). However, other studies have found that school-based universal SEL also has the potential to reinforce dominant norms; hence, the need to pay particular attention to issues of equity and social justice through a more T-SEL pedagogy (Jagers et al. 2018; 2019; Lee et al. 2024).

T-SEL surveys were used in this thesis' research as part of an action research pedagogy, which sought to improve social and emotional competencies in architectural undergraduate students within diverse cohorts. The surveys were used not merely as statistical tools but rather as a lens for teaching. Wanting to test how students' design practice was becoming more conscious, critical and careful, the T-SEL surveys offered ways of testing the closely related competencies of Self-awareness (conscious practice), Self-management (careful practice) and Social/ relationship awareness/ skills (critical practice).

Student's conscious design practice was developed through enhanced self-awareness: "understanding one's emotions, personal and social identities, goals, and values" (Jagers et al. 2019, 167). Student's careful design practice was derived from greater Self-management, regulating their emotions and behaviour and managing their goals and university work. Student's critical design practice came from critically situating themselves within the diverse

institutional setting through Social awareness, Responsible decision-making and Relationship skills. The T-SEL surveys were used to measure the improvement of these affective values of self-awareness, self-care and critical thinking.

The T-SEL surveys used in this research were adapted from the open-source WCSD Social and Emotional Competency Assessment which was developed "through a four year iterative process" using "Rasch modelling techniques to determine how well items assessed students across a range of social and emotional competencies."(Washoe County School District 2018a, 2)

However, in comparison to some school-based SEL, SECA and T-SEL programmes where teachers rate students, in this research, students being adults rated themselves and each other. The surveys included four to six questions or items in the following categories on a four-point Likert scale (Very Easy, Easy, Difficult, Very Difficult) (refer to Appendix B for full adapted questionnaire and the initial WCSD item banks) :

1. Self-Awareness
    a. Self-awareness – Self-concept (4x items)
    b. Self-awareness – Emotion knowledge (6x items)
2. Self-management
    a. Self-management – Emotion regulation (4x items)
    b. Self-management – Goal management (6x items)
    c. Self-management – University work (4x items)
3. Critical Social Awareness
    a. Social awareness (5x items)
    b. Relationship skills (6x items)
    c. Responsible decision-making (5x items)

The surveys were initially completed by most students in the third-year undergraduate class of 2023. Subsequently, the surveys were also completed by students in the third-year undergraduate class of 2024, as well as the 2024 fourth-year Honours class, albeit on a smaller voluntary basis. The surveys were conducted online using the university's online learning platform, and students consented to take part in the research surveys. (Table3.4)

Table 3.4Survey sample size: number of students who completed the surveys

Year	**No. Students**			**Sample Size Demographic Breakdown**											
	Class	T-SEL surveys sample size		**Women Students**						**Men Students**					
				Black	White	Indian	Coloured	Asian	***Total***	Black	White	Indian	Coloured	Asian	***Total***
2023	55	T-SEL Self 1	54	18	10	2	2	0	*32*	*7*	*5*	8	2	0	22
			98%	33%	19%	4%	4%	0%	59%	13%	9%	15%	4%	0%	41%
		T-SEL of Other	50	17	10	2	2	0	*31*	6	3	8	2	0	*19*
			91%	34%	20%	4%	4%	0%	62%	12%	6%	16%	4%	0%	38%
		T-SEL Self 2	42	13	9	2	2	0	*26*	5	3	6	2	0	*16*
			76%	31%	21%	*5%*	*5%*	0%	62%	12%	*7%*	14%	*5%*	0%	38%
2024	56	T-SEL Self 1	23	11	4	3	0	0	*18*	3	1	1	0	0	*5*
			41%	48%	17%	13%	0%	0%	78%	13%	4%	4%	0%	0%	22%
		T-SEL of Other	14	6	2	3	0	0	*11*	2	1	0	0	0	*3*
			25%	43%	14%	21%	0%	0%	79%	14%	7%	0%	0%	0%	21%
		T-SEL Self 2	10	4	1	2	0	0	*7*	2	1	0	0	0	*3*
			18%	40%	10%	20%	0%	0%	70%	20%	10%	0%	0%	0%	30%

These T-SEL surveys were completed three times during the academic year:

- An initial self-assessment survey: **T-SEL Self1**
- A survey assessing a friend in the class: **T-SEL of Other**
- A second self-assessed survey at the end of the year: **T-SEL Self2**

The T-SEL Self1 survey established a benchmark, while the T-SEL Self2 survey assessed whether students had shown improvement against the first benchmark. At the same time as the T-SEL Self1 survey, students also completed surveys of each other (T-SEL of Other), testing their perceptions of each other. The T-SEL surveys of each other tested self-awareness research, which suggests that true self-awareness needs to be correlated externally with others (Eurich 2017; 2018). In other words, only when a student's view of themselves correlates with a friend's view of them can they be truly thought of as self-aware. The outcomes of the research did not support this theory, but comparing a student's view of themselves with the perceptions of other students provided participants and educators with invaluable insights.

In 2023, T-SEL Self1 was not conducted at the beginning of the year, as it was part of the parallel-engaged pedagogy in 2023, which first introduced the idea that students need to learn skills and social and emotional competencies to succeed as architects. The concepts of a more conscious, critical, careful practice were first discussed and unpacked before the T-SEL Self1 survey established the social and emotional competency benchmark. The 2023 T-SEL of Other survey questioned class perceptions of this benchmark in each other, while the 2023 T-SEL Self2 survey established whether students had improved on the benchmark.

The validity and reliability analyses of the WCSD item banks "focused on iteratively improving the item bank, ensuring that items covered the full range of each construct"(Washoe County School District 2018a, 2)

The reliability of the main categories of the adapted T-SEL survey questions used in the three student surveys completed: Self 1; of Other and Self 2 was tested[13] for Cronbach's alpha for internal consistency as well as Inter-item Correlations (Table 3.5).

Table 3.5 T-SEL surveys reliability test results (refer Appendix)

	Reliability of results					
	Cronbach's Alpha			**Inter-Item Correlations**		
T-SEL Survey	Self 1	Other	Self 2	Self 1	Other	Self 2
Self – awareness	0.51	0.71	0.65	0.09	0.20	0.15
Self – management	0.76	0.84	0.81	0.18	0.27	0.25
Critical Social Awareness	0.76	0.83	0.77	0.16	0.24	0.19

Assessment Scales	**Cronbach's Alpha**	**Inter-item correlation**	
	0	no internal consistency	>0.5	high correlation
	0-0.6	Poor reliability	0.2 -0.5	ideal correlation
	0.6+	reliable	<0.2	low correlation
	0.7-1	acceptable reliability		
	0.8-1	good reliability		
	0.9-1	redundancy between items		

[13] Lebo Tawane, a statistician, tested the reliability of the adapted T-SEL survey questions as well as the correlation comparison between Self1, of Other and Self2 surveys – refer Appendix for statisticians letter and analysis calculations results summary

Of the three categories, Self-management and Critical Social Awareness were found to have an acceptable internal consistency with a Cronbach alpha coefficient of between 0.76 and 0.84 across the three surveys[14] (Table 3.5). However, the Self-awareness category only had an acceptable internal consistency in the of Other (0.71) and Self 2 surveys (0.65), whilst the Cronbach alpha coefficient of the Self1 survey was only 0.51. This variance in the reliability of the same survey questions used in the three different surveys over a period of time with the same group of students was probably attributable to a number of factors.

Firstly, these variable reliability results showed that there were changes in student perceptions over time, suggesting that students were less consistent in their self-evaluations in the first Self 1 survey, possibly due to a lower initial understanding of the concepts and themselves. By the time they completed the Self2 survey, they had much clearer and more stable self-perceptions at the end of the academic year, contributing to higher reliability scores of this survey. The reasons for the Of Other survey, completed at the same time as the Self1 survey, having the highest reliability (0.71), could be due to students' assessments of each other being more stable than their self-assessments which could be clouded by internal bias or mood.

The last factor to consider is that Cronbach's alpha is sensitive to the number of items that test a particular concept. If there are fewer than 10 items then a Cronbach alpha of 0.5 is common (Pallant 2007,95). This was the case for Self-awareness which only had 10 items, and had a Cronbach alpha of 0.51.

Having established the reliability of the T-SEL surveys the results were analysed. First in terms of the whole class and later through gender and racial lenses as per demographic classifications used in the latest 2022 South African Population

[14] Cronbach's alpha coefficient should be above 0.7 for acceptable reliability(Pallant 2007,95)

Census (Statistics South Africa, 2023). This came to the crux of the difference between SEL and T-SEL, focusing on overcoming structural impediments to equity and social justice, essentially, questioning, as previous studies have done, whether T-SEL is merely reinforcing institutional norms or actively working against them in the service of equity (Jagers et al. 2018; 2019; Lee et al. 2023; 2024). This gender and racial analysis was a type of "strategic essentialism" (refer to Section 3.1.1 for a discussion).

Therefore, the T-SEL survey results were further analysed in several ways to ascertain differences across gender and race. Gender was used as the primary lens and race as a secondary lens and vice versa. Then, the results were analysed to determine which students initially had the highest benchmarks in Self-awareness, Self-management and Critical Social awareness/ responsibility, as well as those who showed the most improvement in these metrics. These analyses were done on the 2023 T-SEL surveys only, as the 2024 T-SEL surveys' sample sizes were too small (Table 3.4).

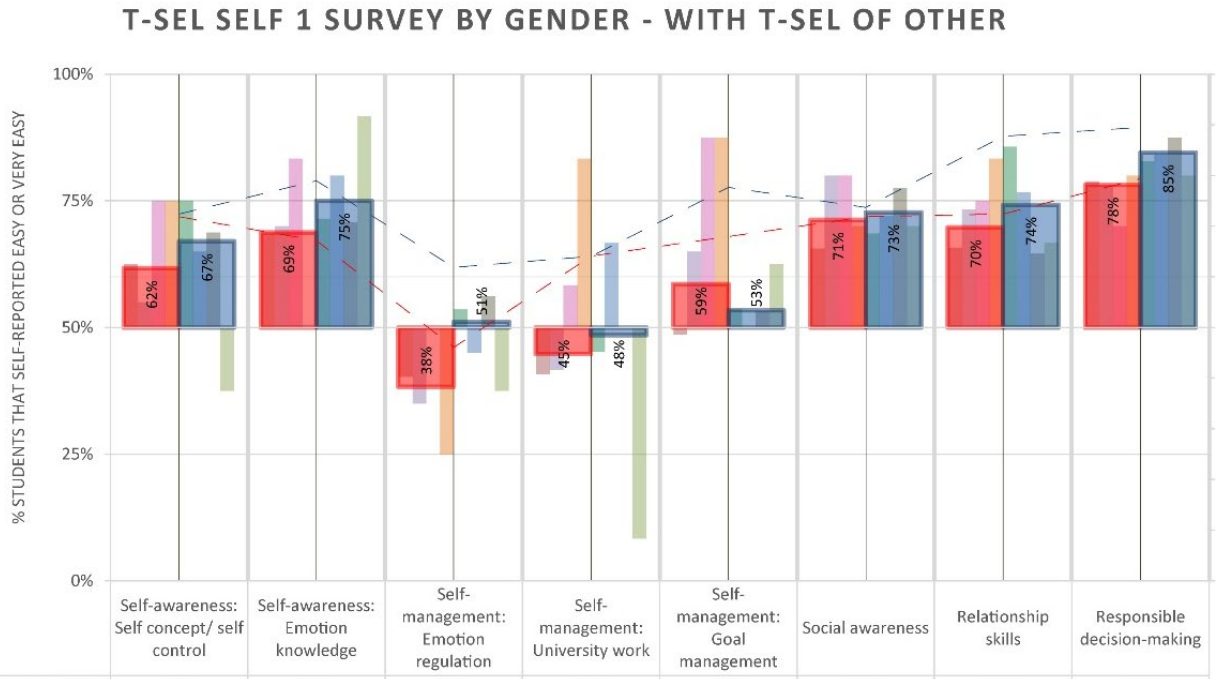
Analysing the T-SEL results by race and gender served to determine the transformative impact of the autoethnographic practice-based design research within a supportive pedagogy of care. Within the South African higher education context, transformation is typically measured in racial terms (Fataar 2012; Cross and Atinde 2015; Thomas and Wagner 2016; Jansen 2019). Similarly, in this research, race and gender were used as lenses to measure transformation.

Note that the analysis was always based on the percentage of students who found a particular competency easy or very easy. In other words, the analysis was looking for the number of students who had self-perceived ease or confidence in the particular competency. This followed the scoring as per the WCSD surveys (Washoe County School District 2018a).

Firstly, the 2023 T-SEL Self1 results were analysed using gender as the primary category, with race as a secondary category (Figure 3.14). Assessing these collated results, it appeared that in all competencies but one, men students (n=22/55)[15] had greater initial confidence and ease in their own social and emotional competencies. This is especially noticeable in Self-management: Emotion regulation, where the difference between men and women(n=32/55) students was 13%, with 51% of men students finding emotional regulation easy, while only 38% of women students found the same. The only category where women students appeared to display an initial greater ease or confidence than men students was in Self-management: Goal management.

However, when the T-SEL Self1 survey was statistically analysed to ascertain if these apparent gender differences were statistically significant using crosstabulation, the Fisher's test and Phi values demonstrated that none of these apparent differences between genders were statistically significant (see Appendix for a summary of values and calculations).

[15] 22 men students completed the survey out of 55 students



	Self-awareness: Self concept/ self control	Self-awareness: Emotion knowledge	Self-management: Emotion regulation	Self-management: University work	Self-management: Goal management	Social awareness	Relationship skills	Responsible decision-making
Self 1 Black African Women (n=18/54)	63%	69%	40%	41%	49%	66%	66%	79%
Self 1 White Women (n=10/54)	55%	70%	35%	42%	65%	80%	73%	78%
Self 1 Indian Women (n=2/54)	75%	83%	50%	58%	88%	80%	75%	70%
Self 1 Coloured Women (n=2/54)	75%	50%	25%	83%	88%	70%	83%	80%
Self 1 Black African Men n=(7/54)	75%	71%	54%	45%	54%	69%	86%	83%
Self 1 White Men n=(5/54)	65%	80%	45%	67%	50%	72%	77%	84%
Self 1 Indian Men (n=8/54)	69%	71%	56%	50%	53%	78%	65%	88%
Self 1 Coloured Men (n=2/54)	38%	92%	38%	8%	63%	70%	67%	80%
Self 1 Womens Average (n=32/54)	62%	69%	38%	45%	59%	71%	70%	78%
Self 1 Mens Average (n=22/54)	67%	75%	51%	48%	53%	73%	74%	85%
Other Womens Average (n=31/54)	72%	67%	46%	64%	68%	72%	72%	79%
Other Mens Average (n=19/54)	72%	79%	62%	64%	78%	74%	88%	89%

Figure 3.14 Transformative Social Emotional Learning (T-SEL) Self1 survey 2023 results by gender then race, averaging the gender numbers

In the crosstabulation analysis of the T-SEL Self 1 survey, gender differences were only demonstrated to be statistically significant in the following items, listed in their survey categories and sub-categories below.

1. Self-awareness
   1.1 Self-awareness: Emotion knowledge (2 items of 6)
      a. Knowing ways to make myself feel better when I'm sad
      b. Knowing ways I calm myself down
2. Self - management
   2.1 Self-management: Emotion regulation (1 item of 4)
      a. Staying calm when I feel stressed

Therefore, out of all the social and emotional competencies in the T-SEL Self1 survey, only in Emotion knowledge and Emotion regulation were men students found to have a statistically significant ease which women students did not have. All the other apparent differences in Figure 3.14 were not statistically verifiable.

The higher social and emotional learning benchmark set by men students in the 2023 T-SEL Self1 survey was similarly found in their perceptions of other students in the 2023 T-SEL of Other survey. Men students (n=19/55) showed that their perceptions of other students in the majority of competencies were between 4% and 25% higher than their perceptions of themselves, except in Social awareness, which was the same.

By contrast, women students' (n=32/55) perceptions of other students were much lower than men students' perceptions of others but still higher than their perceptions of themselves. However, women students also had a much smaller margin difference between their perceptions of others and their perceptions of themselves, with Social

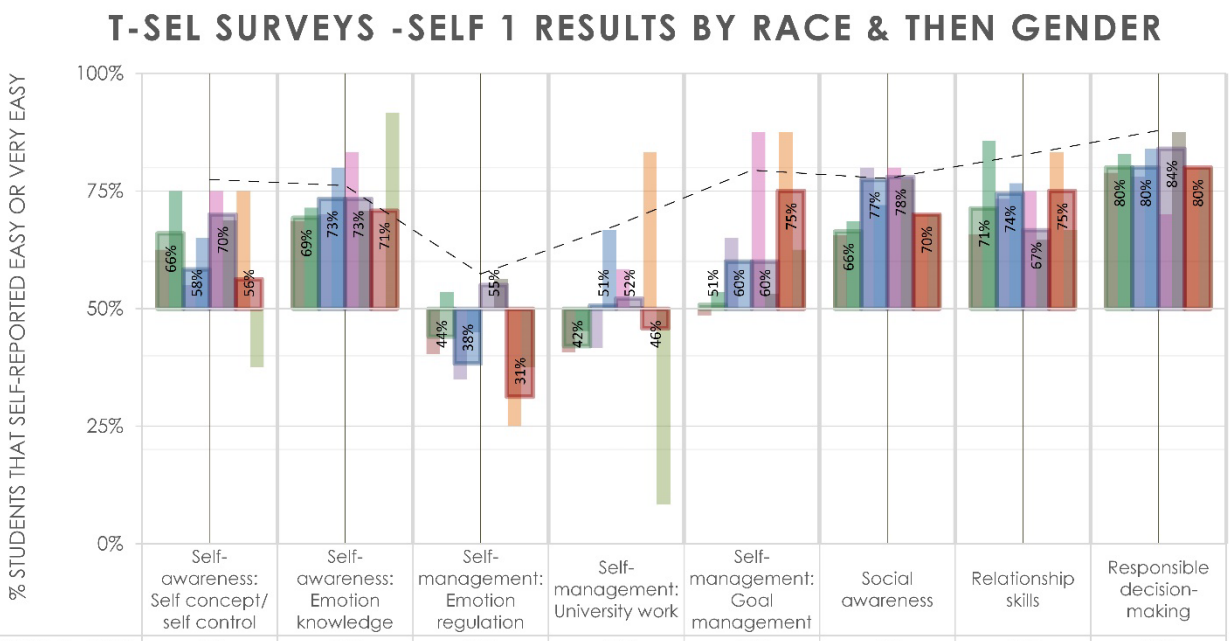
awareness, Relationship skills, Responsible decision-making and Self-awareness: Emotion knowledge being very similar. The graph also clearly demonstrates that the gender averages were not consistent across racial groups; often, the gender average was a result of wide discrepancies across race[16] (Figure 3.14).

The 2023 T-SEL Self1 results were then analysed with race as the primary lens and gender as a secondary lens (Figure 3.15). It appeared from the graph results that in some competencies, such as Self-awareness: Emotion knowledge, Social awareness, Relationship skills and Responsible decision-making, the differences between races were relatively small. Whereas in other competencies, especially Self-management, there appeared to be wider differences across races. It should also be noted that there were differences between genders in some racial groups. More than half (67%) of white men students (n=5/55) found Self-management: University work easy, which is much higher than for white women students (n=10/55) as only 42% found this easy.

In two categories, Self-awareness: Self-concept and Self-management: University work, Coloured[17] women students'(n=2/55) results were much higher than Coloured men students (n=2/55): diverging by more than 75% in the latter category. In fact, in all racial groups, there were discrepancies between men and women students across the majority of categories. However, what appeared clear from the graph is that no one racial group was dominant across all categories. This was a departure from research done in the United States, where black and Hispanic students were found to have lower initial benchmarks across social and emotional competencies (Jagers et al. 2018; Lee et al. 2024).

[16] Gender averages were weighted by the number of students in each racial/ gender category.

[17] In the South African context 'Coloured' is a category used under Apartheid, but is still used as a descriptor in the demographic categories of the South African census, and colloquially describes a diverse group of people of mixed race, typically with Cape Malay, Khoisan or African heritage.



	Self-awareness: Self concept/ self control	Self-awareness: Emotion knowledge	Self-management: Emotion regulation	Self-management: University work	Self-management: Goal management	Social awareness	Relationship skills	Responsible decision-making
Self 1 Black African Women (n=18/54)	63%	69%	40%	41%	49%	66%	66%	79%
Self 1 Black African Men n=(7/54)	75%	71%	54%	45%	54%	69%	86%	83%
Self 1 White Women (n=10/54)	55%	70%	35%	42%	65%	80%	73%	78%
Self 1 White Men n=(5/54)	65%	80%	45%	67%	50%	72%	77%	84%
Self 1 Indian Women (n=2/54)	75%	83%	50%	58%	88%	80%	75%	70%
Self 1 Indian Men (n=8/54)	69%	71%	56%	51%	53%	78%	65%	88%
Self 1 Coloured Women (n=2/54)	75%	50%	25%	83%	88%	70%	83%	80%
Self 1 Coloured Men (n=2/54)	38%	92%	38%	8%	63%	70%	67%	80%
Self 1 Black Students (n=25/54)	66%	69%	44%	42%	51%	66%	71%	80%
Self 1 White Students (n=15/54)	58%	73%	38%	51%	60%	77%	74%	80%
Self 1 Indian Students (n=10/54)	70%	73%	55%	52%	60%	78%	67%	84%
Self 1 Coloured Students (n=4/54)	56%	71%	31%	46%	75%	70%	75%	80%
– – – Other CLASS (n=51/54)	77%	76%	57%	68%	79%	78%	83%	88%

Figure 3.15 Transformative Social Emotional Learning (T-SEL) Self1 survey 2023 results by race then gender, averaging the race numbers

However, the survey data confirms research done on emotional intelligence in South Africa, which found that black and white participants had similar scores (Gignac and Ekermans 2010). This was also confirmed by the statistical analysis of the T-SEL Self1 survey by race. In this crosstabulation analysis, the Pearson test and Cramer's V values were used as the comparison was greater than 2x2 and included black, white, coloured and Indian student categories(refer Appendix for calculations and results). The analysis showed that there was no statistically significant difference in any of the survey categories between students when comparing race.

This brings into question, once again, whether dividing students into their racial groups and then using these average statistics for pedagogy is an accurate or useful measure.

The established benchmarks for social and emotional competencies in the 2023 T-SEL Self1 surveys were then compared to the 2023 T-SEL Self2 surveys to assess any changes. Overall, the class showed improvements in all the competency metrics of social and emotional learning from the T-SEL Self1 to Self 2 surveys (Figure 3.16).

In all the main categories Self-Awareness; Self-Management and Critical Social Awareness, 7% more of the class found these categories easy by the end of the year. However, despite this 7% improvement being important for teaching, this was not a statistically significant improvement. The T-SEL Self1 survey was statistically compared to T-SEL Self2 survey using crosstabulation analysis, calculating the Fishers's Exact test and Phi. From the values obtained from these statistical tests, it was clear that only some items within the main three categories showed statistically significant improvement (refer Appendix for full Fisher's test and Phi values of all items).

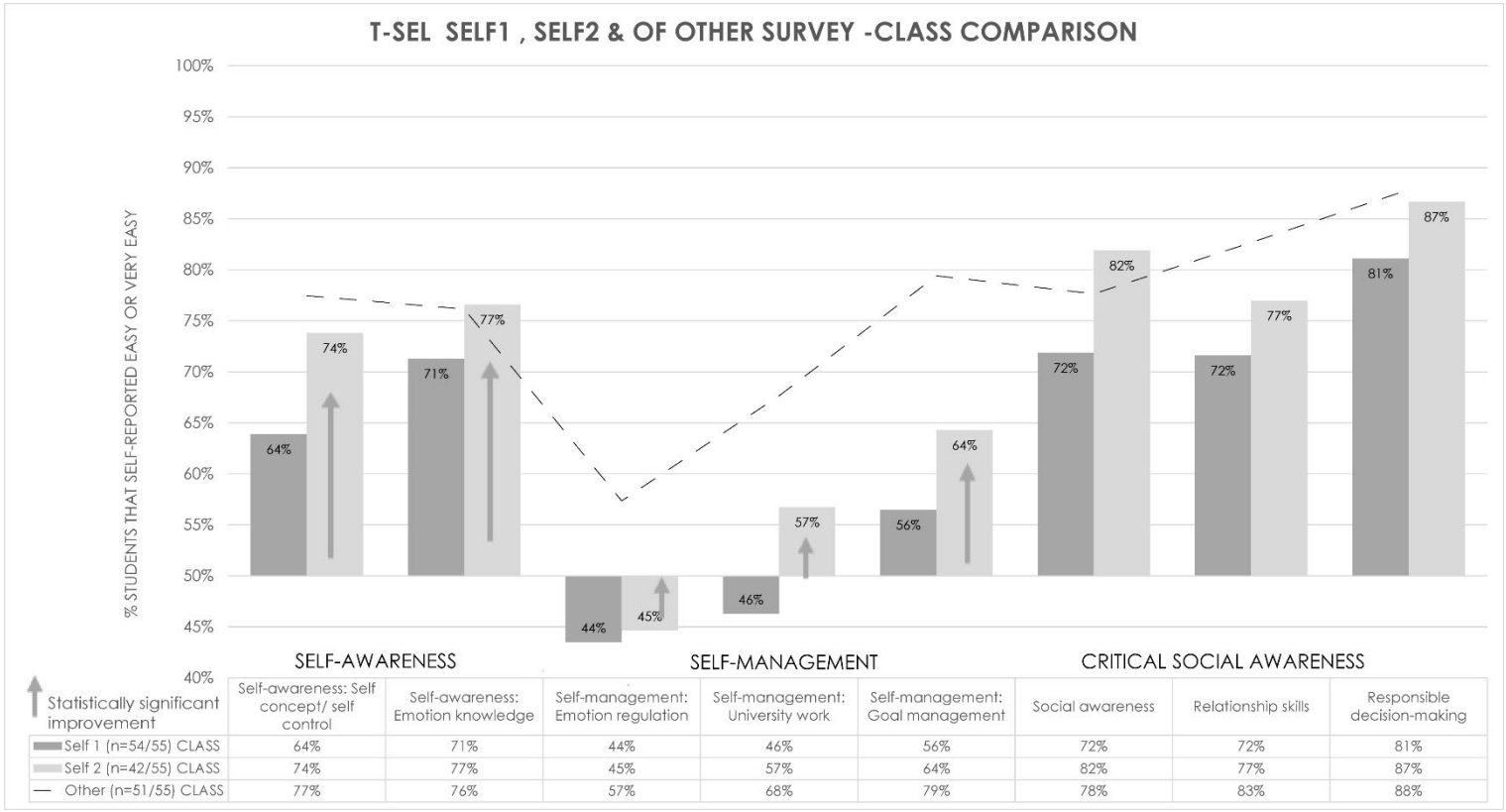


Figure 3.16 Transformative Social Emotional Learning (T-SEL) 2023 Self1 Sefl 2 and Of Other survey results of class averages

In the Self-awareness category, three items out of ten showed statistically significant improvement, listed below in their sub-categories:

1.1Self-awareness: Self concept/ self control (1 item of 4)

a. Knowing what my strengths are

1.2 Self-awareness: Emotion knowledge (2 items of 6)

b. Knowing when my feelings are making it hard for me to focus
c. Knowing what my body does when I am nervous

In the Self-management category, seven items out of fourteen showed statistically significant improvement, listed below in their sub-categories:

2.1 Self-management: Emotion regulation (2 items of 4)

a. Staying calm when I feel stressed
b. Being patient even when I am really excited

2.2 Self-management: University work (2 items of 6)

a. Staying focussed in lectures or studios even when there are distractions
b. Planning ahead so I can turn a project in on time

2.3 Self-management: Goal management (3 items of 4)

a. Thinking through the steps it will take to reach my goal
b. Reaching goals that I set for myself
c. Setting goals for myself

This demonstrated that Self-management: Goal management had a statistically significant improvement.

In the Critical Social Awareness category, six items out of sixteen showed statistically significant improvement, listed below in their sub-categories:

3.1 Social awareness (2 items of 5)

a. Knowing how my actions impact other students
b. Learning from people with different opinions to me

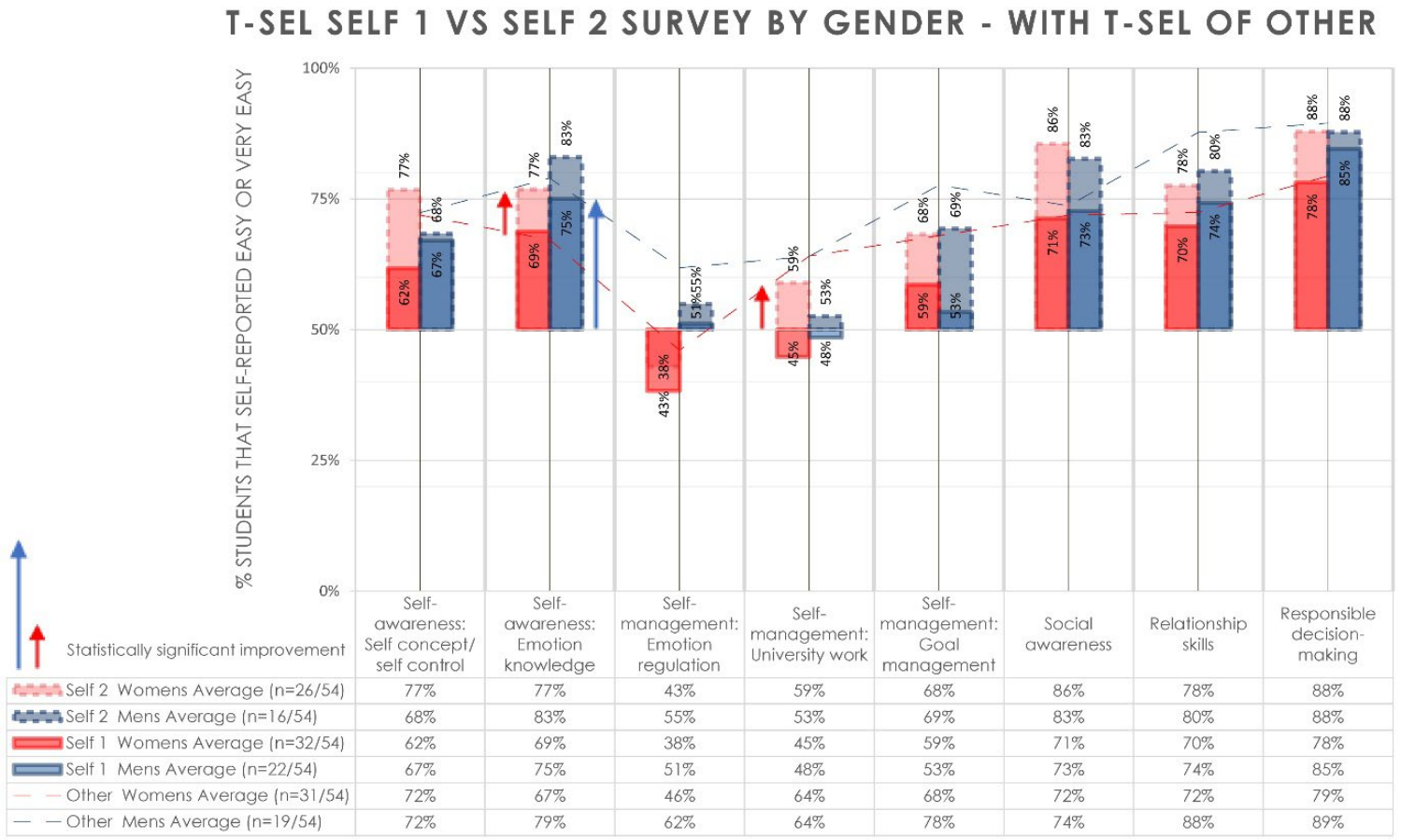
3.2 Relationship skills (3 items of 6)

a. Getting along with my classmates
b. Talking to a lecturer or counsellor when I have problems at university
c. Being welcoming to someone I don't usually eat lunch or hangout with

3.3 Responsible decision-making (1 item of 5)

a. Helping make my university a better place

Despite this improvement across the class in social and emotional competencies, there appeared to be differences across gender and race. Once again, the results were collated and analysed using gender as the primary lens with race as a secondary lens and vice versa (Figure 3.17).



	Self-awareness: Self concept/ self control	Self-awareness: Emotion knowledge	Self-management: Emotion regulation	Self-management: University work	Self-management: Goal management	Social awareness	Relationship skills	Responsible decision-making
Self 2 Womens Average (n=26/54)	77%	77%	43%	59%	68%	86%	78%	88%
Self 2 Mens Average (n=16/54)	68%	83%	55%	53%	69%	83%	80%	88%
Self 1 Womens Average (n=32/54)	62%	69%	38%	45%	59%	71%	70%	78%
Self 1 Mens Average (n=22/54)	67%	75%	51%	48%	53%	73%	74%	85%
Other Womens Average (n=31/54)	72%	67%	46%	64%	68%	72%	72%	79%
Other Mens Average (n=19/54)	72%	79%	62%	64%	78%	74%	88%	89%

Figure 3.17 Transformative Social Emotional Learning (T-SEL) Self1; Self2 and Of Other 2023 survey results compared by gender (the arrows show the only differences that are statistically significant)

Improvement from the 2023 T-SEL Self1 survey to the 2023 T-SEL Self2 survey was seen across both genders (Figure 3.17). However, women students (n=32/55) improved more than men students (n=22/55), but it must be noted that this was off a much lower initial benchmark than men students, as seen in Figure 3.17. The notable increase was in Self-management: University work, which improved from 45% to 59% for women students, becoming a positive statistic. Further, in some categories, the improvements made by women students were such that they either equalled or exceeded those of men students, for example in Self-awareness: Self-concept, Self-management: University work, Social awareness and Responsible decision-making. However, Self-management: Emotion regulation was still in negative territory for women students despite the improvement, while men students who had started with a T-SEL Self1 benchmark with a modest 51% improved to 55%.

If we were to extrapolate these findings, it appears that even though men students (n=22/55) start off with greater ease across these social and emotional competencies, the pedagogy has a greater impact on women students (n=32/55) such that their initial disadvantage is overcome and they exceeded men students in some competencies by the end of the 2023 year, for example in Self-awareness: Self-concept /Self-control and in Self-management: University work.

However, the apparent gender differences between the T-SEL Self1 and Self2 surveys, seen in Figure 3.17, were not all confirmed to be statistically significant. In a crosstabulation[18] analysis of the T-SEL Self 1 and Self2 surveys, thirty-six of the forty items in each survey (90%) were found to have no statistically significant difference between genders. Only four items (10%) were revealed to have a statistically significant difference between genders, as listed below and highlighted in Figure 3.17:

[18] Fisher's Exact test and Phi values were calculated and compared between the T-SEL Self1 and Self 2 surveys

1. Self-awareness
    1.1 Self-awareness: Emotion knowledge (2 items of 6)
        a. Knowing ways to make myself feel better when I'm sad
        b. Knowing ways I calm myself down
2. Self - management
    2.1 Self-management: Emotion regulation (1 item of 4)
        a. Staying calm when I feel stressed
    2.2 Self-management: University work (1 item of 6)
        a. Finishing my university work without reminders

In '*Knowing ways to make myself feel better when I'm sad; 'Knowing ways I calm myself*' and '*Staying calm when I feel stressed'* the statistically significant difference in Self1, due to men's greater ease with these items than women, was reversed in the Self 2 survey, with women making significant improvement, and men showing a deterioration in these metrics. In '*Finishing my university work without reminders',* whereas there was no statistically significant difference between genders in the Self 1 survey, women improved to the point that in the Self 2 survey, their ease with finishing their university work was statistically significantly more than men students.

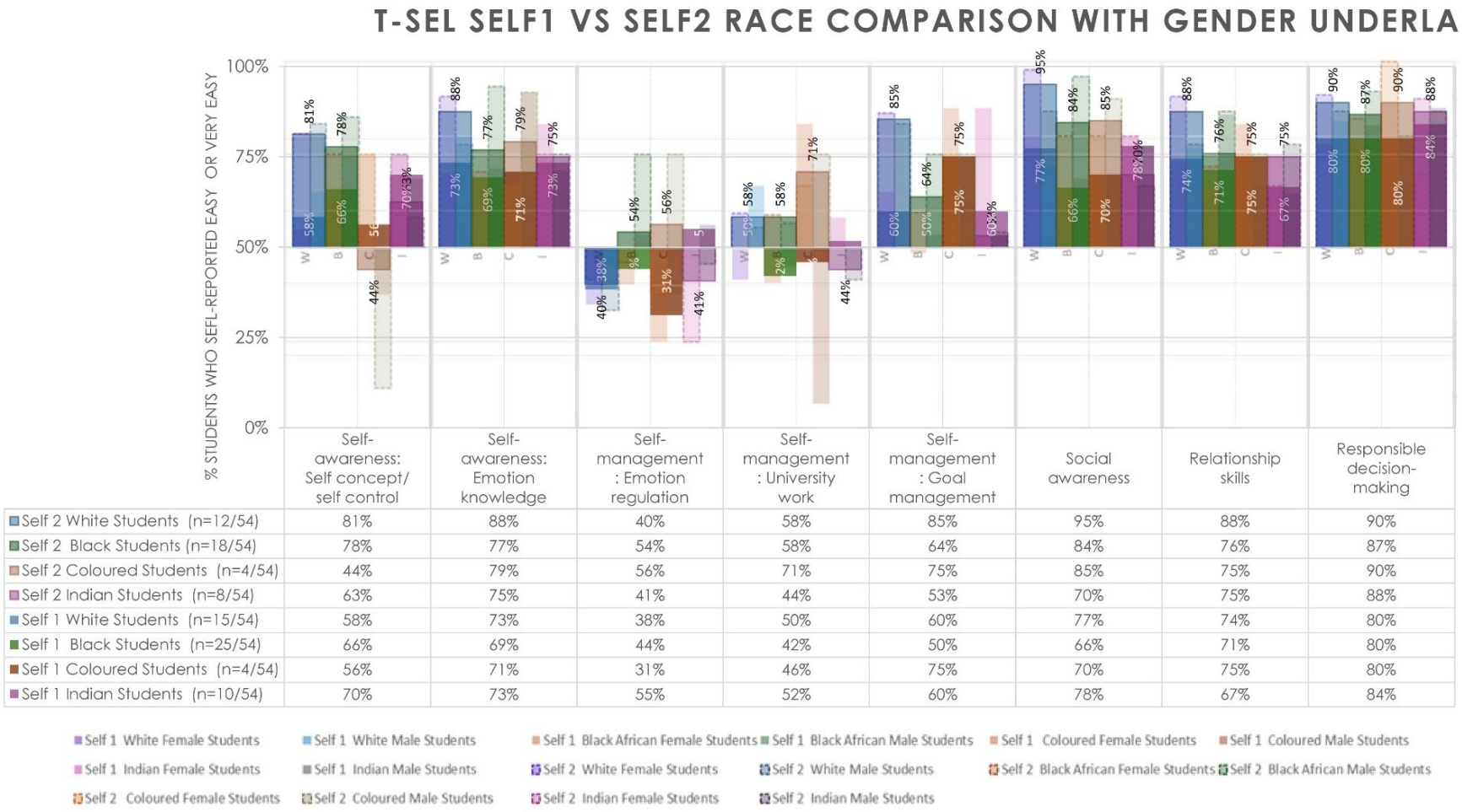
Therefore, the pedagogy, although transformative for both genders, appears to be slightly more so for women students. Nonetheless, when looking more closely at Figure 3.17, it is clear that making assumptions based on gender averages is risky. For example, in Self-awareness: Self-concept, Self-management: Emotion regulation and Self-

management: University work, there is a high degree of variance among men students across race. Women students also had varied results across race, albeit with a slightly smaller variance.

When assessing the improvement from the benchmark set in the 2023 T-SEL Self1 surveys to the 2023 T-SEL Self2 surveys, it was clear that the equity and social justice aims of the transformative pedagogy were only partly met (Figure 3.18). While black students (n=25/55) were the only demographic group to have improvement to above 50% in all competencies, Coloured (n=4/55) and Indian students (n=10/55) dropped in some competencies. White students (n=15/55) improved across most competencies but still struggled with Self-management: Emotion regulation, with only 40% of white students finding this easy in the 2023 T-SEL Self2 survey compared to 38% in the T-SELF Self 1 survey. However, due to the small sample size of Coloured and Indian students, no real conclusions can be drawn from their survey findings, while with the larger groups of students, both black and white, there were differences in gender within those race groups.

When doing a crosstabulation statistical analysis of whether there were any statistically significant differences in terms of race between the T-SEL Self 1 and Self 2 surveys, thirty-five of forty items (87%) in each survey showed no statistically significant differences. Below are the five items that were shown to have statistically significant differences in terms of race:

1. Self-awareness
    1.1 Self-awareness: Self-concept/ self-control (1 item of 4)
        a. Knowing when I am wrong about something



	Self-awareness: Self concept/ self control	Self-awareness: Emotion knowledge	Self-management : Emotion regulation	Self-management : University work	Self-management : Goal management	Social awareness	Relationship skills	Responsible decision-making
Self 2 White Students (n=12/54)	81%	88%	40%	58%	85%	95%	88%	90%
Self 2 Black Students (n=18/54)	78%	77%	54%	58%	64%	84%	76%	87%
Self 2 Coloured Students (n=4/54)	44%	79%	56%	71%	75%	85%	75%	90%
Self 2 Indian Students (n=8/54)	63%	75%	41%	44%	53%	70%	75%	88%
Self 1 White Students (n=15/54)	58%	73%	38%	50%	60%	77%	74%	80%
Self 1 Black Students (n=25/54)	66%	69%	44%	42%	50%	66%	71%	80%
Self 1 Coloured Students (n=4/54)	56%	71%	31%	46%	75%	70%	75%	80%
Self 1 Indian Students (n=10/54)	70%	73%	55%	52%	60%	78%	67%	84%

Figure 3.18 Transformative Social Emotional Learning (T-SEL) Self1 and Self2 2023 survey results compared by race (including gender)

2. Self - management
    2.2 Self-management: University work (1 item of 6)
        a. Staying focussed in lectures or studios even when there are distractions
        b. Being prepared for project presentations
3. Critical Social Awareness
    3.1 Social Awareness
        a. Knowing when someone needs help
    3.3 Responsible decision making
        a. Helping make my university a better place

Of the five items where there were statistically significant differences across race, the first item '*knowing when I am wrong about something'* had no statistically significant differences across race in the T-SEL Self1 survey, but by the Self2 survey black and coloured students showed a marked improvement, whilst white and Indian students showed a decline. This change resulted in Self 2 survey having a Pearson test p-value of 0.04 and a Cramers V value of 0.45, which showed a moderate statistically significant difference across races.

Similarly in the item *'Staying focussed in lectures or studios even when there are distractions',* although there was no statistically significant difference across race in the Self1 survey, in the Self2 survey black students made statistically significant improvements, with smaller improvements by Indian students, whilst white and coloured students showed a decline. This meant that the difference between Self1 and Self2 in this item showed a statistically significant difference across race.

The last three items reversed the above trend, with the Self1 survey showing statistically significant differences across race, which were evened out due to considerable improvement by black students in *'Knowing when someone needs help'*, by black and Indian students in '*Being prepared for project presentations'* and by black and coloured students in *'Helping make my university a better place'*. Due to these improvements, all of these items showed no statistically significant differences across races by the Self2 survey.

Although the comparative crosstabulation of the Self1 and Self 2 surveys showed few statistically significant differences across race, the five items' noted as well as Figure 3.18 show that the pedagogy was partially transformative in terms of race. This is despite quite large disparities between men and women students within race groups.

This can be further seen when analysing the survey data through the lens of a more conscious, critical, careful practice. Which students had the initial greatest ease with the different assessed metrics in the 2023 T-SEL Self1 survey, and which showed the greatest improvement when compared to the 2023 T-SEL Self2 survey?

When looking at the data through the lenses of self-awareness, self-care and critical social positionality, there were no clear racial or gender patterns. The students who were initially more confident, or the students who had the greatest improvement, were not from any one racial or gender group. However, women students showed average improvements that exceeded that of men students, which was also seen in Figure 3.17. Interestingly, men students showed the greatest improvement in Self-management, while women students showed the greatest improvement in Self-awareness.

A more careful analysis revealed that some students who had struggled with their mental health during the year had initial low scores in the Self-management category of the T-SEL Self1 survey. Therefore, in future, the surveys could potentially be used to identify students who might require additional social and emotional support during the year.

Finally, the improvements of each group from the 2023 T-SEL Self1 to the T-SEL Self2 surveys were compared to the average improvement of the whole class. It was notable that only three demographic groups exceeded the class average in their social and emotional learning improvements: black men students, black women students and white women students. This was evidenced in the statistical analyses of the two surveys, outlined above, which demonstrated that both women students and black students had a small to moderately greater statistically significant improvement from Sefl1 to Self2 than other students.

This analysis suggests that the autoethnographic practice-based design research within a parallel-engaged pedagogy of care has a transformative effect on women students and black students in particular. This does not negate the improvements made by other students in the class, as demonstrated by the current study's results.

In 2024, further surveys were completed by the third-year students to check some of the assumptions made on the 2023 survey results. As an extension of the research, surveys were also conducted with Honours degree students in 2024. Unfortunately, these surveys could not be compared to the 2023 surveys as they had very different sample sizes due to being conducted on a smaller voluntary basis (Table 3.4).

When analysing the results of the 2023 T-SEL surveys (Figures 3.14 to 3.17), there were clear gender patterns and less clear racial patterns. These patterns were used as the basis for initial focus group discussions.

3.2.2 Focus groups and interviews

After collating and analysing the initial 2023 T-SEL survey results, a series of focus groups were convened to further unpack what the students thought most contributed to their design practices becoming more conscious, critical and careful.

The student focus groups, conducted in May 2024, included students who had completed their third year between 2019 and 2023. Although all students from these years were invited to participate in the focus groups, only approximately twenty students volunteered, of which only fifteen participated. However, the focus groups were not divided by year but rather by race and gender to address the differences that emerged in the T-SEL outcome.

Dividing the student cohort into their racialised identities was deeply uncomfortable for me as a researcher. After discussions with colleagues about this racial categorisation of focus groups, it became clear that this "strategic essentialism" (Spivak and Grosz 1990, 11) could be useful in better understanding and critiquing the lived reality of different students.

> "… strategically you can look at essentialisms, not as descriptions of the way things are, but as something that one must adopt to produce a critique of anything". (Spivak et al. 1990, 51)

Scholars have concurred, arguing that essentialism, despite being based on erroneous logic, is useful "in struggles against domination and structures of inequality, and towards what may broadly be described as postcolonial and decolonial scholarship" (Kurzwelly et al. 2020, 73).

However, Spivak et al. (1990, 109) noted with disquiet the ways in which "strategic essentialism" had been deployed against its intended goals, being "used as part of a 'good' strategy as well as a 'bad' strategy". In South Africa, essentialism has been used as both a good and bad strategy to "disdain and control others from a position of power and privilege [as was done in Apartheid], or alternatively, as a tool to fight strategically for the rights of the oppressed and underprivileged" (Kurzwelly et al. 2020, 69). It must be noted that the application of "strategic essentialism" (Spivak and Grosz 1990, 11) to the formation of the focus groups did not override the acknowledgement that students have individual and multiple characteristics that make fallacious the notion that they can be reduced to one often arbitrary category.

The reasons for the formation of the focus groups by gender and race[19] and the concomitant discomfort it caused me were discussed at the beginning of each focus group. Interestingly, in some groups, this separation led to some revelations that would not have been shared in a larger, more diverse group. Students, finding themselves among friends, were more open to discussing the affective impact of the pedagogy.

The student focus groups were conducted at the end of the five-year period of action research during Cycle #6 in May 2024. Some students had just completed their third year of the BAS undergraduate degree, while some students were in Honours and others were in professional practice, having completed their Masters degrees. This allowed the focus groups to measure the impact of the pedagogy on further postgraduate study, as well as on architectural practice.

[19] Class could not be used as due to protection of personal information (POPI Act) this information on class was not available

The questions asked in the student focus groups were general and specific. All groups were asked what impact the third-year pedagogy had on them personally as students and on their design practice, both in terms of how the course was taught, the pedagogy and what was taught in the course content and the curriculum. The more specific questions related to the initial T-SEL survey findings of each focus group.

Below is a summary of the discussion in each focus group. In the student focus group summaries, no student participant identifiers are used. This is to maintain confidentiality as some students in the focus groups might be identified through their drawings where participant identifiers were used.

Student Focus Group 1: Black women students

This focus group comprised five black women students, including Coloured and Indian students. Of the five students, four were from the 2023 third-year cohort, and one student was from the 2022 third-year cohort. The discussion began with sharing my discomfort about the demographic formation of the focus group. However, students quickly shared that they themselves had formed a "black girls WhatsApp support group" in 2023, supporting and sharing information with each other. Therefore, they appeared comfortable with the notion of separating and essentialising on the basis of their gender and race, referring to the focus group as a "safe space". However, they did discuss that essentialising on the basis of gender and race doesn't take into account the often stark differences in a black women's group, such as differences in culture, language, rural or urban, or socio-economic background. Secondly, I shared that the 2023 T-SEL surveys showed that other students perception of black women students was far higher than their perception of themselves. While this surprised the students, it confirmed some of their experiences, with one student

noting how a white men student had said to a black woman student, "You scare me so much. You're so confident." Students spoke of being brought up expected to be quiet and listen and learn, that "your opinion doesn't matter as much as anyone else"; it took three years to develop confidence in their voices and not be afraid to stand up for themselves in the classroom:

> "Sitting in the front was to force myself to be like, I have an opinion, and I said it before, I shouldn't be scared because I'm not [going to] lie, Sandra, the row of white girls behind you was intimidating." (Black Women Student; Student Focus Group 1,2024)

These comments pointed to a deeper ontological difference between cultures. The largely Western white students' cultural worldview elevated the individual above their community, which conformed with the institutional habitus, whilst African students' worldview focused on the community. In an informal social media poll of the student community the majority of students of all races noted that their worldviews had changed due to architectural education. However, while white students mostly felt that the change did not impact their relationships with their family and community, black students felt that it had. This was confirmed by a later interview (Interview 008, 2025) with one of the students in this focus group, who noted that the change in her worldview had made her more critical of some of the patriarchal rituals of her community. She was however able to "call out" this patriarchy in a respectful and dignified way which did not cut her off from the communal ways of being. She thus acknowledged that although her worldview had changed, she had incorporated those changes into her previous worldview. Her new hybrid evolving worldview integrated the foundational values of her community's worldview with an acknowledgement of her individual value and position within that community.

When asked about the impact of third-year, care dominated the discussion. They spoke of struggling in their first and

second years but finding that third-year tested and developed their skills in a caring and supportive environment. They attributed their WhatsApp group chat as central to that care and support but also felt cared for by their educators, noting they "didn't feel like we were alone". They spoke of the third-year lecturers as being "human, like a proud mother" wanting them to be the best they can be; "You were showing up therefore I also had to show up… [therefore]… emotionally I feel safe." (Black Women StudentStudent Focus Group 1, 2024)

Student Focus Group 2: White men students

This focus group included three white men students, one each from the 2020, 2022 and 2023 third-year cohorts. The T-SEL survey found that even though white men had a higher than average perception of their socio-emotional competencies, the class had an even higher perception of them. In fact, the class's perception of white men students was higher than any other demographic group. In response to this finding, one student spoke of men being "quite good at putting on a façade and not talking about the things they [were] struggling with. So maybe that contributes to a perception of someone doing better than they are". Another student noted that this was not so much a façade but rather, "when it comes to university work, [you're] not so good at being open about challenges that you're facing". However, one student felt they were very self-aware of their emotions and, therefore, could create a façade. When asked about the impact of third-year on them and their design practice, the overwhelming response was self-awareness stemming from the Manifesto project. They spoke of the Manifesto project as defining their voices and how this has continued to "pay dividends… seeing patterns re-emerge in Honours". They spoke of the Manifesto project as a "stepping stone" in "exploring taste and understanding what I like" (Student Focus Group 2, 2024).

Student Focus Group 3: White women students

This focus group included three white women students, two from the 2023 third-year cohort and one from the 2020 third-year cohort. I shared the T-SEL survey findings that the class's perception of white women students was lower than their perception of themselves. The students agreed that this was possibly due to emotional outbursts or crying incidents in the design studio. However, they felt that this emotional vulnerability was a strength and not a weakness, allowing them to then continue to work on projects after releasing their emotions. One student shared that the class

> "would like, see me down on the docks like crying because I'm struggling or whatever... But I kind of got a hold of myself again, and I managed to be like, OK, we have to continue now, like let's go, and then I try and push myself to like continue with the project".

They did, however, mention a few incidents in third-year where women's input was dismissed and "women do take a step back" as men were dominating. When asked about the impact of third-year, the primary discussion was around confidence and self-awareness, but care was also mentioned at the end of the discussion. Students spoke of the need for women

> "to show confidence to do certain things in life, and if you don't, it's kind of seen as a weakness. So even if it's a façade or a, you know, you [are] pretending to be confident, as a white female, it takes you further in life".(White Women Student; Student Focus Group 3,2024)

However, the students who had been in practice also noted that "people don't like strong women, confident women", whereas men were seen as overconfident or with a false sense of confidence. Therefore, they noted that some architectural practices only want to hire women interns for those reasons, but also possibly due to women being

more reliable and conscientious. They also spoke of not feeling as understood by men tutors, but that overall they had positive motivation and support from their third-year educators who "never said this is a bad idea… worked with students to develop their ideas… versus second-year tutors who shut ideas down". Students also spoke of self-awareness and that the Manifesto project was a "reference point and foundation… I knew what I like, what I want to do, what type of architect I want to be… helped find yourself as a designer" (Student Focus Group 3, 2024).

Student Focus Group 4: Black men students

Four black men students, including Indian students, participated in this focus group. Of the four students, two were from the 2023 third-year cohort, one from the 2021 third-year cohort and one from the 2020 third-year cohort. The T-SEL surveys showed that black men students had the highest emotional regulation of all groups. The students agreed with this, stating that, even when they were suffering, "you carry yourself better than you feel". They also spoke of the cultural pressure to be strong, with one student seeing emotions as "the death of duty… you don't have time to feel when you have tasks at hand", while another said you have to "suck it up". They spoke of the cultural and familial pressure "to be successful… don't have anything to fall back on, you have to create stability for yourself and your family, the goal is completing a degree and guarantee a future".

As one student put it, "I am black; therefore, there is extra pressure".

This emotional regulation, possibly also a sign of emotional maturity, was evident when the discussion turned to improvements that should be made to the undergraduate degree as a whole. These improvements included taking financial constraints into consideration, especially the costs of printing and model materials, as well as consideration with briefs, which "require an understanding [that] some backgrounds do not have". When asked about the impact

of third-year, they raised confidence and self-awareness. Students spoke of confidence being slow to build, especially since they felt too proud to ask for help initially. However, positive relationships with the lecturers allowed the "time for confidence to build". Students spoke of the Manifesto project as the top thing they took away from third-year. One student spoke of the Personal Spatial Memory exercise in the Manifesto project as "significantly building confidence… made me who I am" (Student Focus Group 4, 2024).

The student focus groups confirmed some of the trends identified from the T-SEL survey analysis. Men students spoke more often about conscious self-awareness as being the biggest takeaway of the third-year pedagogy. Women students spoke about how the care they had felt from their educators resulted in the development of greater self-care in their design practices. All students, spoke of greater confidence in their design practice and in themselves as an outcome, except white men students, as they began with high levels of confidence. Most students also gained an understanding of their critical position within the architectural profession, as well as within their particular communities.

Other focus groups were conducted with educator colleagues and practicing architects who had graduated from SoAP over the past 30 years. The first focus group were all women architects and award jurists for various regional and national architectural competitions and awards, as I wanted to better understand the lack of women representation in architectural awards over the last twenty-four years. The second and third focus groups were teaching colleagues in the third-year studio from 2019 to 2023. Eight colleagues taught with me in the third-year design studio; however, one colleague, Gerald Chungu, passed away during the COVID-19 pandemic. The remaining seven colleagues were all invited and accepted; however, one did not make it to the focus session. Two teaching colleague focus groups were held instead of one due to scheduling issues. The discussions focused on the pedagogical developments at Wits, as well as practice paradigms arising from that pedagogy.

Women Architect Colleagues: Focus Group 1

Five women architects, urban designers, educators and award jurists took part in this focus group, held in February 2024. The focus group questions centred on mastery in architectural practice over the last twenty-four years and how this has been defined by the SAIA Architectural Awards of Excellence. The main discussion points were the role and legitimacy of the SAIA, practitioner confidence and resources for award submissions and, lastly, the jurors and judging process and criteria of awards.

There were competing opinions of the SAIA's legitimacy, with architects saying it was akin to an "old boys club" (Colleague 01; Colleagues Focus Group1, 2024) or a "closed gentlemen's club"(Colleague 05; Colleagues Focus Group1, 2024) with a problematic heritage founded during Apartheid. Other architects noted that the SAIA needs to be transformed from the inside and that the awards, even if seen as illegitimate within South Africa, create platforms for award recipients on an international level.

There seemed to be a consensus that the criteria for judging awards is not relevant, often outdated, draws on European rather than African values and does not sufficiently address the core issues of architecture in South Africa. Despite pushback from the jurors—"there was a serious debate amongst ourselves about criteria"(Colleague 05; Colleagues Focus Group 1,2024) yet often these criteria are set in stone. Although, in one case, the jury threw out the criteria and collaboratively formulated their criteria, which were more relevant to the African context. The consensus was that there should be transformative criteria in the awards, which measure the complexity and difficulty of public and community work and value the effort, collaborative processes and the architect's agency within that process:

"One of the issues we were looking for was sort of transformative architectur[al] meaning. You know something that addresses the political issues of transformation… we spoke about sort of resource efficiency, that how could you achieve a lot with a little?"(Colleague 05; Colleague Focus Group 1, 2024)A transformative category for architects of colour was discussed and rejected as playing into racial narratives and segregation. The composition of jury panels was also discussed, noting the statistics that over the last twenty-five years of awards, the juries have been majority white men. One person noted,

> "If you make the most diverse representative jury of any sort, the likelihood of averaging out bias is very high. So shouldn't the thing be as open as possible… the jury and who enters and all the criteria as open as possible?" (Colleague 03; Colleague Focus Group 1, 2024)

The outcome is to be representative of a wider range of architectural excellence. However, this does not seem to be borne out, as juries have been majority black and women in the last two iterations of the awards (2020 and 2022), but the recipients have remained majority white and men. The jurors noted that no matter the make-up of the jury, the projects that make it through the regional awards to the national competition are still not representative—the jurors can only assess the projects given to them. Essentially, the problem must be addressed regionally and nationally. It was also clear that there is a certain amount of "old boys" or "gentlemen's club" behaviour in juror groups (Colleagues 01 & 05; Colleague focus Group 1, 2024), with some participants noting that projects by perennially award-winning architects are treated differently. There seems to be a sense of deference to these architect's work that is not afforded to other architects, especially in presenting their work and being interviewed for the awards. It seems, in this way, "the old boys club"(Colleague 1, Colleague Focus Group 1, 2024) reinforces its values and membership.

The statistics of the dearth of architects of colour and women architects as award recipients were discussed. The potential reasons for this lack of representation was attributed to a lack of confidence among women to submit their work for peer review and awards competitions:

> "I think that this process of nominating yourself to be an awardee. Yeah, yeah, is a problem for black architects. When the confidence levels are low. I know I have designed and built really good quality architecture. I know that and I don't need a jury to tell me that, and I don't need a name in the industry for that to happen. But this is not 20 years ago and I don't want to be a member of SAIA in order for me to get that recognition right. And so I very deliberately. I do not want an award." (Colleague 02; Colleague Focus Group 1, 2024)

There was a long discussion about generational differences in confidence, particularly as older women architects, notably private school educated, had no lack of confidence; therefore, questions around class and its impact on practice confidence were discussed.

> "And you know, and the whole thing about confidence in gender, you know that someone will have confidence in their work when their work is actually crap. Whereas as a woman you have this, like, perennial lack of confidence in your own work." (Colleague04; Colleague Focus Group 1,2024)

Also, the difference to the new generation of architects, with social media savvy brands which rely on image and little substance to develop their practices – evidencing levels of confidence that seem to be in excess of the substantive quality of work. The discussion around a possible sandwich generation, those that grew up under Apartheid, in less than ideal circumstances, both economically and in terms of schooling, that having been the first generation to gain access to previously closed institutions struggled to adjust and felt like outsiders at those institutions, and this has had

long term impacts on the levels of confidence on their own practices. That the older generation, largely white and men, were gatekeepers for this sandwich generation, and that the younger generation, having not experienced this, have in some ways jumped over them. In this respect, there was a suggestion that when considering award recipients, gender and race are not the only metrics that could reveal some underlying systemic issues, but also age.

Resources, or lack thereof, also featured as a reason for the lack of award submissions. The issue of resources was debated.

> "Criteria needs to measure more things than just the building the artefact; there needs to be a measure that says that architecture is not just about the building produced but the processes. You know that if someone has spent two years on a building, that's like everything is worked out to the tee, but someone [else] has… lost money on a project that they spent two minutes on because they couldn't spend any more time and resources on it. And yet the building is still of a quality, be up there… because of that process and effort and whatever and complexity. Those two things actually are then equal."(Colleague 1; Colleague Focus Group 1, 2024)

Essentially the discussion was around how to compare a public works architect to an architect with a private client who is knowledgeable about architecture, has a multimillion-rand budget and is paying full fees for a home that can take two years to design right down to small details. In other words, the issue of resources is systemic and the quality of a resultant building can largely be skewed due to the budget and complexity differentials that architects are given, as well as the support by clients, private or corporate. How this is balanced in the final design criteria must be addressed.

Teaching Colleagues: Focus Group 2

Two former colleagues and educators who taught the ARPL3005 Architectural Design and Theory III course in some of the years between 2019 and 2023 participated in this focus group, which took place in March 2024. The focus group discussions unpacked the pedagogy and the curriculum of the third-year design studio: what was taught, how it was taught and its impact on students. One of the main discussion points centred on student validation—as an educator team "we encourage[d] self-value and its expansion and development – not just pure validation"(Colleague 05, Teaching Colleagues Focus Group 2, 2024), considering the essential tension between what the individual brings to the design conceptually and theoretically and meeting the constraints of context and programme in a design project.

The impact of COVID-19 on the pedagogy, where the teaching from April 2020 to the end of 2021 was online, was discussed. A colleague noted that the caring and nurturing pedagogy came to the fore during this time. Both colleagues noted how we were more focused on whether the student's home environment and circumstances were conducive to the student being productive. There was a sense that the pedagogy became more student-centred and student-led, realising that a singular approach was not going to work and that each student needed to be approached as an individual. In the discussion, colleagues spoke about how we assume the physical space creates a level playing field in the design studio and at the university:

> In the "neutral terrain of the university, we didn't have to invite a lot of our time thinking about where [the students are] living, under what condition[s] and to what extent are the conditions under which the(y are living impacting on their ability to work". (Colleague 05, Teaching Colleagues Focus Group 2, 2024)

There was a general consensus that the more careful and sensitive student-led approach should not be discarded when returning to campus. There was also a side note that this individualised approach was something that other faculty members scoffed at—this was not prevalent in all courses.

The reinforcement of reflective moments at the beginning and end of the year through the two Manifesto projects was also seen as one of the greatest impacts on students.

Reflecting on this focus group, it became clear that the third-year pedagogy and curriculum were collaboratively developed. My input and innovation were in the two Manifesto projects and introducing a parallel-engaged pedagogy and a conscious and critical practice. However, the caring pedagogy developed in all members of the teaching team during COVID-19.

Teaching Colleagues: Focus Group 3

Four former colleagues and educators who taught in the ARPL3005 Architectural Design and Theory III course in some of the years between 2019 and 2024 participated in this focus group, which took place in March 2024. Similarly to the Teaching Colleagues: Focus Group 2, the focus group questions unpacked the third-year pedagogy and the curriculum, what was taught, how it was taught and the impact thereof on students.

One colleague noted the progression over the years was remarkable, realising that black and women students in those seven years became more confident and did not lag behind the rest of the class. This tutor was surprised that even students without cultural capital, a prior exposure to architecture and art, were succeeding and doing well. However, another colleague noted that bias can go both ways, stating that tutors could overmark a student from a

different background—make allowances—as much as they could undermark. The mark can be inflated if there is a low threshold of expectation, i.e., when a student produces something more than expected.

Colleagues narrated their personal experiences of arriving at university with a lack of exposure to architecture and how their lecturers' nurturing, encouragement and belief in their ability drove them to do better and better:

> "Someone at some point nurtured your potential; you felt cared for, you felt seen, you felt heard, that you, at that point, were like, OK, I can do this." That "confidence grew in your skin… I belong here just as much as you."(Colleague 09, Teaching Colleagues Focus Group 2, 2024)

Nonetheless, another colleague noted that confidence can be a problem as it makes students think they know everything.

The impact of the two Manifesto projects was also discussed, with colleagues mentioning the importance of analysis as a skill, as well as how the project personalises design for students. One colleague described the process for students:

> "I remember what this particular space I remembered as a child or a first memory and then understanding how that has potentially impacted their understanding of space… understanding that who they are now is a process, a journey and the, the work that they're designing now is a process of where they grew up, how they grew up, their understanding of space. I think that's quite powerful. I think some of them make that correlation. Not all of them, but I think the ones that do, I think it's quite powerful for them. And maybe, I don't know, maybe it starts giving them permission to take their practice of architecture more seriously, that there are patterns that are starting to develop."(Colleague 08, Teaching Colleagues Focus Group 2, 2024)

Once again, one colleague, playing devil's advocate, questioned whether students were emotionally mature enough in third-year for this type of exploration. However, other colleagues saw the value of the Manifesto project in third-year as self-reflection that broadens students' horizons.

Apart from these focus groups, individual architects, educators and tutors from SoAP and other South African Schools of Architecture were interviewed to ascertain their views on broader South African architectural pedagogy and practice, as well as their views of practice-based design research at their institutions:

1. Interview 001 (July 2023): Practising architect and educator at a South African university, SoAP alumni.
2. Interview 002 (Feb 2024): Practising architect and educator at a South African university
3. Interview 003 (March 2024): Educator at a South African university
4. Interview 004 (April 2024): Practising architect and educator at SoAP
5. Interview 005 (May 2024): Practising architect and former educator at SoAP
6. Interview 006 (June 2024): Two practising architects, one of which is also an educator at SoAP. Both are SoAP alumni.
7. Interview 007 (August 2024): Practising architect and former educator and director at SoAP

A additional interview with a student to unpack the ontological shifts in her worldview during and after architectural education was conducted

8. Interview 008 (September 2025): Interview with a student from the focus group 01

The various focus groups and interviews bring the diverse voices of students, educators and architects to the fore in the research, validating some initial conclusions, disputing others and bringing new insight to light. These interviews and focus groups also provided a final triangulation to the data, making meaning.

3.3 Limitations to the methodology

The limitations to the methodology lay in testing shifts and changes in design practice over time, the effects of unequal power relations between students and educators and acknowledging that the knowledge produced was done so within a particular worldview, my own.

Firstly, how could the research test whether the reflective-diffractive practice-based design research impacted and changed design practice to be more conscious, critical and careful? The outcomes of the initial Manifesto reflections at the beginning of the year could not be taken as evidence of shifts in design practice and only as a venturous desire for a different type of practice.

Participants needed to reflect on ongoing design practice throughout the year, carried out in light of the new tacit design knowledge obtained in the Manifesto. For students, the Manifesto and first T-SEL survey were compared to the Manifesto Revisited Essays and the last T-SEL survey at the end of the year. The comparison of these two sets of qualitative and quantitative data questioned whether design practices had shifted to be more conscious, critical and careful.

The time limitation of one academic year meant that only short-term shifts in practice could be assessed. Longer-term shifts in practice could only be ascertained in the focus groups, which were conducted at the end of a five-year period. However, the focus groups posed other limitations. There was a range of responses to questions on the impact

of the pedagogy on practice, from recent BAS graduates to students already in professional practice. This meant that for some students, the time elapsed since third-year created some difficulties in remembering the pedagogy itself. While for other students, the pedagogy was too recent to gain perspective on its impact on longer-term practice.

Secondly, the unequal power relations between students and educators could lead to student unreliability in reflecting on their practices and possible academic bias. Asking students whether their design practices had become more conscious, careful and critical meant that educators could expect some subjective self-assessment bias. Some students naturally stated that, yes, their practices had improved without providing adequate evidence thereof. Therefore, when collating the data, the evidence for shifts in practice was carefully assessed to overcome this limitation. The introduction of the T-SEL surveys also served to balance this subjective bias, although the surveys themselves could also display some of that bias, although to a lesser degree, as the students could not remember their answers from the first survey. Going forward the intention is to use the T-SEL surveys from first-year and every subsequent year to identify shifts in practice across the entire educational period. Nonetheless, one of the limits of this research lies in the institutional or familial pressure on students to succeed which exacerbates self-reporting bias.

Academic bias is also something that the educator-researcher needed to be aware of. Interestingly, the best design students were not necessarily the students who developed the most conscious, careful and critical practices over the course of the year. Some of the most interesting insights and catalytic shifts came from students who were struggling academically.

Lastly, I found it challenging to balance the multiple roles of architect-educator-researcher, especially when carrying out autoethnographic practice-based design research alongside the students. The limitation in attempting this type of research is that the power inequity is always present, even when researching in parallel with students. Students look to

the educator to learn mimetically, which could lead to uncritical copying rather than an embodied understanding of how to conduct their research. The possibility of mimetic learning also impacted students' critical reflection of their own ontologically situated spatial memories. My readings of their spatial memories were from an outsider's worldview, both culturally and architecturally. This meant that when applying an architectural concepts lens to their spatial memories, students, could inadvertently make readings of their spatial memories which ran counter to their cultural and ontological meanings. Therein lies one of the critical limitations of this research, translating these diverse ways of being rather than letting them speak for themselves, as expressions of a worldview so different from my own. The research limits lie at this tension between supporting students own ways of seeing and being. yet translating them into architectural ways of designing which might subvert those very ways of being in the first place.

These limitations formed part of the action research. Strategies were tested to overcome acknowledged limitations in previous cycles and their effectiveness re-tested going forward. Thus, overcoming these limitations as much as possible enriched the research process. When the limitations could not be overcome, they have been acknowledged in order to make the limits of knowledge clear.

3.4 Ethical issues

Ethics approval was obtained from the Wits Research Office, protocol no H23/04/9 (refer Appendix E).

Ethics consent in writing was obtained from all participants, students and colleagues (refer appendix for pro-forma consent forms and participant information sheets). The focus groups were audio recorded, and this is noted in the consent forms, but was also confirmed verbally at the start of the focus group discussions.

The ethical issues that were engaged within this research were the power differential between the researcher-educator and students. This was due to both being research participants and, therefore, engaging more directly with each other than is the norm in the design studio. Although this was an ethical issue, it was the strength of the research. The other main ethical issue was the sometimes personally sensitive information revealed through the practice-based design research methods.

The unequal power relations were dealt with in two ways. Firstly, the practice-based research exercises were carried out within a parallel-engaged pedagogy where the educator was also engaged in the same exercises alongside the participants, sharing their outcomes and inviting student review. This served to counter the unequal power relations, reveal the institutional bias and allow the educator to engage alongside students. Secondly, students and participants discussed the research at the outset. Informed consent forms were completed. Students were informed that their research data would only be assessed at the end of the academic year, thus preventing any bias or cross-contamination between assessing research and academic outcomes. Further, it was made clear that participants could opt in or opt out of the research at any time. If opting out, their academic outcomes would not be impacted.

The intention of the research was not to compare the outcomes of participants or to place a value judgement on the participant outcomes. Therefore, analysing the T-SEL data through race and gender was a misstep in that it forced comparisons of students along those lines. In the end, the 2024 T-SEL surveys contested the conclusions drawn from the 2023 race and gender data comparison and confirmed the initial aim of validating individual design voices. The research was rather to assess whether the reflective-diffractive practice-based research had an impact on the participants' individual design practice, making it more conscious, critical and careful. This was different for each participant as each participant's practice was at a different stage and unique.

As the researcher, I endeavoured to ensure that participants only shared as much as they were willing to. The informed consent (refer to Appendix E) included whether participants accepted taking part in the research and whether they agreed for their outcomes to be shared. The identity of participants was kept confidential to ensure the participant's right to privacy, which is enshrined both in the general terms of Section 14 of the South African Constitution, specifically in the POPI Act (Protection of Personal Information Act 4 of 2013). This right to privacy reinforced the reasons for confidentiality's importance, which included the relationship of trust built with the researcher and how information was divulged, both of which were carried out as per the informed consent form.

The processes of ensuring confidentiality within the context of this relationship of trust were set out within the consent form. Both parties essentially agreed to two aspects of confidentiality, the process of collection of information and its' reporting. Both of these have limitations which were carefully defined. In the collection of information, the autoethnographic exercises and focus groups exposed the participant's identity to the group and therefore, while confidentiality could not be guaranteed in the process, it could be guaranteed in the reporting. These limitations were taken into consideration when dealing with any particularly sensitive data and the possible reputational and/or psychological harm on the individual should any such sensitive information become public. In the case of the peer review within the exercises, the participants shared only what they were comfortable sharing.

In conclusion, issues on ethics in South Africa rest on the universal principles of good ethics as outlined in the Singapore Statement of Research Integrity (Kombe et al. 2014) of "honesty, accountability, professional courtesy, fairness and good stewardship" (Dhai 2019, 148), These need careful consideration in terms of the potential vulnerability of participants when dealing with personal histories and information of participants.

Refer to appendix for pro-forma Informed Consent Forms, Participation Sheets and proposed questions for focus groups.

PART B: PAPERS

Three papers were written following each of the three theories relevant to this thesis, namely autoethnography, practice-based design research and transformative architectural pedagogy. Each paper was submitted to a local or international journal for peer review and publication. The peer review recommendations that were followed are noted below in the summaries of each chapter in order to make clear how these peer reviews helped to focus on the contributions to knowledge.

The autoethnography paper in Chapter Four, ***Doing autoethnography, teaching autoethnography as an architect-educator-researcher***[20], answered the initial questions posed in the research "*What do I know through my design practice? How do I practice? How do I know what I know?*". The paper is, thus, an example of autoethnographic practice-based design research by a researcher (myself) with an established architectural design practice critically viewing their (my) body of work and situating their (my) design and teaching practice. Therefore, the autoethnography went beyond that original aim. I taught autoethnography to my students by doing autoethnography in the design studio. However, teaching autoethnography occurred in parallel, with both my students and I doing autoethnography in the design studio. Teaching at a South African university post-Apartheid and post the decolonising imperative of the #FeesMustFall protests required me to critically position myself as a white woman educator. Thus, through the autoethnography, I could critically position myself within the decolonising institution, as well as unearth tacit knowledge of my design practice.

[20] Paper 1 was submitted to ArchitectureSA in July 2024 following a call for papers but was retracted before peer review, and submitted to The International Journal of Art & Design Education (iJADE) in February 2025. Chapter Four are the revisions made after peer review re-submitted to iJADE in October 2025.

This autoethnography paper has not been published as yet, but was peer reviewed by both international and local South African reviewers. The comparison of these peer reviews is instructive. The international peer reviewers coming from a general arts and design education background requested more citations, better theoretical grounding especially of the more poetic writing sections and an expanded literature review including 'A-R-Tography (Artist-Researcher-Teacher)' and intersectionality, all from the Western discourse. Both international and local peer reviewers suggested a more academic structured approach to the paper to make its contribution clearer.

The local reviewer, however, with a local and embedded understanding of the context was much more critical. The journey of care and reflexivity in the paper needed to be seen within "a larger system of shifting cultural and institutional capital". Essentially this reviewer asked how the personal narrative arc could shift to a historic dialectic. Drawing from Bourdieu and Fanon, the reviewer asked about whether the paper is evidence of whiteness being reconstituted through gestures of redemption such as care and reflexivity, after Apartheid and the decolonial imperatives of #FeesMustFall protests. The reviewer requested that the paper address the ontological question:

> "if true care demanded the relinquishing of one's world, one's epistemic grounding, institutional status, aesthetic sensibility, could that care be sustained? If the price of transformation were not recognition but loss, would the author participate willingly? Or more unsettling still, is transformation only desirable when it allows one to retain continuity with the structures that gave them voice and authority in the first place?"

The reviewer requested that this inherent tension be revealed through dwelling in the discomfort of the contradiction of care and complicity, transformation and self-preservation. This was seen to be the "structural condition of whiteness in the post-apartheid university and the globalised architectural profession". Therefore, the shifts requested by the local reviewer included a clearer theoretical postcolonial, critical whiteness and political

economy framing. That the way that care is shaped by and circulates within institutional and professional fields should be addressed, especially "whether care can be disentangled from power". Lastly, that the paper should acknowledge that "transformation may be involuntary, incoherent or even contradictory". Thereby the paper would shift from self-narration to structural critique, and open space for a more necessary but uncomfortable conversation about "what care does and whose world it sustains".

This paper was revised as per both reviewers comments, both local and international.

The autoethnography of the first paper used practice-based design research methods in the curriculum to unearth tacit knowledge of architectural design practice. Some of these practice-based design research methods were adapted from postgraduate programmes for undergraduate students in a South African context. The second paper in Chapter FIve, ***Adapting practice-based design research methods to a South African undergraduate architectural studio to build a more conscious and critical architectural design practice in students***[21], describes this process of adaptation. The aim of the autoethnographic practice-based design research was to support a more critical and conscious design practice in students. The paper reflects on how these adapted methods supported this aim. Furthermore, it also describes a breakthrough in the research when a novel method, *Personal Spatial Narrative*, was conceived to address struggles that students and I had with the adapted methods. This paper has been accepted for publication by the ARENA Journal for Architectural Research (AJAR), after peer review and revisions. The international reviewers noted the paper's contribution to knowledge as being twofold. Firstly, the adaption of practice-based design research methods which are typically used in postgraduate programs to the undergraduate architectural program. Secondly, the application of the African philosophy of Ubuntu to architecture, which was at first a peripheral

[21] Paper 2 was submitted to the Arena Journal of Architectural Research (AJAR) in March 2024. Peer reviews were received in August 2024. The revised paper as per the peer reviews was re-submitted in October 2024. The paper has been accepted for publication.

discussion in the paper but was expanded after this review. The peer review therefore served to not only confirm the first contribution to knowledge but highlighted a second contribution. A local South African review also noted the Ubuntu contribution, requesting that this be expanded with a deeper understanding of its ontological condition.

The autoethnographic practice-based design research was taught through a parallel-engaged pedagogy of care. The third paper in Chapter Six, ***Tracing the evolution of a parallel-engaged architectural pedagogy of care in South Africa***[22], traces the evolution of this pedagogy in the third-year design studio. The parallel-engaged pedagogy of care merged the critical pedagogies of Freire, hooks and De Sousa Santos with the particularities of the South African higher education context. The research demonstrated that the pedagogy (how students learn) is as important as what they learnt, the curriculum and methods of autoethnographic practice-based design research. This paper was published in the International Journal for Architectural Research (Archnet IJAR) in September 2024. In that peer review the transformative and decolonial potential of the pedagogy was requested to be articulated more clearly. The international reviewers with limited knowledge of the South African architectural education landscape also requested more extensive citations of Lokko. Whilst the first was implemented fully, for the second request, Lokko's contribution was contextualised and articulated in relation to Wits, the institutional context of the paper.

The three papers interweave the ways in which a more conscious, critical, careful design practice was supported. The development of conscious, self-aware and critical practice was shown in the autoethnography and practice-based design research papers, which situated my students and I within a local culture of architectural education and

[22] Paper 3 was submitted to Archnet- IJAR: International Journal of Architectural Research in May 2024. Peer reviews were received in June 2024. The revised paper per the peer reviews was re-submitted in August 2024 and accepted for publication. The paper was published online in September 2024.

practice. The pedagogy paper introduces the need for care and how it is developed through an affective caring pedagogy.

The transformative imperative is also a thread that runs through all the papers. In the autoethnography paper, whiteness is deconstructed while strategies for centring other voices in the design studio by quietening my own white voice are portrayed in the pedagogy paper. The practice-based design research paper also describes how unearthing individual ways of seeing and being in a design studio builds epistemic diversity in the "pluriversity" (Mignolo 2011; Mbembe 2016).

The papers describe the same research process through different lenses, demonstrating that developing a transformative pedagogy requires attention not only to the curriculum and the pedagogy but also to my and students' critical position with both.

Finally, a point about the differing views of international and local reviewers. International reviewers could better articulate the contributions to knowledge, highlighting some contributions which were either not fully explored, and confirming others. The local reviewers on the other hand, with their deeply embedded understanding of the context offered more critical insight into the ontological underpinnings of the research, as well as positing possible future explorations of both the pedagogy and the research. The generous, thought provoking and deeply engaged reviews, both local and international, served to confirm the value of the PhD by publication method.

4 CHAPTER FOUR: DOING AUTOETHNOGRAPHY, TEACHING AUTOETHNOGRAPHY AS AN ARCHITECT-EDUCATOR-RESEARCHER

Paper resubmitted with revisions as per peer review to International Journal of Art and Design Education - IJADE

Who am I?

I am a practicing architect, a teacher, an educator, a researcher.

I am South African and Portuguese. I was not South African enough, am I Portuguese enough?

I am white, not so white, white enough, too white, not white enough.

I am a woman, a mother, not yet a grandmother, a sister, no longer a daughter. I am a wife.

I am a vessel, empty, full, all of these things, none of these things, more than all these things.

I am everything, nothing, in between, always just becoming.

I am becoming these things and losing these things. I am evolving…fluid.

Who am I? Who was I? Who am I becoming?

I am a first-generation South African, born of immigrant parents with all the othering that brings.

I am a white woman aware of the inherent privilege of being white within the still racialised post-Apartheid South African society and the struggle of being a woman in a patriarchal society.

Yet my whiteness is muddied by my working-class immigrant background. I was sometimes not white enough as a child, as a student, on the periphery looking in, invited into white privilege in some circumstances, and outed in others.

Identity is fluid, constructed, inherent, becoming, intersectional.

Who am I?

4.1 Doing autoethnography, teaching autoethnography

The research commenced with a self-acknowledged lack of confidence in my own design practice. I wanted to understand my practice better, hoping that this would translate into a more conscious, critical, careful and confident design practice. In order to do so autoethnographic research was conducted. I was researching my design practice 'auto', critically situating it within a practice culture 'ethnos', through writing, drawing and photography, 'graphy' (Ellis and Bochner 2000), the very definition of autoethnography. The introductory poem articulates the 'auto' my identity within its 'ethnos', context. I am a white woman architect-educator-researcher situated within a culture of architectural practice and education at a historically white institution, the University of the Witwatersrand (Wits) in Johannesburg. Situated in a still racialised and patriarchal South Africa thirty years after the fall of Apartheid. The autoethnography attempts to read the culture of architectural practice and education in this place, at this time, through research on my design and teaching practice and that of my students. Essentially doing autoethnography and teaching autoethnography.

Autoethnography has developed and evolved over time to mean different things, with current practices falling within four themes: "reflecting and engaging; making and relating; representing, breaking and remaking; moving and changing" (Jones et al. 2016, 37–38). My autoethnography started with a desire for change in design practice, not only for myself but also for my students and, therefore, sits within the autoethnographic practice that seeks "to change not only the self but also communities and societies" (Sparkes 2016, 2). The research extends the recent "autoethnographic turn in design" (Schouwenberg and Kaethler 2021) at the intersection between autoethnography and pedagogy, working with similar methods as Alexander (2016) but in the architectural design field rather than performance.

Autoethnographic practice-based design research aligns with "a/r/tography"(Irwin and De Cosson 2004) in interweaving the three identities of architect-educator-researcher, which are also underpinned by the intersectionality(Crenshaw 1989) of being a white woman in South Africa. I moved from doing autoethnographic research on my design practice as an architect-researcher to teaching autoethnographic research to my students as an architect-educator-researcher. The autoethnographic research used practice-based design research methods established in postgraduate programs (Van Schaik 2020; Fraser 2013; Blythe and Stamm 2017a; Vaughan 2017b), adapting these to the South African practice context and to undergraduate students. To gain insight into student experiences of the pedagogy, students' self-reflective writing, focus groups and surveys were triangulated. The research was carried out in action research cycles from 2019 to 2025 with third year undergraduate students at the School of Architecture and Planning of the University of the Witwatersrand (SoAP). Interviews with practicing architects were also conducted as part of the 'ethnos' research into the culture of architectural design practice in South Africa.

It is self-evident that architects need new ways of thinking about architectural practice in the context of multiple global crises, including ecology, economy and health. Architects in South Africa, in the global south, are familiar with these challenges, practising within contexts of scarcity, transformation and emergency. Understanding how design practice could address these crises necessitates an understanding of the drivers of design practice, both personal and contextual. Autoethnographic practice-based design research enables designers to become aware of these drivers, critique them and thus practice more consciously, responsibly, critically and carefully.

4.2 Which practice? Architect-educator-researcher

Mid-career pause…
What do I know through my architectural design practice?
How do I practice?
How do I know what I know?
Where and when did I learn how to practice in this manner?
Pause…

The questions I sought to answer emerged from desiring change in my design practice—from unconscious architectural design practice to one that is more self-aware, confident, conscious and critical. My design practice questions were explored through autoethnographic practice-led and practice-based design research, unearthing tacit knowledge of my design, pedagogy and research practice. The research is both practice-based as it produces creative artefacts, drawings and photographs when deconstructing past practice(Fraser 2013), but it is also practice-led as it "leads… to new understandings about practice" (Candy 2006, 1).

The research is situated within architectural practice-based design research where the research can straddle different modes or identities such as "architect-teacher-researcher"(Vaughan 2017b). In arts research and arts education this is known as "a/r/tography"(Irwin and De Cosson 2004), a living inquiry where art, writing (graphy) and the multiple "identities of artist, researcher and teacher (a/r/t) [are] in contiguous relations…simultaneously in and through time and space"(Irwin et al. 2006, 70).



Figure 4.1 The architect is at the centre of the autoethnographic research. The researcher and teacher roles keep looping back to the architect at the centre (Author's drawing)

However, in architectural research and education the term a/r/tography has rarely been used, with design research, practice-based design research or practice-led design research being preferred. Nonetheless, this papers exploration of autoethnographic practice-based design research, where the practice in question is triple fold architect-educator-researcher (design+ pedagogy+ research practice) is related to the theoretical framework of a/r/tography. The architect-educator-researcher identities in this research are similarly contiguous and simultaneous, whilst Vaughan's(2017b) "architect-teacher -researcher" had a more linear relation . Lastly, in a/r/tography, 'graphy' referred to writing, whilst in this research, 'graphy' is both writing and drawing, possibly the more important tool for an architect, used to both explore and represent.

The autoethnographic methodology is practice-based and practice-led design research, which reflects on me at the centre of the practice (Figure 4.1) and the context of my practice through different methods, including *Personal Spatial Memories*, *(De)constructed Archives*, *Communities of Practice* and *Institutional Influence*. Together these unearth design practice tacit knowledge through iterative research cycles, where research into past practice impacts present practice and ventures new practice futures.

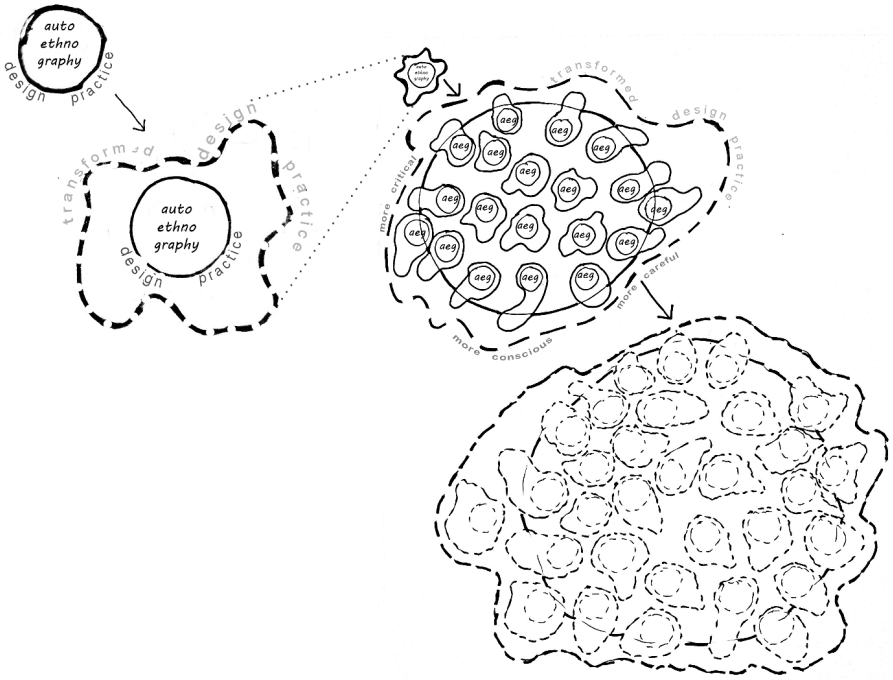


Figure 4.2 A study within a study. Autoethnography on my design practice sits within a greater study of design pedagogy where students also carry out autoethnography on their design practices (Authors' drawing)

In desiring change, I moved from being an architect to an "architect-teacher-researcher" (Vaughan 2017). The autoethnographic research was initially on my design practice to develop more confidence in my design practice through conscious self-awareness and critical positionality. However, the research scope was broadened when I started teaching. Teaching design elicited related questions: Could practice-based design research be as transformative for students' design practice as it potentially was for mine as a mid-career architect? The research was a study within a study, with the results and outcomes of my autoethnography informing my teaching of autoethnography (Figure 4.2).

However, I was not teaching in the normative hierarchical way of standing in front of a class, transmitting knowledge to largely passive students. I was sitting alongside them in the design studio, working in parallel with them on research aimed to uncover knowledge about design practice, mine and theirs. I, therefore, did not see myself as a teacher but rather an educator, co-constructing knowledge alongside my students in a participatory action research process. Conducting my own autoethnographic practice-based design research in studio meant students would observe and learn from my research process without me actively 'teaching' them.

I was an architect researching my design practice, while at the same time, I was an educator demonstrating to students how to research their design practices (Figure 4.2). At that point, I was all three simultaneously architect, educator and researcher, aligned with living fluid a/r/tography practice

The practice-based design research allowed for both distance and radical proximity with my design practice. I could stand back and look at more than thirty years of practice, gaining a critical distance for a meta-reflection on all my work. At the same time, I became more intimately acquainted with my practice, a radical proximity which allowed me to explore the roots of my way of seeing and designing. Through researching my practice I gained not only a more critical and conscious design practice, but also a greater understanding of how to teach that. The creativity explored in practice was researched, then translated pedagogically and the process then articulated for a more conscious and critical design and teaching practice. This echoes a/r/tography(Irwin 2017; Springgay 2008) in that the architect created material forms of knowing, interpreted by the researcher as theory and data which were then explored by the educator with students in an embodied way. Without the researcher the material forms of knowing would remain unarticulated, and without the educator these would not translate into transferrable knowledge.

4.3 Seeking critical spatial practice

Self-reflective autoethnographic practice-based design research reveals tacit knowledge of design practice, but it can also be myopic, self-referential and lack relevance beyond the designer. The aim of my own autoethnographic research was to develop a more confident, critical and conscious practice. Essentially I was seeking something akin to critical spatial practice, following Rendell (2018; 2020; 2021) and Schalk et al. (2017), which seeks to transform and

change the conditions of practice. By not only doing autoethnography but also teaching autoethnography, I was seeking that change beyond myself as the individual designer.

In my initial research into my role as a woman architect I referred to my architectural practice as 'feminist' during a conference presentation. I was publicly criticised. One of my responders was not convinced, noting the difference between a female practice and a feminist practice, that a woman-led practice could still perpetuate the status quo, not seek to transform practice and, therefore, not be a feminist practice. A feminist critical spatial practice, on the other hand, aims to "critique and question" rather than "maintain and reinforce existing social and spatial orders" (Rendell 2021, 8).

I reflected on the criticism, seeing my initial statement as seeking validation. In that reflection I saw that as a practicing architect, I had been complicit in perpetuating established norms, rather than question or critique them. For many years, I practised unconsciously, not critically and deliberately. I accepted client norms and pushed envelopes ever so slightly, taking note not to rock the boat too much. I was acutely aware of the economic power my clients exerted over me, being a vessel for their desires and wishes. I did not have confidence in my agency to question or even act upon the status quo. The norms of architectural practice within South Africa, thirty years post-Apartheid, are defined by a split economic system. Public institutions are governed by Broad Based Black Economic Empowerment preferential procurement rules that seek economic justice. Whilst commercial and private clients reflect an economy still largely controlled by a white minority. Practices follow colonially untransformed practice statutes initially derived from the Royal Institute of British Architects (RIBA). The profession is still dominated by white men who form 59% of professionally registered architect(South African Council for Architectural Profession 2023) , yet are only 3.5% of the South African population(Statistics South Africa 2023). This results in architectural practices

operating between these two competing systemic economic norms, between transforming practices whose focus is public work and commercial practices who leverage racial, patriarchal and economic networks.

My practice was governed and, in some ways, constricted by these competing practice contexts. However, by looking closer I realised that I had developed micro strategies of resistance. I sought collaborations with other women architects, resulting in entries to several design competitions. When considering Rendell's (2018, 13) qualities of a feminist critical spatial practice "collectivity, subjectivity, alterity, performativity, materiality", it was clear that collectivity was present. The collaborative network also worked, and still works, to challenge women's representation in educational curricula, awards juries and competition administration, seeing the importance of working in several spheres that impact practice.

But what of the other qualities of a feminist critical spatial practice? Subjectivity, examining the "inter-relations between location, subjectivity and knowledge… an ongoing critique of binary positions" (Rendell 2018, 7) and alterity's "focus on the other… practicing 'otherwise' or 'otherhow'" (Rendell 2018, 9) was present in some projects. Notably in the collaborative projects of LemonPebble, led by Tanzeem Razak and Althea Peacock and Greenbrick, my practice, where a colonial-era mansion was re-invented into a research institute. The house's back door servant entry was re-imagined as the primary entrance, with the memory of the servant's quarters inscribed in the forecourt contrasting against the grandiose scale of the house. In a decolonising act, the design subverted the classical architecture and highlighted the ways in which black servants lived during South Africa's colonial past and under Apartheid.

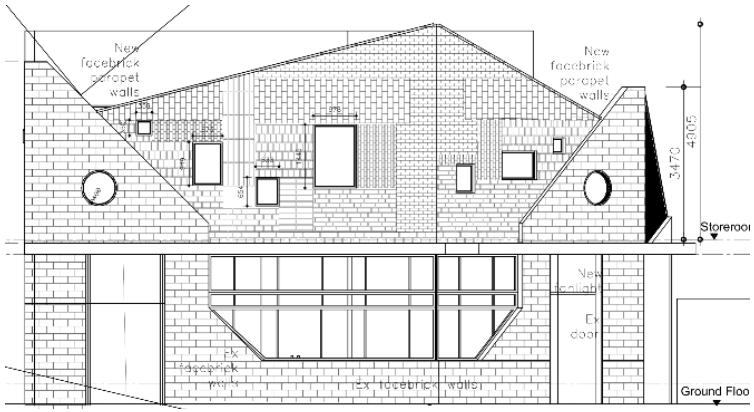






Figure 4.3 Proposed elevation showing reclaimed and salvaged brickwork. Photos of brick cleaning and bricklayer, Aaron Mahlangu, using creative licence to complete the façade (Author's drawing and photographs)

Materiality, considered from an ecological perspective, has been an ongoing theme in my practice but has only recently become more overt and deliberate, unearthing its' socio-economic realm. Materials, after all, are indivisible from the men and women who made them or have developed skills over time in their building use.

In a recent project, all existing materials, including bricks, were painstakingly cleaned and re-used, and new materials required were sourced from salvage yards (Figure 4.3). This more careful and deliberate use of materials meant the initial design of facades was fluidly altered to incorporate and respond to the re-use of materials from site and salvage yards. The bricklayers were co-opted to use creative licence in their application of the salvaged bricks and pavers on the façade. It was a collaborative, evolving design, tapping into bricklayers' material understanding built up over years of bricklaying. The project took longer than planned, the material cost lower, the labour cost higher. Perhaps this echoes the call for a slower architecture, one in which the builders can become craftsmen once again, working closely with the architect to create. I was architect, client and contractor, and could, therefore, take risks with programme time to explore a different way of practicing (Figure 4.3).

In examining the ways in which my practice displays qualities of a feminist critical spatial practice, these come to the fore in self-build projects and public projects. In projects for private clients, especially residential clients, these qualities were more muted or largely silent. Do I have agency in my own architectural choices, but am still not confident enough to make those same choices for clients?

As an architectural intern and a young architect, I worked for several firms, all led by award-winning men architects. The design will of the leading architect prevailed over the client and everyone else on the team, at times through coercion and sheer force of a dominant personality. However, when I started my practice, I was interested in collaborative ways of practicing. My clients', contractors' and consultants' ways of thinking about design, building and space fascinated me. How could we together design and execute a project that was successful in meeting client requirements? I, as the architect, was just one component of that team, and I saw my role more as facilitator and mediator. I did not see myself as a 'starchitect', and very few clients came to me prompted by any identifiable styles in my previous architectural design projects.

It seems clear that my design practice already had some of Rendell's (2018, 9) qualities of a feminist critical spatial practice, like practicing collectively and "otherwise", but that they were liminal and subconscious. By purposefully reflecting on my design practice, I gained deliberate and critical agency in both design and teaching practice. In seeking a more conscious, critical, careful and confident design practice for myself, I gained an understanding of how to teach those ways of practicing to students. I was developing confidence in my own voice, and yet in gaining an appreciation for collaborative ways of practicing, I realised that my confidence should not override students' confidence in their own voices. That in fact in finding my confidence, I could help them to find theirs. Confidence in this sense was not bombastic, or egoistic, but rather self-efficacy, one's belief in the ability to succeed in specific

situations and accomplish certain tasks, therefore impacting motivation and performance (Bandura 2012). In the South African context it is important to make that distinction, as many students' ontological worldviews see individual confidence as confronting a relational, communal way of being. The emphasis on self-efficacy, a skills or practice related confidence means students can develop practice confidence without necessarily violating their ontological ways of being.

In doing and teaching autoethnography, I was seeking and teaching how to gain self-efficacy. I was revealing ways of practicing collaboratively, and how these might challenge practice norms. In teaching collaborative ways of practicing I also learnt how collaboration was an integral part of so many South African students' worldviews and ways of being rooted in Ubuntu philosophy " I am , because we are" (Mbiti 1969; Ramose 2003). Even though individual confidence could impact students' ontological ways of being the emphasis on collaboration could reaffirm these ways of being. The ontological impact of the pedagogy is therefore not clear, potentially reinforcing some aspects and challenging others.

4.4 Politics of whiteness

Being a woman in architectural practice, I am more often than not confronted on a project with teams of men—consultants, contractors, builders—all men. I maintain a feminist stance. I belong here. I will not act like a man, I will be respected as a woman. I do not scream, profane or bully, all behaviours I have seen in some men architects. I collaborate, listen, take notes, discuss and mediate solutions. In difficult meetings, I come over-prepared, following contracts to the letter, but I am open to solutions emanating from all team members. I am, however, a white woman architect in South Africa, where the overwhelming pattern of project teams, especially on private projects, is still white

men as consultants and contractors and black men as builders and labourers. I cannot deny, therefore, that my race, especially in this country, crosses some gender boundaries. Black women architects have discussed in interviews how they face a double barrier to being respected on site, feeling like they need to "stake (their) claim on site, be quite vocal or disappear" (Black woman architect, Interview 06, 2024). As a result, this black woman architect relies on her inner validation and deliberately dissociates her self-confidence from the realities on site.

As a white woman educator at a historically white university, I am faced with the opposite reality. My classes are majority black students and students of colour, with white students in the minority. From the time I started tutoring in the design studio at SoAP in 2010, there was a deliberate and careful orchestration of the gender and racial composition of the studio tutor group. This acknowledged the importance of two factors. Firstly, students more readily engage with tutors who reflect their own identities, and secondly, students could always find a tutor who could perhaps better understand their cultural worldviews. This counters Payne's (2015, 10) research that, as per Bourdieu, "schools 'misrecognize' elevated levels of cultural capital as 'natural' talent and in turn reward such students for simply being cultured and having a privileged family background". In architectural studios where assessment is qualitative and subjective, Payne's research conclusions are not surprising. A multi-cultural, multi-racial and multi-gendered tutor group was a good start to countering the misrecognition of 'natural' talent. From 2018, when I formally joined the staff at SoAP as an educator, and not just a tutor, I found myself in the role of co-leading a multi-cultural-racial-gender team together with another white woman, Melinda Silverman. Much like my experiences in practice, Melinda and I collaborated with rather than led the team. Curricular decisions were discussed with other tutors and even with students. Was collaboration a gendered response to teaching borrowed from practice?

However, we were white, teaching a multi-racial, multi-cultural class, where whiteness was in the minority, except in the teaching staff. We had "invisible knapsacks" (McIntosh 2019) of white privilege, unearned power systematically conferred to us, of which we were largely unaware. Vice (2010) suggests that as white South Africans, silence and humility are required to counter that privilege. Humility was a quality of our teaching, acknowledging that we did not know everything and that together we could co-construct a better, more equitable curriculum; however, silence was not. We were highly vocal, demonstrating through heated discussions between ourselves and with students that the messy, tangled, complicated spaces of dialogue and actively listening to each other's worldviews was where learning occurred, not through silence. Much like Frizelle (2019, 20), we used "engaged listening" to centre other voices and reduce the historical privileging of both our voices and those of white students.

We worked to undo the misrecognition of white privilege as talent in design, as per Payne (2015). This misrecognition acts on two levels. Firstly, white students, although in the minority in the classroom at SoAP, are culturally more vocal, not even aware of their inherent expectations that people will listen and accept what they say as valid. As white educators, we needed to be engaged listeners to all students, especially those whose practices we least understood, who, for cultural reasons, were quieter (Student Focus Group 1: Black women students, 2024)[23]. Secondly, white students' ways of seeing and designing usually closely correlate with the still largely white and westernised architectural canon. To counter this misrecognition, we critically questioned the mastery shown in the accepted canon, extending architectural references to African and South African examples, specifically from architects of colour and women architects. We also worked with, rather than against, students' design instincts, especially those whose conceptual beginnings were deemed in earlier years to not be of sufficient quality to develop. As a white

[23] In a student focus group, black women students noted how culturally they were expected to be seen and not heard. This translated into a difficulty at university to express their voices confidently (Student Focus Group 1: Black women students, 2024)

design educator, I was acutely aware of the need to park my inherent architectural biases and judgements, to be open to unfamiliar forms of cultural architectural expression and to help students develop them.

This acute awareness of my ways of seeing, my design practice was developed through practice-based design research alongside students. Together, we unearthed a better understanding of our individual ways of seeing (Figure 4.2). This was liberating for me as an educator and hopefully also for my students. It allowed the different voices that were expressed in class discussions to be expressed as different design voices. It allowed us—me and my students—to gain confidence in our ways of seeing, thus validating difference. It allowed me as an educator to be aware enough of my preferences in architectural design to not consciously impose them on students' design practice. I could journey with them, helping them develop their ways of seeing—as a passenger, as a facilitator, not as a leader.

I do, however, acknowledge that in all this messy being in the context of South Africa, I am working from within the system, the racialised institutional system that still largely reproduces the colonial and Apartheid education I experienced at the same institution. Yet my position as a white educator also brings forth questions of the enduring symbolic capital of being white. As whiteness is no longer associated with mastery, as it was under Apartheid, is its value being reconstituted through gestures of redemption, as researchers have suggested(Fanon et al. 2002; Frizelle 2019; Manning 2004; DiAngelo 2011; Bazana and Mogotsi 2017; Davis and Steyn 2012). Am I inadvertently reasserting my value through teaching autoethnography with care?

Where did this care originate? Is it an ethical or moral stance rooted in values, consistency, authenticity and relational recognition or is it the performative result of structural pressure tied to metrics or symbolic capital? Noddings(1986) who first used the term ethics of care sees it as a relational encounter between the "carer" and the "cared-for"(2012, 772) and is "other-oriented , not self-oriented"(2012, 777). Ahmed(2012) notes that non-performative structural care is

not enacted, meaning it stays at the level of metrics and is therefore not felt. Hooks(1994) sees care as essential in critical pedagogy in order to emancipate following Freire(2017).

As a South African educator there is pressure following the #FeesMustFall decoloniality protests to transform ways of teaching. This pressure is acutely felt by white educators in their attempts to be relevant or to redefine their roles (DiAngelo 2011; Frizelle 2019; Zembylas 2025). This might be a reflection of finding new forms of symbolic value for whiteness as noted by Fanon (Simmons 2023; Fanon et al. 2002). In the South African context researchers have noted that educational policies invoke care but remain appearance policing and not authentic(Joorst 2021; Van der Westhuizen and Hannaway 2024). This echoes criticisms on neoliberal education systems which make teachers perform caring gestures for audits, metrics and accountability(Grummell et al. 2009; Ball 2003; Ahmed 2012).

Being embedded in the current decolonial discourse in higher education, it would be erroneous to declare that the imperative for care in teaching autoethnography is solely ethically and morally driven. However, the care demonstrated in the pedagogy is not a strategic or conscious response to those pressures, although I acknowledge that the pressures shape the very context within which I practice as an educator. Perhaps the question is not so much whether the care imperative is morally or structurally driven but rather whether it is felt and received by the cared-for, the students themsevles. If students do not feel cared for then the care is only performative and structural, and does not meet Noddings(2012, 772) definition of care as a relational act between the carer and cared-for. The pedagogy of care in this research is relational with students responding that they felt "cared for" (Students Focus Group 01, May 2024), not only in formal surveys and focus groups but also in the unseen places, in corridor chats and personal interactions which are not measured by the institution.

Ironically some of the very descriptors of ethically and morally driven care, those informal interactions, which are the real demonstrations that care exists in the pedagogy, cannot be measured or evidenced in academia. Another assessment of whether the care is structurally or morally driven is the continuity of the care relation beyond the institution, which once again is hard to provide evidence for. Nonetheless, the pedagogy of care is foundational to teaching autoethnography echoing Camangian's(2010, 180) statement that "students do not care how much you know until they know how much you care".

4.5 Institutional narratives

Students and I unpacked our ways of seeing, through a *(De)constructed archive* of design practice by redrawing it. Teasing out the responses to context, functionality, poetics and circulation in each project through small vignette sketches. Purposefully, the drawings were small to focus on design principles and so that we could arrange them into a poster to see 30 years of work at a glance.

We also explored other architects' projects in the same way (through small vignette sketches) to explore our communities of design practice. Who were we drawn to? Which projects came to mind when we thought of precedents or architects whose work we admired?

Something struck me when putting these vignettes together (Figure 4.4). The architects I admired were alumni of the two institutions where I studied architecture, SoAP and the Faculty of Architecture of the University of Porto (FAUP). The architect I am was influenced by architects from these two institutions.

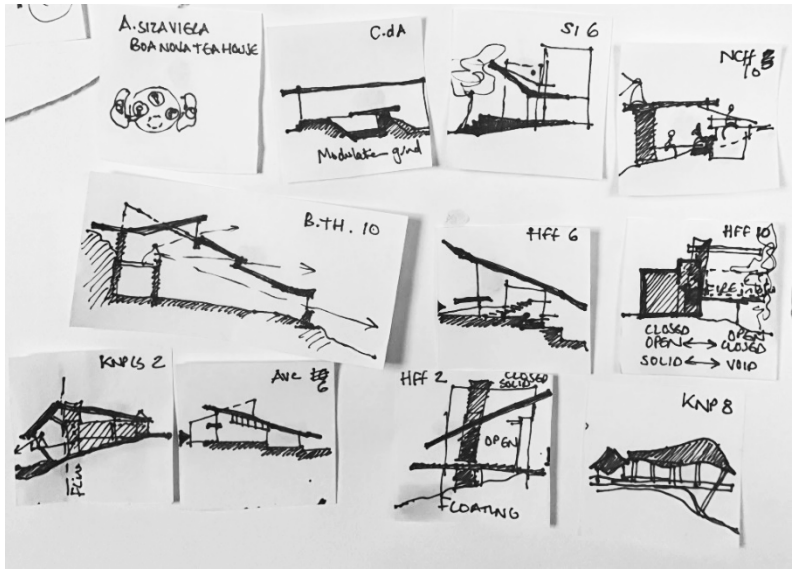


Figure 4.4 The deconstructed archive of my practice: project sections alongside my community of practice archive: vignette sectional drawings of Boa Nova Tea House by Siza Vieira and Casa das Artes by Souto Moura, demonstrating their influence on my practice, a topographical architectural language that joins architecture and landscape (Author's drawings)

I arrived at Wits as a creative fifteen-year period under Pancho Guedes had ended in the early 1990s, but his legacy lingered through the lecturers who were first taught by him and then became his colleagues. Guedes, first a student at Wits under the modernists at the then Faculty of Architecture, was persuaded that architecture was, above all, an art, integrating other plastic and design arts such as painting, sculpture, interior, landscaping and urban design.

This creativity included the fusion of local artistic, craft and material vernacular culture with modern architecture that was turning towards the post-modern in terms of a plurality of architectural languages and influences. As one of his students noted, "Pancho taught us to invent buildings from dreams; to go beyond working consciousness into the realm of magicians and sorcerers. He inspired us with buildings he'd dreamt into reality" (Guedes et al. 2003, 2). Pancho claimed, "for architects the rights and liberties that painters and poets have held for so long" (Raman in Guedes et al. 2003, 20).

Moving to Portugal, studying architecture at FAUP, meant exploring my Portuguese heritage and recovering, along with my mother, from the recent death of my father. I was already familiar with the architect Alvaro Siza Vieira.

Upon my arrival at FAUP, I was introduced to the work of Eduardo Souto Moura. These two architects dominated the ethos and thinking at FAUP in the early nineties, alongside a deep respect for the urban quality of the city of Porto. Far from the wild creativity that held sway at Wits, every design decision made at FAUP needed to be critically defended in terms of its contribution to the city and the type of modernism espoused by Siza Vieira and Souto Moura.

I matured on a personal and design level, realising that what was considered mastery in architecture in one region was dismissed in another, echoing Van Schaik,

> "mastery is not an international currency. What passes for mastery in one city can look suspiciously empty to the practitioners from another city, even when they are at first impressed"(Van Schaik 2004, 15) .

From Portugal, I could see the Wits ethos clearly and critically. Thirty years later, when researching my design practice, I realised that the architect I am was formed at the intersection of these two institutions. Through the *(De)constructed Archive* of my work and the *Community of Practice Archive*, I also realised that even though the ethos at these two schools was so different, I had seen a common thread.

The projects in my *Community of Practice Archive*, Siza's Boa Nova Teahouse, Souto Moura's Casa Das Artes and Guedes' Habitable Woman, all explored the ways in which architecture embeds itself into and responds to the landscape. When telling students the story of my architectural origins through a narrative of the two archives, I realised that sections of several of my projects were eerily similar to the sections of Siza Vieira, Souto Moura and Guedes. Landscape, it seems, was the common factor to which I was personally drawn in the architecture of both Wits and FAUP alumni.

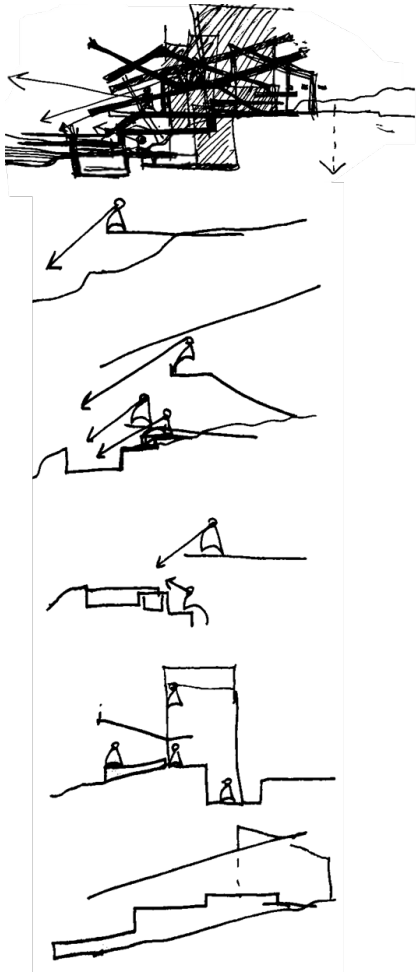


Figure 4.5 Sectional drawings of my projects, unpacking the different ways architecture related to land and landscape (Author's drawings)

There was, after all, a common thread, a 'topographical architecture', whose origins were unearthed through the *(De)constructed archive* of my practice and the *Community of Practice Archive*. In the sectional drawings of my *(De)constructed archive* (Figure 4.5), my buildings slowly descend into the ground.

The phenomenological relationship between people and the Earth is explored. Slowly, the buildings descend as if growing roots into the soil, becoming solid, of the soil. Does this echo my rootedness, my becoming more a part of this land? Or do the buildings have agency; are they wanting to become like trees, deeply rooted in the soil?

The buildings anchor to the site topography, to trees, carefully surrounding them, enclosing them, embracing them. With the absence of trees on site, trees are imagined, brought into being and planted, built at the same time as the building. The building remains static while its relationship to the new trees develops, first as an anchor, protecting the sapling trees from the winds, then gradually, the trees grow larger and become the dominant agent in the relationship, overshadowing, giving shade and dappled light to the building.

The architecture forms a new experience, decentres the human, repairs the relationship to land, and perhaps even offers a new relationship of human to environment. How has becoming more conscious and self-aware of this fascination and its origins changed my design practice? I have been much more intentional in exploring topography in terms of embedding architecture within the landscape, as well as the topography of the architecture itself. The conscious self-awareness of landscape and topography in architecture made me explore the phenomenological experiences of landscape—people moving through my designs are made aware of being in the landscape: perched above, ensconced below or alongside.

However, in South Africa, the connection to land and landscape is highly charged. Politically, many call for the return of land that was taken during Apartheid or even during colonial times. For many cultures, the land is a living, breathing being that cannot be carved up, subdivided and owned. Swathes of wild, sparsely populated landscapes where ancient ecosystems thrive are protected and venerated by many. All South Africans have a deep connection to the land, whether this is politically, culturally or ecologically motivated. Therefore, my fascination with landscape and topographical architecture was just scratching the surface. Was there a way to look at the relationship between architecture and landscape as something more than a physical embodied phenomenological fascination? Could this relationship be imbued with meaning, with the same contradiction and complexity, with which land is regarded within South Africa?

A few years after unearthing this fascination, I explored it together with Melinda Silverman in a design competition for a Commonwealth War Graves Memorial[24].

[24] Commonwealth War Graves Memorial design competition entered with Melinda Silverman – assisted by Priyan Moodley and Talya Michaels

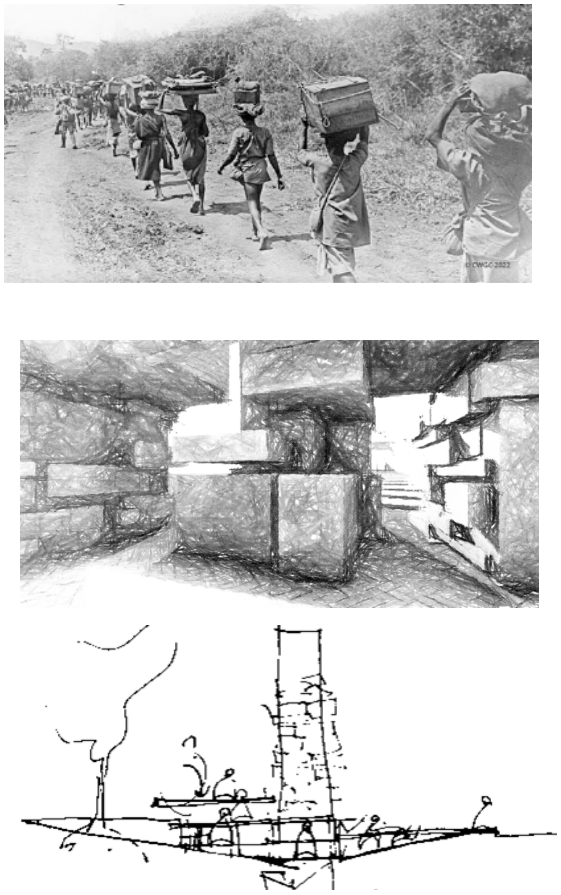


Figure 4.6 Commonwealth War Memorial Competition: proposed grotto (middle) with blocks symbolising the weight of war that was carried by soldiers (top) (drawing from render by Talya Michaels) and sectional conceptual sketch (right) (Author's drawing)

The company gardens in Cape Town were designed in a classical manner, with several war monuments on the various axes. Monuments of great war generals on horseback were raised high above the gardens on plinths. The proposed memorial design deliberately subverted and obscured the axial views of the existing monuments by descending the visitor into the land. The landscape of the company gardens was cut to contest the existing formal classical arrangement of the gardens and their hierarchical relationship to the surrounding buildings.

At the lowest point of this cut, the visitor would find themselves in a grotto surrounded by large concrete blocks inscribed with the names of soldiers whose value in that war was to be carriers, literally carrying the weight of the war, the blocks onto which their names were now inscribed (Figure 4.6). The blocks symbolised the munition, food, artillery and even a boat carried across a landmass from one sea to another. Visitors would experience the oppressiveness of these large blocks encroaching from all sides, including pressing down from above. The relationship of the proposed war memorial to the land, the company gardens, would be subverted by not laying claim to a higher level on grand, outsize plinths as the other monuments did.

The proposed war memorial would remind visitors of the oppression felt by these soldiers, deemed South African enough to enlist but not white enough to take up arms. The very first drawing for this competition was a sectional sketch of a ramp carved into the formal gardens descending into the land (Figure 4.6). That section spoke of belonging to the land but being oppressed by it, of carrying the land and eventually being buried, entombed within it.

The embodied relationship to land was consciously and critically explored through a critique of who belongs and who carries the weight of war, physically, emotionally and psychologically. Thus, the topographical, architectural tropes that had previously been neutrally explored in my practice, as if land and landscape had the same meaning to everyone, were now critically engaged with.

Many of my initial forages into the spatial exploration of topography through phenomenology assumed a universal body, a universal relation to the landscape. The memorial project was a break with that universality, engaging intentionally, deliberately and consciously with different political, cultural and ecological relationships with land and landscapes.

> "It can be a way to unveil the particularities of different embodiments and to bring these embodiments to bear on the theoretical discourse of what bodies, institutions, and architectures can do. Architecture doesn't need a phenomenology; it needs phenomenologies." (Norwood 2018, 21–22)

Through my own autoethnographic practice-based design research I realised that the institutions where architects study prove influential for their design practices. I had not started my Community of Practice Archive with a preconceived notion that institutional narratives would be influential, but that was one of the outcomes of the

research. Therefore, when briefing students on their own Community of Practice Archives, it became clear that they should include architects who were alumni of the institutions where they had studied.

The influential SoAP thread that I had picked up from Guedes through Peter Rich, who was taught by him and who taught me, was picked up by students in their *Community of Practice Archives*. When unpacking their own institutional narratives many students extended the thread from Guedes, to Peter Rich to Sechaba Maape who taught them in first year, and whose practice, drawings and recent lecture reflect on this thread (Maape 2024). They then reflectively extended, as I had done, this thread into their own practices. However, the readings of this thread and its influence on design practice varied. For me it focussed on topographical architecture, whilst for some students it was a thread of African space-making routed in local and indigenous ways of being, knowing and seeing. Other students saw the thread of Modernism as it runs through SoAP as influential, from the early South African modernists, Martienssen et al, to Guedes' Tropical Modernism to today. Yet other students traced a strong feminist thread at SoAP from Denise Scott Brown, to Lindsay Bremner, to Kate Otten to Tanzeem Razak and Althea Peacock of LemonPebble who have designed the new SoAP buildng. These many threads proved that institutional influence on design practice is not singular, but that it is important to unpack its myriad forms. Thus my research on my practice as an architect, informed the pedagogy, and by extension students' understandings of their own design practices.

4.6 Memories

My fascination with topographical architecture and its complex relationship with land and landscape had been unearthed through drawing and (de)constructing my archive of practice and my C*ommunity of Practice Archive*. However, at one point in the research, I felt compelled to revisit some of my built projects and photograph them.



Figure 4.7 Photographs of past built projects revealed a fascination with colour, texture and pattern (Author's photographs)

Something that, unfortunately, my students could not do as their practice archives were of their unbuilt design projects. By photographing my built projects, I also became an "ordinary user" (Petrescu 2007,6), inhabiting my designs and experiencing their spaces in a new way. The photographs were revealing, not only of the varied relationships to land and landscape but of something else. Colour, texture and pattern were in abundance. It was clear that drawing and photography became tools with their own agency to reveal different kinds of "situated knowledges" (Haraway 1988) about my design practice. By including some readings of practice and excluding others, these tools effectively "co-produce the thinker" (Stengers 2013, 196).

Where did the riotous colour and pattern joyously explored in my projects come from? Certainly not from the men architectural precedents of FAUP and SoAP, almost always white and clinical, although Souto Moura and Guedes broke that trend in some ways. It reminded me of playing with swatches of discarded fabric from my seamstress mother and, later, colourful drawings and paintings. This memory was instructive.

Unknowingly, I was dirtying those pristine white men architectural references with women's work, with playful colour, pattern and texture (Figure 4.7). Colour was used in two ways, echoing artist Oskar Putz's attitudes to colour and architecture. The first was 'fixation', where colour and texture are bound with form, used to heighten form and spatial intent. In the second way, colour is autonomously applied to existing flat facades to add interest and variety and break up expanses of wall, creating a dialogue between form and colour (Schultz et al. 2019, 74).

Unearthing the personal roots of my fascination with colour in design practice changed the practice-based research I conducted with my students. I asked them about their spatial memories and if there were personal roots to their ways of seeing, drawing from their ontological ways of being. Whereas for me, the personal roots arose from asking myself where colour had come from, for them, the exercise for students was inverted. They first drew a spatial memory and then reflected on whether there were connections between that memory and their *(De)-constructed Archive* of design practice. Thus, just as I had added the institutional narrative to students' project brief after realising that this was foundational to my way of practicing, the *Personal Spatial Narrative* was also added to students' project brief. My research into my architectural practice flowed into my teaching practice, not directly from architect to educator, but mediated by my autoethnographic research therefore architect-researcher-educator.

4.7 Conclusions

What impact has this newfound tacit knowledge unearthed through autoethnographic practice-based design research had on my practice, both my design and teaching practice? Upon reflection, it is clear that a conscious self-awareness of the design tropes or fascinations to which designers returns again and again is required to develop those tropes critically and deliberately. My fascination with topographical architecture's relation to landscape and

my exploration of colour, texture and pattern would have remained unexamined tropes, destined to be replicated without being critically examined. Becoming consciously aware of them allowed me to examine, question, develop or subvert them as an architect. As an educator this conscious awareness of my own design biases allowed me to suspend them in order to support students in developing their own particular ways of designing, of being.

In my teaching practice, I asked myself what impact I hoped my pedagogy would have on my students. Initially, the focus was on building confidence, arising from a personal place—my lack of self-confidence in my design practice. When unpacking this, I began to realise that it was not just confidence that I was building but a more self-aware, conscious, deliberate, critical and careful design practice, both in myself and in my students. In following students' journeys over five years, it is clear that the pedagogy impacts each student in different ways, with confidence, conscious self-awareness and care most mentioned by students (Student Focus Groups, 2024). Initially, I thought that to teach something I had to demonstrate it or put it into action in my design and teaching practice, this has been confirmed. To instil care in students' practice, I had to demonstrate care in the pedagogy. To teach self-awareness, I had to reveal my own path to the conscious self-awareness of my design practice. To teach critical practice, I had to critically engage with my position as a white woman architect-educator-researcher in South Africa. That is how being a teacher has impacted my design practice. In order to teach conscious, critical, careful practice, I have had to learn to develop it incrementally. The autoethnography became an auto-pedagogy.

What could researching myself (auto) as architect-educator-researcher or architect-researcher-educator say about the culture of architectural practice and education in South Africa (ethnos), and how is this revealed through writing, drawing and photography (graphy)? Through the practice-based design research tools of drawing, photography and writing, I have unearthed the roots of my design practice as an architect. This newfound tacit knowledge has been

generative for my teaching practice, exploring with students the roots of their diverse ways of seeing in the same way that I explored my design roots. Becoming aware of my fascinations as an architect has allowed me to quieten my design voice in the studio, working against my natural design biases to support students' individual and diverse design journeys, their own becoming. A colleague in a focus group described it as an ability to find the student's creative voice and work with them in transforming it, working from the student's standpoint and encouraging self-value and its expansion and development:

> "You were good at identifying what their core idea was and then working with it and helping them to pull it through. So even if it had a very weak starting point, you could somehow find the kernel and then through constant iterations make that alive in some way." (Teaching Colleagues: Focus Group 2, 2024)

This, perhaps, is a version of Vice's (2012, 340) exhortation to white academics for "humility and silence", deliberately quietening my design voice, which is the product of a late Apartheid architectural education at Wits and European influence from FAUP. I acknowledge that my design voice is still very 'white' in the sense that its cultural precedents and roots are within 'white' culture, even though it has been muddied by my working class, immigrant background. Therefore, this quietening of myself in the design studio allows my students, from various linguistic and ethnic South African and diasporan African backgrounds, to centre their own design voices, exploring and developing them. It is the antithesis of the Masterclass studio, where students learn to design like the master. I do not teach students how to practice like me, but rather guide them on their own becoming journeys, as I myself journey alongside them.

> "I do not know what it is to grow up in an impoverished rural area, or in a township, but I do know what it feels like to be an outsider. I use that generatively, I lean into it. It enables me to actively listen to students. Both what they say or complain about, but also the silences. Many students are not willing to open up and

ask for help, and therefore you need to be attentive to students withdrawing from learning. In many ways it is my lack of self-confidence, of not belonging, which is my strength as an educator, not my weakness." (Reflective Journal entry; May 2024)

I started this research from a position of wanting to build confidence, my own and that of my students. I have come full circle back to confidence, realising that a lack of confidence, this messy, feeling my way, explorative place is actually a generative place to be, both as an architect and an educator. It is the place of curiosity as a researcher searching for uncertain answers. A place of collaboration as an architect, working slower, more deliberately and more carefully. A quiet place as an educator, listening to students' silences, allowing space for their voices to be heard.

4.8 References

Ahmed, S. (2012) On Being Included: Racism and Diversity in Institutional Life. Duke University Press.

Alexander, BK. (2016) "Teaching autoethnography and autoethnographic pedagogy." In Adams, TE Jones, SH and Ellis, C (eds.). Handbook of autoethnography. pp 538-556. London: Routledge.

Ball, S.J. (2003) "The Teacher's Soul and the Terrors of Performativity". Journal of Education Policy 18 (2): 215. https://doi.org/10.1080/0268093022000043065.

Bazana, S. and Mogotsi, OP. (2017) "Social identities and racial integration in historically white universities: A literature review of the experiences of black students." Transformation in Higher Education. Vol. 2, a25. https://doi.org/10.4102/the.v2i0.25

Blythe, R. and Stamm, M. (2017a) "Creative practice research glossary." In Verbeke, J (ed.). The ADAPT-r creativity book. pp 335-348. Brussels: KU Leuven.

Camangian, P. (2010) "Starting with self: Teaching autoethnography to foster critically caring literacies." Research in the Teaching of English. Vol. 45, no2, pp 179-204. https://doi.org/10.58680/rte201012745

Candy, L. (2006) "Practice based research: A guide." Creativity and Cognition Studios Report 1 (November). INTERNET. https://www.creativityandcognition.com/wp-content/uploads/2011/04/PBR-Guide-1.1-2006.pdf. Cited 12 February 2025.

Crenshaw, Kimberle. (1989) "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics". University of Chicago Legal Forum 1989 (1). https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8.

Davis, D. and Steyn, M. (2012) "Teaching social justice: Reframing some common pedagogical assumptions." Perspectives in Education. Vol. 30, no4. Pp29-38. https://doi.org/10.38140/pie.v30i4.1780

DiAngelo, R. (2011) "White Fragility." International Journal of Critical Pedagogy. Vol. 3, no3, 54-70.

Ellis, C. and Bochner, AP. (2000) "Autoethnography, personal narrative, reflexivity: Researcher as subject." In Denzin, NK and Lincoln, YS (eds.). Handbook of qualitative research. 2nd ed., pp 733-768. Thousand Oaks, California: Sage Publications.

Fanon, Frantz, Constance Farrington, and Frantz Fanon. (2002) The Wretched of the Earth. Grove Press.

Frampton, K. (2007) Modern architecture: A critical history. 4th ed. London: Thames & Hudson.

Fraser, M. (2013) "Introduction." In Fraser, M (ed.). Design research in architecture: An overview. Surrey: Ashgate Publishing Company.

Freire, P. (2017) Pedagogy of the oppressed. South Africa: Penguin Random House.

Frizelle, K. (2019) "Troubling whiteness: A critical autoethnographic exploration of being white in the context of calls for the decolonization of Higher Education." PINS-Psychology in Society. Vol. 58, no1, pp 4-26. https://doi.org/10.57157/pins2019Vol58iss1a6048

Grummell,B., Devine,D and Lynch,K. (2009) "The Care-Less Manager: Gender, Care and New Managerialism in Higher Education". Gender and Education (Abingdon) 21 (2): 191–208. https://doi.org/10.1080/09540250802392273.

Guedes, L., Guedes, P. and Raman, PG. (2003) Viva Pancho. Durban: Total CAD Academy.

Haraway, D. (1988) "Situated knowledges: The science question in feminism and the privilege of partial perspective." Feminist Studies. Vol. 14, no3, pp 575-599. https://doi.org/10.2307/3178066

Irwin, R. L. (2017) "A/r/Tography: A Metonymic Métissage". In Arts Education and Curriculum Studies. Routledge.

Irwin, R. L. and De Cosson,A. (2004) A/r/Tography: Rendering Self through Arts-Based Living Inquiry. Pacific Educational Press.

Irwin, R. L., Beer,R., Springga,S. , Grauer,K., Xiong.G and Bickel.B. (2006) "The Rhizomatic Relations of A/r/Tography". Studies in Art Education (Reston) 48 (1): 70–88. https://doi.org/10.1080/00393541.2006.11650500.

Jones, SLH., Adams, TE. and Ellis, C. (2016) "Introduction-Coming to know autoethnography as more than a method." In Jones, SLH Adams, TE and Ellis, C (eds.). Handbook of autoethnography. London: Routledge.

Joorst, J.P. (2021) "Why Should an Ethics of Care Matter in Education?" Transformation in Higher Education 6 (October). https://doi.org/10.4102/the.v6i0.127.

Maape, S. (2024) "Evoking the Spirit of Pancho Guedes and Peter Rich in an Era of Artificial Intelligence". March 19. https://www.gifa.org.za/event-details/evoking-the-spirit-of-pancho-guedes-and-peter-rich-in-an-era-of-artificial-intelligence.

Manning, J. (2004) "Racism in Three Dimensions: South African Architecture and the Ideology of White Superiority". Social Identities 10 (4): 527–36. https://doi.org/10.1080/1350463042000258944.

Mbiti, J.S. (1969) African religions & philosophy. London: Heinemann.

McIntosh, P. (2019) "White privilege: Unpacking the invisible knapsack (1989) 1." In McIntoch, P (ed.). On privilege, fraudulence, and teaching as learning. 1st ed., pp 29-34. New York: Routledge.

Noddings, N. (1986) Caring: A Feminine Approach To Ethics & Moral Education. Univeristy Of California Press.

Noddings, N. (2012) "The Caring Relation in Teaching". Oxford Review of Education 38 (6): 771–81. https://doi.org/10.1080/03054985.2012.745047.

Norwood, BE. (2018) Disorienting phenomenology. INTERNET. https://www.academia.edu/36816548/Disorienting_Phenomenology. Cited 17 February 2025.

Payne, JC. (2015) "Investigating the role of cultural capital and organisational habitus in architectural education: A case study approach." International Journal of Art and Design Education. Vol. 34, no1, pp 9-24, https://doi.org/10.1111/jade.12018

Petrescu, D. (2007) Altering practices: Feminist politics and poetics of space. London: Routledge.

Ramose, M.B. (2003) "The philosophy of Ubuntu and Ubuntu as a philosophy." In Coetzee, PH and Roux, PJ (eds.). The African philosophy reader. 2nd ed., pp 270-280. New York: Routledge.

Rendell, J. (2018) Only resist: a feminist approach to critical spatial practice. Architectural Review (blog). February 19, 2018. INTERNET. https://www.architectural-review.com/essays/only-resist-a-feminist-approach-to-critical-spatial-practice. Cited 17 February 2025.

Rendell, J. (2020) "From critical to ethical spatial practice." In Bean, J Dickinson, S and Ida, A (eds.). Critical practices in architecture. The unexamined. 1st ed. Newcastle upon Tyne: Cambridge Scholars Publishing.

Rendell, J. (2021) "A way with words: Feminists writing architectural design research." In Fraser, M (ed.). Design research in architecture. 1st ed., pp 117-136. London: Routledge.

Schalk, M., Kristiansson, T. and Mazé, R. (eds.) (2017) Feminist futures of spatial practice : Materialisms, activisms, dialogues, pedagogies, projections. Baunach, Germany: AADR/Spurbuchverlag.

Schouwenberg, L. and Kaethler, M. (eds.). (2021) The auto-ethnographic turn in design. Amsterdam: Valiz.

Schultz, K., Wiedemann-Tokarz, H. and Herrmann, EM. (2019) Thinking color in space: Positions, projects, potentials. Basel: Birkhäuser.

Simmons, M. (2023) "Frantz Fanon and Education". In Oxford Research Encyclopedia of Education, by Marlon Simmons. Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.1770.

South African Council for Architectural Profession. (2023) SACAP 2022-2023 Annual Report. INTERNET. https://www.sacapsa.com/html/SACAP_Annual_Report_2022_2023/index.html#page=28. Cited 13 February 2025.

Sparkes, AC. (2016) "Autoethnography as a mode of knowing and a way of being." In Jones, SLH Adams, TE and Ellis, C (eds.). Handbook of autoethnography. pp 512-517. London: Routledge

Springgay, S. (2008) Being with a/r/Tography. Sense Publishers.

Statistics South Africa. 2022. (2023) Statistical release. P0301.4. Department of Statistics, South Africa. INTERNET. https://census.statssa.gov.za/assets/documents/2022/P03014_Census_2022_Statistical_Release.pdf.Cited 18 June 2024.

Stengers, I. (2013) "Introductory notes on an ecology of practices." Cultural Studies Review. Vol. 11, no1, pp 183-196. https://doi.org/10.5130/csr.v11i1.3459

Van der Westhuizen,L. and Hannaway,D. (2024) "Authentic Caring in Online Professional Development for Early Childhood Teachers in South Africa". South African Journal of Childhood Education (Johannesburg) 14 (1): 1–13. https://doi.org/10.4102/sajce.v14i1.1574.

Van Schaik, L. (2004) Mastering architecture: Becoming a creative innovator in practice. Chichester: Wiley.

Van Schaik, L. (2020) Building a culture: Reflections on three decades of design practice research at RMIT. Melbourne, Australia: Uro Publications.

Vaughan, L. (ed.). (2017) Practice-based design research. London: Bloomsbury Publishing Plc.

Vice, S. (2010) "'How do I live in this strange place?'" Journal of Social Philosophy. Vol. 41, no3, pp 323-342. https://doi.org/10.1111/j.1467-9833.2010.01496.x

Zembylas, M. (2025). "Affective Methodologies for a Critical Study of Whiteness: Considerations for White Scholars". Contemporary Educational Psychology, January, 102346. https://doi.org/10.1016/j.cedpsych.2025.102346.

5 CHAPTER FIVE: ADAPTING PRACTICE-BASED DESIGN RESEARCH METHODS TO A SOUTH AFRICAN UNDERGRADUATE ARCHITECTURAL STUDIO TO BUILD A MORE CONSCIOUS AND CRITICAL ARCHITECTURAL DESIGN PRACTICE IN STUDENTS

Paper accepted for publication in ARENA Journal of Architectural Research, forthcoming end of 2025

Abstract

Practice-based design research methods developed in postgraduate creative arts and architecture programmes internationally supported a more conscious and critical design practice in mid to late-career architects. The question asked in this research is how these practice-based design research methods could be adapted to support a similarly more conscious and critical design practice in undergraduate architectural students in South Africa.

The adapted practice-based design research methods, the *(De)constructed Archive* of personal design practice and the *Communities of Practice Archive* originated from postgraduate Royal Melbourne Institute of Technology and Adapt-R programmes. The adaptations addressed the disparities between postgraduate and undergraduate students, as well as the post-colonial, post-Apartheid and post #FeesMustFall institutional context. On a personal level, students were encouraged to unearth their personal and local ways of seeing and knowing through collaborative social reflection, validating diverse ways of being in themselves and others and thus developing a more conscious, self-aware practice. On a contextual level, students interrogated institutional influence and questioned established notions of mastery within a slowly transforming and decolonising institution, critically situating themselves within this architectural culture.

The adaptations to the practice-based design research methods, therefore, addressed the particular philosophical, educational and practice context of South African architectural undergraduate students towards a more conscious, critical and self-aware practice.

Keywords: practice-based design research; conscious; critical; undergraduate; South Africa

5.1 Introduction

This research commenced from a personal place. As a mid-career architect researching my architectural practice using practice-based design research methods, I became more consciously and critically aware of my practice, as well as my position as a white woman architect on the margins of a field traditionally dominated by white male

mastery within South Africa. This process boosted my confidence, enabling me to define how my practice diverges from the norm and recognise its unique value.

As an undergraduate design educator at a South African university, I questioned whether these practice-based design research methods could similarly affect students. I commenced formal teaching after the #FeesMustFall and #RhodesMustFall student protests. The #FeesMustFall and #RhodesMustFall student protests of 2015 and 2016 made it clear that the post-Apartheid project of increased higher education access for historically excluded students was not sufficient and that the curriculum itself needed to be decolonised. The decolonisation of the curriculum was seen as a break from a "Eurocentric canon… that attributes truth only to the Western way of knowledge production. It is a canon that disregards other epistemic traditions" (Mbemeb 2016, 32). The practice-based design research methods could potentially be used to validate the diverse knowledge traditions that students bring with them into the institution. Placing students' personal and diverse ways of seeing and being at the centre of the curriculum supports a more conscious, critical and confident practice in students.

Validating diverse ways of seeing can be seen within the South African philosophy of Ubuntu, "umuntu ngumuntu ngabantu' or 'motho ke motho ka batho" (Ramose 2003, 272), which is found across Africa in many cultures and languages but is arguably a humanist concept not confined to Africa. Ubuntu has been translated variously into "I am because we are and, since we are, therefore I am" (Mbiti, 1969,108), "I am because you are, you are because I am" [Ngubane and Makua 2021, 3] or "that to be a human be-ing is to affirm one's humanity by recognizing the humanity of others and, on that basis, establish humane relations with them" (Ramose 2002, 272). Paraphrasing this translation for this research: for a student to gain confidence in their particular design practice is to recognise and validate

diverse ways of seeing and being within themselves and others, thereby gaining conscious and critical awareness of their position both within the institution and outside of it.

The institution is the University of the Witwatersrand (Wits), a historically white, post-colonial, post-Apartheid and post #FeesMustFall South African university. Wits was actively engaged in the transformative project after the end of Apartheid, addressing issues of access and academic success by students who were previously excluded from the historically white institution. Post #FeesMustFall, this transformative project became a decolonial epistemic project as well, addressing the lingering coloniality of the Eurocentric canon and curriculum. Any curriculum changes within this context become inherently political in nature, raising the question of whether they contribute to the university's transformative and decolonial mission.

The students are in their third and final year of a Bachelor of Architectural Studies undergraduate degree at the Wits School of Architecture and Planning (SoAP). A third-year design studio project entitled Manifesto, inherited from my predecessors, Ludwig Hansen, Paul Kotze and Brendan Hart had focused on helping students recognise in which direction their instinctual design decisions in earlier years had been taking them. This Manifesto project, as it was originally designed, had the genesis of some of the practice-based design research methods, albeit unknowingly (Interview 004, 2024). Recognising the potential to use adapted practice-based design research methods more intentionally, the Manifesto project was altered over five years using participatory action research. The action research was participatory because, as part of the research process, I was researching my design practice alongside students researching their design practices using the same practice-based design research methods. The learning from my practice-based design research impacted the adaptation of the methods for students and vice versa.

Due to this participatory action research process, the practice-based design research methods were adapted, and new methods were added in response to reflecting on student learning and outcomes from previous years. At the end of the five years, a series of focus group discussions and interviews with students and teaching staff unpacked the research's impact on students and the institution.

In adapting the practice-based design research methods to undergraduate students, the aims were like those for my research: a more conscious, critical and confident practice. However, the aims also diverged in addressing the decolonial and transformative mission of the institution, creating within an Ubuntu philosophical context Mbembe's (2016) "pluri-versity" as opposed to the one worldview of the uni-versity:

> "a process of knowledge production that is open to epistemic diversity…embraces it via a horizontal strategy of openness to dialogue among different epistemic traditions… To decolonize the university is to therefore to reform it with the aim of creating a less provincial and more open critical cosmopolitan pluriversalism – a task that involves the radical refounding of our ways of thinking and a transcendence of our disciplinary divisions." (Mbembe 2016, 37)

5.2 Adapting practice-based design research to a South African undergraduate programme

Practice-based design research uses design projects as the central components of research and is categorised into different modes. Frayling (2012) differentiated the research by its relation to design, namely 'research *into*/ *through*/ *by* design'. Archer (2012) framed design research through practitioner action: 'research *about* practice/ *through* the medium of practitioner activity/ *for* practitioner activity'. While Cross' (1999) taxonomy of design research was differentiated by its focus: 'designerly ways of knowing' focusing on people, design praxeology focusing on practices

or processes of design, and design phenomenology focusing on the form and configuration of artefacts or products of design.

These different categories of design research overlap each other in their focus, outcomes and processes. Lucas (2016, 43) notes that this "loop of reflective practice, acting and thinking as a continuum, is one way of marking out the field of practice-based research". These loops are also noted by Malins and Gray (1995) as a process where reflection *on* past practice moves to reflection *in* the present through insight and questioning and, lastly, reflection *for* future needs and hopes.

This cyclical model of design research builds on Schön's (1987) double loop of 'reflection-in-action', connecting to prior experiences, critically responding to action in the process and 'reflecting-on-action' by analysing your process, exploring reasons and consequences. Van Schaik (2020), Blythe and Van Schaik (2013) and Vaughan (2017) also speak of cycles of research where the driver to commence practice-based architectural design research is to transform current and future practice by "being able to understand and articulate the value or challenges" in past practice (Vaughan 2017,16).

These looping processes of practice-based design research have been employed in postgraduate programmes in architecture at several institutions since the late 20th century, arguably commencing at the Royal Melbourne Institute of Technology(RMIT) in Australia with their Masters by Design and later PhD by Design programmes. In Europe, largely in response to the Bologna Declaration, architecture schools, incentivised to start doctoral programmes, grappled with what doctoral architectural research could or should entail, exploring various approaches to practice-based or design-driven research. Fraser (2013) outlined these varied approaches by groupings in the United Kingdom, Australia

and Europe. He compared the reflective practitioner-oriented model of the RMIT with the historical approach of Jonathan Hill at The Bartlett School of Architecture at University College London (Bartlett).

Graduates from these postgraduate programmes have become more conscious and self-aware, and their practices have thus been transformed (Van Schaik 2004; Nilsson and Dunin-Woyseth 2014). Ling (quoted in Van Schaik 2004, 215), an RMIT graduate, confirmed this, saying the practice-based design research entailed "becoming conscious of our processes… what had been instinctive and intuitive became conscious and accessible". Another RMIT graduate said that before he started the PhD he was stuck in practice and that his practice changed after completion. He gained " greater self-awareness of critical preoccupations in practice" (Interview, 2024). A graduate from another practice-based design research programme stated that "it changed the way I think and conceptualise my work, foregrounding how and why I practice rather than what I produce" (Interview, 2023).

Van Schaik (2006, 14), who pioneered the practice-based design research programme at RMIT, speaks about the process "as culminating in that moment when you invent your own way, when you are no longer pursuing external patterns of behaviour, your pattern resides within but paradoxically you are able to view your practice from outside".

The looping reflective cycles of practice-based design research in these postgraduate programmes focus inwardly and introspectively on the doctoral student. Notwithstanding the value of this introspective reflection, the resultant research can be myopic if it does not address the researcher's position within a particular context and the conditions within which the knowledge was produced. Haraway (1988,575) termed this critical reflexivity or "situated knowledges", reinforcing Barad's (2007,168) "diffraction", which exposes patterns of difference, asking questions about the conditions that produced the original works (Barad 2007; 2014). Therefore, a diffractive dialogue breaks apart the cyclical looping processes of reflection to reveal the material conditions and entanglements that shaped

design practices and contributed to their formation. Diffractive research methods would reveal the cultural and socio-political Southern African context of students' practice, in contrast to the reflective methods, which focus inwardly on the student.

By focusing outwardly on the context of practice, diffractive design research asks what changes and differences design research can make to its context and the world. Rendell (2012,92) calls this "critical spatial practice", defined by De Certeau(1984) as practices whose tactics interrogate not only the context but the limits of their disciplines. As Borden (2008, 221) notes in writing about the value of arts research for UK institutions:

> "Research is, after all, nothing if we do not in some way change ourselves as well as our buildings. The best architectural research… is, therefore, that which asks us to consider not only what we understand and undertake by way of architecture and buildings, but also who we think we are and how we want to reside, play and work together."

Therefore, the more reflective practice-based design research methods used in the above-mentioned postgraduate programmes were adapted to address the differences between postgraduate and undergraduate students, while more diffractive techniques were included to focus on the students' South African institutional context. The adapted methods had both a personal and social relational focus, embracing the South African philosophy of Ubuntu, "I am because we are" (Mbiti 1969).

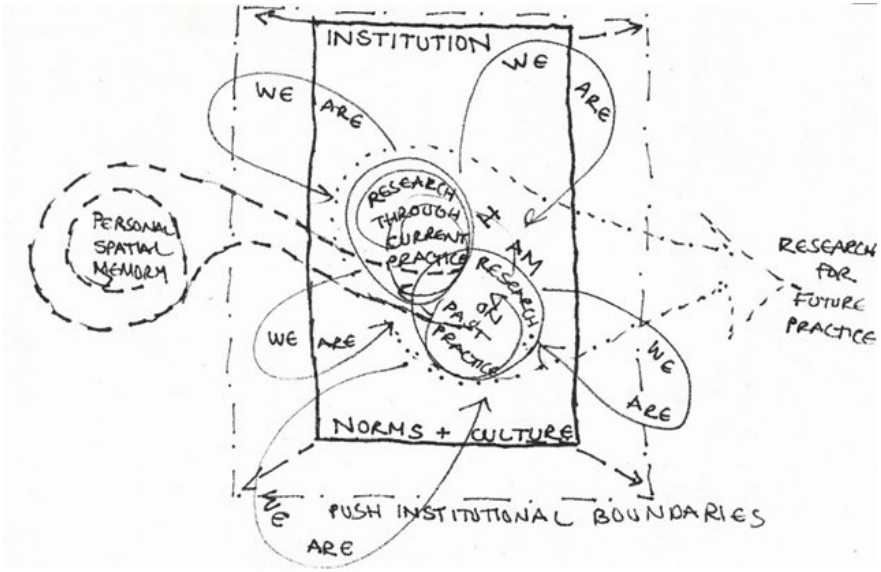


Figure 5.1 Practice-based design research for students in the context of Ubuntu entails unearthing who "I am" personal research on past practice and personal spatial memories, as well as reflecting on the relational "We are" within and outside of the institutional norms and culture, thereby pushing these institutional and epistemological boundaries (Author's drawing)

Practice-based design research in the context of Ubuntu entails students reflectively unearthing personal research on past practice and personal spatial memories, essentially who "I am", as well as reflecting on the diffractive relational "we are" within and outside of the institutional norms and culture. The institutional and epistemological boundaries are thus expanded by bringing other cultures, knowledge systems and ways of being into the institution (Figure 5.1).

On a personal level, students were encouraged to unearth local personal ways of seeing and knowing through collaborative social reflection, validating diverse ways of being in themselves and in others, thereby developing a more conscious and self-aware design practice. On a contextual level, students diffractively interrogated institutional influence and questioned established notions of mastery, especially those emanating from an untransformed profession and a post-colonial, post-Apartheid and post #FeesMustFall institution. This critically positioned students within a professional and educational architectural culture.

While the added diffractive research focused on students' "situated knowledges" (Haraway 1988), the reflective practice-based design research methods were adapted to a new undergraduate context. What differences between the postgraduate and undergraduate programmes were addressed?

Firstly, these methods were used in postgraduate programmes to evidence practitioners' already established mastery. At both the RMIT and Adapt-R, "practitioners with a peer-recognised body of work built up over a period of years, usually at least seven, [were] invited to examine the nature of mastery that this work has established" (Van Schaik 2004; 2016, 20). Clearly, undergraduate students do not have a body of professional practice work of at least seven years, nor have they already established their mastery. Third-year architecture students typically only have two years of student design practice, being at the beginning of the process of developing architectural mastery.

Secondly, postgraduate practice-based design research is usually undertaken at the doctoral level over three to five years, with biannual Practice Research Symposium sessions (RMIT and Adapt-R) or biannual Community for Artistic and Architectural Research (CA^{2}RE) conferences. The disparity in research duration was addressed by completing the short two-week Manifesto project at the beginning of the year and returning to it at the end of the year through a reflective Manifesto Revisited reflective essay. The research focus groups were also held after graduation, forming another point where the research was reflected upon. This mimicked the various postgraduate sessions (biannual Practice Research Symposia (PRS) or CA^{2}RE conferences) throughout the practice-based design research, where students kept returning to reflect on their design practice.

Lastly, the postgraduate programmes focus on the individual architect's practice and situate it within a field of practice. However, the implementation at the undergraduate level seeks to situate the student in relation to the institution and professional practice context, as well as introduce students to multiple and diverse design worldviews.

This acts to validate students' personal and local ways of knowing, thereby developing agency within the post-colonial, post-Apartheid institution.

The adaptations to the practice-based design research methods, therefore, addressed the personal, philosophical and educational context of South African undergraduate students, aiming to support a more conscious, critical and self-aware design practice.

5.3 Social reflective dialogue

The practice-based design research methods adapted to undergraduate students included the *(De)constructed Archives* of personal design practice and the *Communities of Practice Archives* that originated from methods employed in the RMIT and Adapt-R doctoral programmes (Cross 1999; Archer 2012; Lucas 2016).

The concept of a (*De)constructed Archive* of design practice was referred to in Adapt-R as a "case study in practice-based design research… an individual practitioner's comprehensive research into his practice: each practitioner as such represents a case study" (Blythe and Stamm 2017b, 55). Blythe (2016, 67) further used the term "venturous practice case studies" to refer to the archive as a record of practice that seeks to venture new futures for the practice. The case study of the practitioner as developed in the RMIT programmes was divided into three orders of knowledge. The first order of knowledge grouped the practitioner's projects into similar preoccupations or fascinations. The second order of knowledge makes apparent "transformations and shifts in practice" (Blythe and Stamm 2017b, 55) by reflecting on these grouped projects. The third order of knowledge positions the practitioner "within a field of other, parallel, adjacent or contrasting case studies" (Blythe and Stamm 2017b, 55).

In postgraduate programmes, the *(De)constructed Archive* or "venturous practice case studies" (Blythe 2016, 67) covered the entire body of professional practice, in many cases decades of practice. Postgraduate researchers, therefore, tend to start with a broader view of practice, the journey of practice, and then select projects to study more carefully:

> "The research is a journey of unfolding this line, revealing its intrinsic capacity to become architecture. We will travel through spatial histories and mental maps, the many projects it has conceived, the praxis it has developed and knowledge fields of special interest. We travel by drawing what we see, describing, sensing, reflecting and letting it go. The line is at the same time our medium and our matter of interest, a double perspective driving our quest." (Stangeland 2016)

The *(De)constructed Archive* and the *Communities of Practice Archive* are embedded in an undergraduate student project at the beginning of the third-year Design and Theory course entitled the Manifesto. It is a short two-week project which serves as the introduction to the course, setting the grounding for the exploration of the unearthed fascinations and preoccupations in the subsequent design projects. It can be compared to the first PRS session or first order of knowledge, where postgraduate students reflect on their body of work (Malins and Gray 1995). In all subsequent design projects, students design with an emerging conscious self-awareness of their design practice. They keep returning to these unearthed fascinations asking themselves how they are manifesting in their design projects. There are typically three to four design projects in the year, allowing them ample opportunity to explore their fascinations in different briefs, programmes, and sites. At the end of the year, students revisit the Manifesto through the Manifesto Revisited reflective essay, showing evidence of the exploration of their Manifesto fascinations in their design projects.

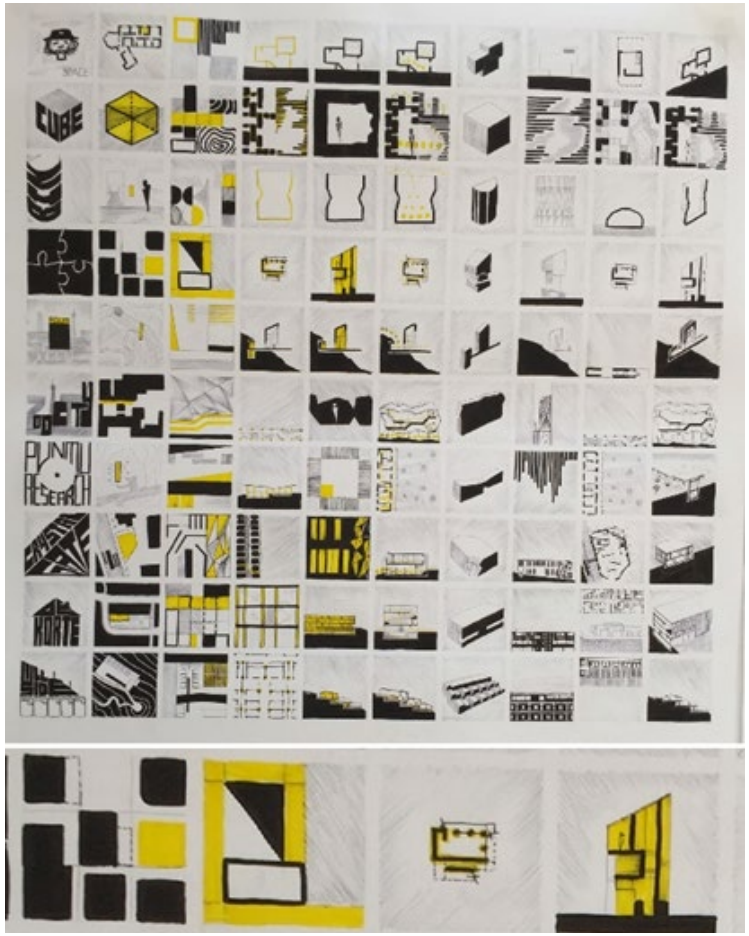


Figure 5.2 Manifesto Poster of 10x10 project drawings from first and second year. The bottom row shows some drawings enlarged. Through graphic techniques and colour the preoccupation with the relationship of light/ dark, solid and void is shown (Drawings by student7161-2019)

In this way, the continual returning to and exploring the ideas unearthed in the Manifesto through the practice-based design research methods and the final reflection at the end of the year echoes the process of the various PRS sessions or the CA^{2}RE conferences. However, this only takes place over the course of one year, whereas in postgraduate research it takes place over three to five years or more. For undergraduate students, their entire body of design practice work is composed of projects completed in their first and second year, approximately ten projects; therefore, all the projects are (de)constructed for the archive. To aid them in clearly analysing their projects, they are tasked with drawing quick analytical sketches or vignettes of their past project's responses to the following categories: site, geometry, structure, enclosure, circulation, massing, façade, and different spatial relationships: public/ private, served/ servant spaces, solid/ void, and major/ minor spaces. The drawings are purposefully small (5cm x 5cm) and drawn by hand. This encourages students to focus on the singular element that defines each category in a specific project. The outcome is ten drawings of ten projects, making a matrix of 100 drawings (Figures 5.2 and 5.3).

The students then reflected on this matrix of drawings, trying to extract preoccupations or fascinations that could be seen across the



Figure 5.3 Manifesto Poster of 10x10 project drawings from first and second year. The bottom row shows some drawings enlarged. Through graphic techniques and colour the preoccupation with the relationship of building to landscape and nature is shown (Drawings by student 7641-;2019)

projects. It was clear that some students were able to unearth these preoccupations. In Figure 5.3 the student's preoccupation with landscape and nature is clearly seen in his site sectional drawings and is expressed through his use of the colour green. The student in Figure 5.2 highlights through his use of yellow and contrast that the main fascination expressed in his projects was the spatial relationships between light and dark, solid and void.

The categorisation and clear set of tasks within the Manifesto project helped undergraduate students unearth tacit knowledge about their emerging design practices. However, some students still struggled to find themes or fascinations in their work. Therefore, a social reflective dialogue was introduced to the *(De)constructed Archive* of the Manifesto project. This social relational learning echoed one of the Ubuntu philosophy principles: "through participation and interaction with others we see ourselves" (Ngubane and Makua 2012, 5].

The student's own preoccupations and fascinations became clearer through interacting with other students. This happened on two levels; firstly, discussing their thoughts and findings forces students to more clearly articulate their fascinations, especially in response to questions.

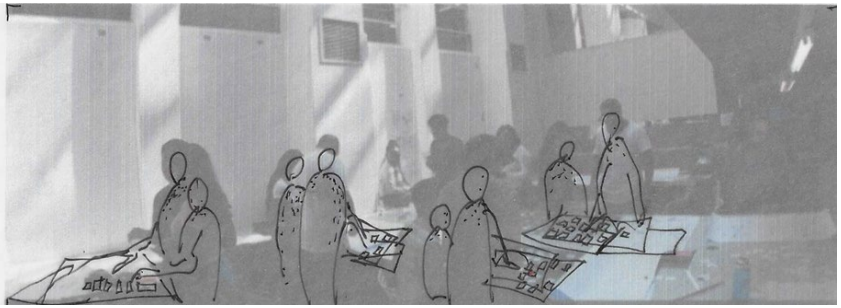


Figure 5.4 Pairs of students in the design studio having social reflective discussions with each other around their (De)constructed Archives. (Author's photograph – still frame from film)

Secondly, seeing how their friend's preoccupation differs from theirs allows them to better express that difference. (Figure 5.4)

The social reflective dialogue is similar to the social reflection of Blythe at the RMIT, where practitioner-researchers discuss their ongoing reflective research in the bi-annual PRS. This social reflection is a "learning that takes place in non-hierarchical and multiple iterations and exchanges between body, world and language and by social means" (Blythe and Van Schaik 2013, 61). However, instead of students presenting their findings to a bigger group, as happens at the RMIT PRS, they discuss their findings with one other student and a tutor. This more personal and intimate social reflection built confidence in students, especially those who struggle with reflecting and articulating themselves.

To show students the type of dialogue I would like them to engage with, I had a social reflective dialogue with a colleague and with students in front of the class, reflecting on my *(De)constructed Archive*. This set the scene for students, highlighting the type of engagement with each other that the task required. In some ways, this also echoed the process of the PRS sessions at the RMIT and Adapt-R, and later the CA^{2}RE conferences, where researchers learn

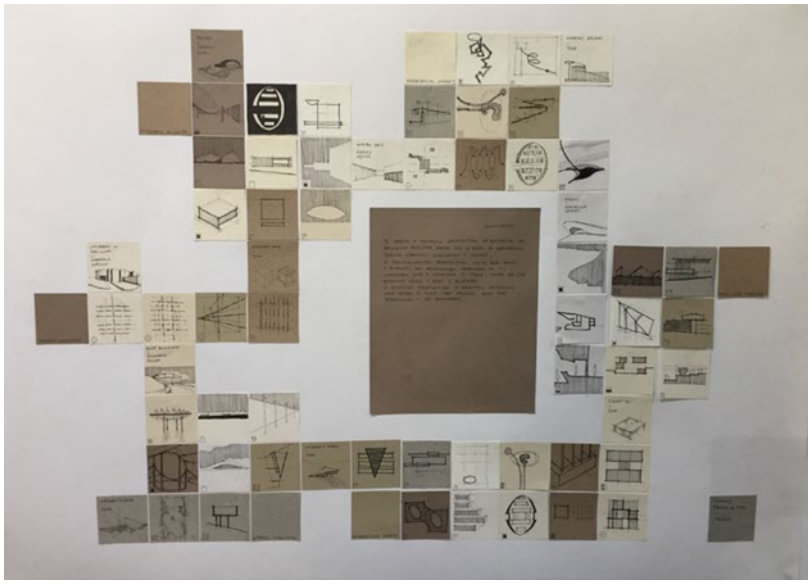


Figure 5.5 Manifesto Poster of 10x10 project drawings arranged in a narrative format (Drawings by student0098-2020)

from watching others engage with their design practice research. Similarly, in the classroom setting, seeing a colleague engage with my design research in that manner was instructive for the students. My *(De)constructed Archive* was presented as a personal narrative of institutional influence between the two institutions of my architectural education, SoAP, Wits and the Faculty of Architecture at the University of Porto (FAUP). Students then repeated the process discussing their findings, collaborating and helping each other find those fascinations (Figure 5.4).

Their posters moved from matrixes of fascinations, as seen in Figures 5.2 and 5.3, to telling personal stories and narratives of their design journeys from the first year (Figure 5.5).

The outcomes of the *(De)Constructed Archive* project improved with the added social reflective dialogue. More students found the research to be meaningful and illuminating.

The social reflective dialogue in a South African architectural undergraduate class promotes social cohesion amongst students from diverse backgrounds, building on the Ubuntu philosophy by promoting "togetherness, coexistence, respect and cooperation amongst students" (Ngubane and Makua 2021, 4).

5.4 Personal spatial narrative

The following year, some students were still struggling to unearth their ways of seeing despite the added social reflective dialogue. One student, in particular, was struggling with the *(De)constructed Archive*; let us call him Funani (a name meaning searching in Zulu). Funani could not see in his archive any particular way of seeing or fascination, even after discussions with colleagues and myself.

Drawing from my recent discoveries about the roots of one aspect of my design practice, I encouraged him to reflect on spatial memories from childhood. As part of my design research, I photographed my past built projects. I realised that the photographs revealed a different aspect of my practice that had not emerged in the drawings of the *(De)constructed Archive*. Upon reflection, it was clear that this aspect of my practice – colour, materiality, texture, and pattern was rooted in childhood memories of playing with fabric at the foot of my seamstress mother's sewing machine.

When Funani explored his early spatial memories of living in a Zulu hut, he drew parallels with some of his projects and was able to articulate a personal way of seeing and being in his design practice:

> "I spent more than ten years staying in a Zulu hut. It shifted my thinking… The Zulu hut, according to its design, [it only has] a short door which is multi-functional. The door, firstly, works the normal way for all doors as where you enter or exit the space, even though it is a serious challenge as you have [to] sag to fit in into the door height. The main challenge in staying in such a space was natural light and ventilation." (Funani, student1902-2021)

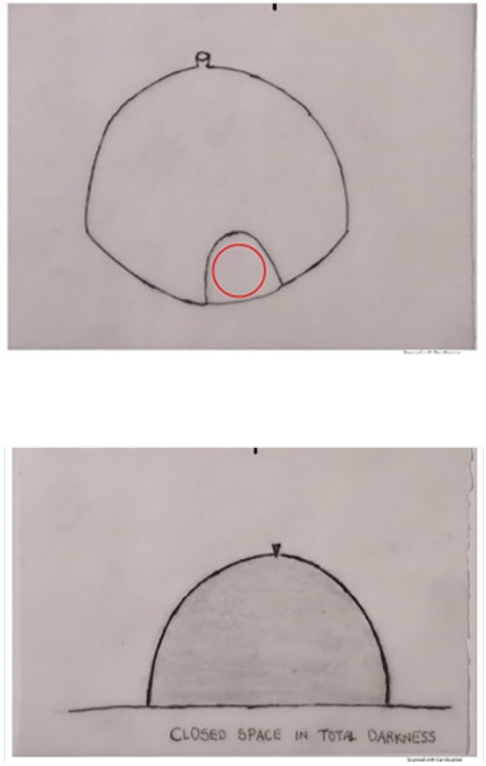


Figure 5.6 Personal Spatial Memory drawing (Funani, student1902-2021)

Following Funani's and my fruitful experiences with spatial memory, a *Personal Spatial Narrative* exercise was added to the *(De)constructed Archive* in the following year. The *(De)constructed Archive* was compared to an early spatial memory, allowing students to gain a better self-awareness of their particular ways of seeing. The *Personal Spatial Narrative* is a type of reflective method unearthing personal spatial memories, firstly explored as a sketch memory drawing and then fleshed out into a *Personal Spatial Narrative*.

This unearthing of a way of being and knowing in students from diverse backgrounds and cultures is an act of "Ubuntu… that promotes and facilitates ontological and epistemic diversity, different forms of being, thinking and seeing and reading the word and the world" (Hlatshwayo 2023, 109).

The *Personal Spatial Narrative* is not a method adapted from postgraduate programmes; it arose spontaneously from reflection on the research process, mine and the students. However, it shares some similarities with Van Schaik's (2008, 41, 47) notions of accessing spatial memories through "eidetic recall", allowing the architect to become aware and conscious of their "mental space", forming an integral part of the architect's spatial intelligence.

There are also parallels with Bachelard's (1994) primal images:

> "… each one of us, then, should speak of his roads, his crossroads, his roadside benches; each one should make a surveyors' map of his lost fields and meadows… Thus we cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalized on the mode of our inner space."(Bachelard 1994, 11–12)

A similar method is Cooper Marcus' (Sarvimäki 2017, 74–82) "memory-sketching", where students draw spatial or environmental memories revealing "environmental autobiographies". The object of the exercise is to validate each student's spatial autobiography, unearth a sense of identity and reveal students' spatial values and biases. Cooper Marcus (2014, 35) noted the transformational effect the project had on her students, with one student noting, "This is the first time in my whole student experience that anyone has said my life is of any consequence."

Thompson (2019, 2) notes that becoming an architect is a meaning-making process where the most effective strategy is narrative, where "personal stories find new ways of connecting past, present and future selves". He sees narrative as how students both evoke psychological resilience and develop it through meaning-making, a process where individuals locate their personal and social identities within their social context.

A note returning to Funani, the student whose pivotal moment was so instrumental in adding a *Personal Spatial Narrative* to the *(De)constructed Archive*. Funani spoke of trying to escape that memory, of how his projects embraced light rather than the darkness he experienced in the Zulu hut. Students viewed their spatial memories in a very binary way, seeking to either escape the negative memories or reinforce the positive ones in their design projects.



Figure 5.7 Personal Spatial Memory drawing and the resultant Manifesto following a reflection on the memory and the (De)constructed Archive, which starts with "a conversation between light shape and form" and ends with "I want to take this theme forward and see how far I can push it." (Photograph of student sketchbook, student2260-2023)

Funani's revelatory moment could be read in terms of the colonialised modern institution overriding the traditional spatial experience. He was quick to read his spatial experiences living in a traditional hut in a negative light and his design practice as breaking with that tradition. The work of understanding the traditional spatial principles that underpin some spatial memories and how these can be explored positively in contemporary design practice is ongoing and not completed in the third year. As many students noted years after the completion of the third year, the *(De)constructed Archive* with the *Personal Spatial Narrative* was an initial revelatory moment at the start of a reflective journey of learning about who they are as designers.

> "So I think it's good to have that kind of [a] little bit of inspiration as a first step in the direction so that you can then further that and work out whether those kind of ideas that you thought you enjoyed or do enjoy were the right ones or the wrong ones, and either way, the answer is still beneficial to you." (Student Focus Group 2, 2024)

As one student put it in his Manifesto, "I want to take this theme forward and see how far I can push it" (Figure 5.7).

In the South African institutional context, the *Personal Spatial Narrative* validates culturally diverse lived spatial experiences as significant in becoming an architect. This is transformational for students who had, until that moment, viewed their past spatial experiences as not relevant to their journey to be an architect. Each student's personal way of seeing and the origin of their spatial intelligence is revealed, and thus, a more conscious design practice is supported. This collective validation of students' diverse cultural capital and exposure to multiple worldviews also serves collectively to provide a counterpoint to the institutional culture steeped in colonial and Apartheid legacies where one Eurocentric worldview was valued. Students are introduced to each other's spatial and worldviews, oftentimes very different from their own, creating through acts of "epistemic disobedience" (Mignolo 2011) and Mbembe's (2016, 32) "pluriversity".

5.5 Institutional influence

The third order of knowledge in postgraduate practice-based design research at RMIT is situating the practice in a field of other practices that share similar preoccupations. RMIT and Adapt-R termed this "Communities of Practice… expand[ing] on the idea of a literature search to establish a field of knowledge… the researcher's immediate creative community" (Blythe 2016, 67). The *Communities of Practice* allows the researcher to "differentiate their own research from that of seemingly neighbouring peers: divergence and dissent become as important as possible confluence and resonance" and, therefore, can be seen as a "critical 'community of inquiry'" (Blythe and Stamm 2017b, 58).

The *Communities of Practice Archive* was adapted at the undergraduate level to specifically focus on institutional influence and questioning mastery in the local architectural profession. This differs from the method at the postgraduate level, which is open to the doctoral student's formulation of their *Communities of Practice*. The

Communities of Practice Archive was implemented in a similar specific and step-by-step manner as the *(De)constructed Archive*. Students were tasked with identifying 10x projects of architects they either aspire to or whose projects have proven instructive precedents to their own design projects. Once again, they had to redraw those projects in small vignette sketches exploring the same categories explored in the *(De)constructed Archives*: site, geometry, structure, enclosure, circulation, massing, façade, and different spatial relationships: public/ private, served/ servant spaces, solid/ void, and major/ minor spaces. However, they needed to include South African, African and Wits alumni architects in their *Communities of Practice Archive*, revealing a local way of practising. This prompted students to critically engage with the institution's particular architectural culture, situating themselves either within that culture or in counterpoint to it.

As students, it is hard to clearly and critically see the architectural and educational culture from within the institution. I only saw the culture of Wits with any clarity as a student after leaving and studying at FAUP, a European institution. The *Communities of Practice* exercise brought clarity to students' understanding of the culture into which they were being indoctrinated. It also allowed students to compare their personal ways of seeing to the institutional culture and position themselves accordingly.

Some students saw a close correlation between their architectural fascinations, the architectural culture of the institution, and their early spatial memories. One student, who we shall name Nomvelo (meaning mother of nature in Xhosa), wrote in her initial Manifesto project:

> "I instinctively relook on the question of how the building will respond to its physical context… One Wits alumni that I feel does this exceptionally well is Peter Rich. The geometry, materiality, volume and the special quality of the Mapungubwe Interpretation Centre successfully [respond] to and [resemble] the physical context in which it's built.

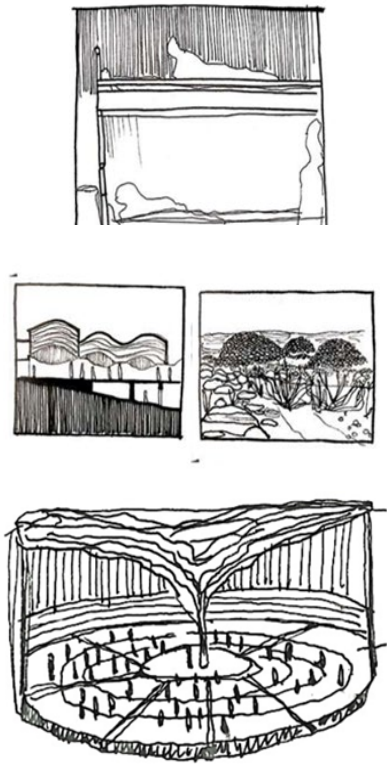


Figure 5.8 Nomvelo's drawings: the personal spatial memory of her bunk bed (left); her sketches of Mapungubwe Interpretation Centre by Wits alumni Peter Rich (middle two); the drawing on the right her exploration of the inside/ outside theme in a third-year project that explored a new South African parliament under a tree, echoing traditional leaders meeting under a tree to discuss important community matters (right) (student3992-2022)

> This marriage between the building and its context is something I would like to achieve within my designs in the future. This is definitely something I learnt during my time at the institution. This drive to design with the idea of combining the outside and inside stems from my earliest memory of space… the confinement of the top bunk of bed within a room I shared with other members of my family… within our small 2-bedroom townhouse. It was the only space I could truly claim as my own which forced me to spend most of my days outside. Being outside felt very liberating so I wanted to be able to create spaces that evoke the same feelings." (Figure 5.8) (Manifesto, student3992-2022)

At the end of the year, in the final Manifesto Revisited reflective essay, Nomvelo noted how her initial Manifesto "was based on escaping the confines of closed tight spaces by designing buildings that have strong relationships with the outside. The design approach still stands and it has evolved into something I explored more conceptually than literally. Over the course of the year… the ideas of community, tradition and culture arose in conjunction with the notion of inside out" (Manifesto Revisited reflective essay, student3992-2022). Her project sketches reflect those explorations (Figure 5.8).

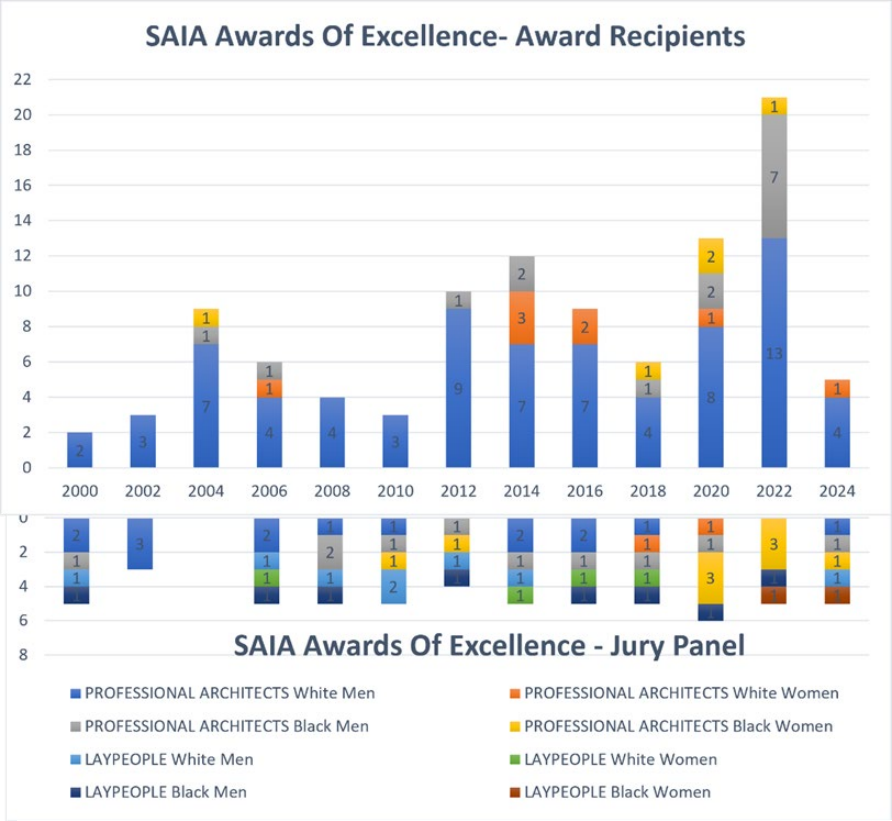


Figure 5.9 Graphical comparison of race and gender breakdown of the South African Institute of Architects (SAIA) Awards of Excellence recipients (top graph) and the jury panel (bottom graph) (Author's construct based on statistics from SAIA)

5.6 Questioning mastery

When discussing which South African architects had been influential to students' particular design practice in the *Communities of Practice Archive*, some common names of award-winning and published architects whose work had been included in their curriculum, mostly white male architects, came up. However, students couldn't easily think of local women architects or architects of colour.

Why, 30 years after the end of Apartheid, are the award-winning architects whose mastery has been peer-reviewed and acknowledged by publications and awards still majority white men? (Figure 5.9)When looking at the South African Institute of Architects Awards of Excellence over the last 20 years, it is clear the award recipients are overwhelmingly white men[25]. White male architects are also overrepresented in the jury panel composition over the same period, except in the most recent editions of the awards.

[25] This data was collated from diverse sources: from primary sources – SAIA presidents who convened jury panels during their years of office; & from secondary sources – including media reports on the awards ; the Corobrik SAIA Awards of Merit and for Excellence Awards Publications (not published in all years); SAIA Annual and Biennial Reports from 2000 (https://saia.org.za/page/publications/publications)

The reasons for this overrepresentation might be because white men also form 59% of professional architects registered with the South African Council for the Architectural Profession (South African Council for Architectural Profession 2023). However, the problem with this statistic becomes clear when compared to the latest South African Population Census data of 2022, showing white men as comprising only 3.5 % of the population (Statistics South Africa 2023).

Why are these statistics important for students and architectural educators in South Africa? The typical undergraduate class at Wits correlates with the population demographics in terms of gender, race and culture. Yet the architects included in the curriculum and educational canon do not. The task of asking students to include South African architects of colour and women architects in their *Communities of Practice Archive* is, therefore, a political act. It asks students to question the mastery depicted in the SAIA Awards, especially as it emanates from a tight circle of membership, panels and award recipients. It asks students to interrogate what kind of mastery they would like to include in their *Communities of Practice*.

The *Communities of Practice Archive* at the undergraduate level, therefore, is more specific in its intent. It compares the students' *Personal Spatial Narrative* with the institutional culture and with the broader professional practice culture within South Africa. It asks students to not only situate themselves in relation to these two cultures but also to question the mastery that has historically been displayed within these cultures. Therefore, in this context, the *Communities of Practice Archive* becomes a tool for transformation and decoloniality within the institution and the profession. One student wrote about pushing back against the architectural precedents he faced in the city where he grew up:

> "Growing up in a colonialized city such as Harare, I was attuned to resent the past [A]partheid regime. The building geometries and arrangements of spaces were no longer applicable to me, [they] represented an unpleasant time

in the country's history. History is indeed fundamental for learning as well as growth, however, those buildings were designed for [different] circumstances. There was no thought for a future where inclusivity would arise. Unconsciously, I grew feeling a resentment [towards] the city as it always felt daunting and grim. The result was a young man who wanted to shift the ideals of a linear short-term thought process in building design, having an influence on how buildings and cities can affect our mood and well-being. We, the architects, need to design more sustainable, user-friendly and interactive buildings for the future. Forms of flow and flexibility, learning from nature that has stood the test of time and using those principals to shape us and our outcomes." (Manifesto, student1226-2022)

5.7 Have students become more conscious, self-aware and critical?

Adapting the practice-based design research methods of the *(De)constructed Archive* and the *Community of Practice Archive* for undergraduate architecture students highlights the disparity between this type of research at the postgraduate and undergraduate levels. Firstly, whereas postgraduate doctoral students evidence their established mastery through this type of research, undergraduate students used it to gradually build that mastery by developing a more conscious, critical and confident practice. A social reflective dialogue and *Personal Spatial Narrative* were added to the *(De)constructed Archive* to overcome undergraduate students' limited body of practice work, in contrast with doctoral students' mastery, as evidenced in their extensive body of professional practice work.

Secondly, the Manifesto project was implemented at both the beginning and end of the academic year, mimicking the first two biannual PRS or CA^{2}RE sessions, essentially meaning that undergraduate students would only begin to engage with the first order of knowledge (Blythe and Stamm 2008, 55). However, the focus group discussions after graduation prompted further reflection.

Lastly, the *Community of Practice Archive* was adapted for undergraduate students to critically situate themselves within the architectural culture at SoAP and South Africa, whereas postgraduate programmes focus on situating the individual architect within a field of practice.

During focus group discussions with third-year teaching staff, one tutor expressed feeling that students were not mature enough in their design practice at the beginning of third-year as their work was a bit "thin", especially when compared to the architects' projects they were analysing (Teacher Colleagues: Focus Group 3, 2024). This comment hit at the crux of the matter: Can undergraduate students with a limited and "thin" body of work develop a more conscious, self-aware and critical design practice through these adapted practice-based design research methods?

The lack of practice experience, or the "thin" body of work of undergraduate students, as one tutor put it, became both an obstacle and an opportunity. It meant that it was difficult for students to unearth their particular fascinations or preoccupations with a *(De)constructed Archive* composed of only a few design projects undertaken until that point. A social reflective dialogue was added to the *(De)constructed Archive*. Discussing their archives with other students assisted each student in seeing their work more clearly and made the class realise the rich diversity of preoccupations across the class. Yet, despite the addition of the social reflective dialogue, the difficulties experienced by some students due to the "thin" body of work remained and led to one of the breakthroughs of this research, the introduction of a *Personal Spatial Narrative*. By looking back and reflecting on early spatial memories, many students, including Funani and Nomvelo, were able to articulate their spatial worldviews more clearly and how these were expressed in their design projects, contributing to a more conscious self-aware design practice. The articulation of these diverse spatial worldviews was instructive in a classroom setting, building in a very real way the "pluriversity" [Mbembe 2016] and contributing to the project of decolonising the curriculum.

Another tutor, by contrast, saw the value of the *Personal Spatial Narrative*:

> "What I do think is quite valuable, and this is maybe where they get quite passionate, is when they have to personalise… this particular space as a child or a first memory and then understand how that has potentially impacted their understanding of space. Understanding who they are now is a journey and the work that they're designing now is a process of where they grew up, how they grew up, and their understanding of space. I think that's quite powerful. I think some of them make that correlation. Not all of them, but I think the ones that do, I think it's quite powerful for them…. maybe it starts giving them permission to take their practice of architecture more seriously, that there are patterns that are starting to develop." (Teaching Colleagues: Focus Group 3, 2024)

Nevertheless, despite their "thin" body of work, students spoke of the Manifesto project as coming at the right time in their design practice development:

> "I think if that project was earlier, I would have struggled and not seen the benefit, and if it was later, I might have missed that exploration in the 'year out' [work experience year after third-year] and then going into Honours again." (Student Focus Group 2, 2024)

In South Africa, after a three-year undergraduate degree, students have to work in an architectural office for a year ('year out') before returning to university to complete their Honours and Professional Masters degrees in Architecture. The value of the Manifesto project at the end of the undergraduate degree is in prompting students to think about their design practice and potentially find an employment position in their 'year out' that fits with their interests.

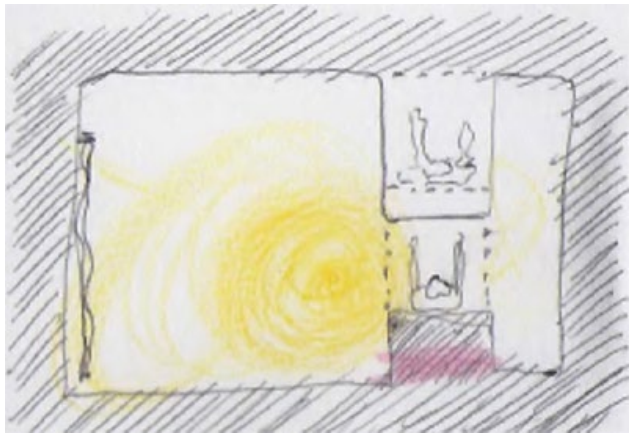


Figure 5.10Figure 5.10 Personal Spatial Memory drawing: My bunk bed. "I am sceptical to draw parallels, but one could see how my spatial memory is linked to my innate desire to separate public and non-public... one learns to respect what is private. Boundaries are set using very architectural means: level changes, thresholds, colour, position, time of day, size, materials" (student6755-2022)

This 'year out' in professional practice also allows students to explore those newly unearthed fascinations before returning to postgraduate study. Students spoke of the Manifesto project as providing a reference point or foundation for being able to push boundaries during their 'year out' (Student Focus Group 3, 2024).

Nonetheless, some students were sceptical about the impact of the Manifesto projects on their design practice, especially initially. Yet, when arriving back at the university one or two years later for postgraduate study, they gain an appreciation for that first step taken in the third-year towards a more conscious, self-aware design practice.

One student, who we shall call Thomas (after the sceptical Doubting Thomas), had some initial scepticism in the initial Manifesto project completed at the beginning of the year:

> "I am sceptical to draw parallels, but one could see how my spatial memory is linked to my innate desire to separate public and non-public... one learns to respect what is private. Boundaries are set using very architectural means: level changes, thresholds, colour, position, time of day, size, materials." (Manifesto and *Personal Spatial Narrative*, student6755-2022) (Figure 5.10)

In his final Manifesto Revisited reflective essay at the end of third-year, Thomas spoke of having grown "aware of [his] biases and inclinations" through the Manifesto project and that he later found himself "supervising [his] intentions while designing… Architecture should reflect the needs of all conscious beings around it and the effects of the world it is in, limiting self-expression of the architect within the building" (Final Manifesto Revisited reflective essay, student6755-2022). He displayed self-awareness by articulating the desire for a project to be expressive of all the people who inhabit or use it and not just an architect's self-expression.

Finally, two years later, after a 'year out' and returning for Honours, in focus group discussions, Thomas' scepticism had abated, noting that although the Manifesto project had felt at the time more like "manufacturing interests rather than unearthing them… [which] defeated the purpose… but now [two years later] the value of the Manifesto and [Manifesto Revisited reflective essay] pays dividends in self-awareness and design response… seeing patterns re-emerging in Honours" (Student Focus Group 2, 2024).

In assessing the impact of the Manifesto projects that included the adapted practice-based design research methods, it was clear from student focus groups that students' design practices had become more conscious and self-aware. Students commented that they understood themselves as designers, gained knowledge about what they liked and what type of architect they wanted to be and defined their voices through the Manifesto project and their early spatial memories (Student Focus Groups 2, 3 & 4, 2024). This newfound self-awareness also contributed to building confidence in their own voices, being able to defend their designs and not being afraid to stand up for themselves (Student Focus Group 1, 2 & 4, 2024).

The development of conscious self-awareness and critical practice was evident to different degrees in most students. However, the ways in which this self-awareness contributed to new levels of confidence in their design voices were

particularly evident in students who had previously struggled with self-confidence. Even though white male students spoke eloquently about newly gained self-awareness, they did not mention confidence in the focus groups. This absence was noted, especially since other students spoke at length about confidence building, as one black women student described:

> "I realised during my time studying that okay as a black woman,… confidence wasn't something that I grew up having. It was like something I needed to come into. I would notice my other classmates, the white counterparts… they seemed confident, and [it] almost seems very natural to them… So it's something that you have to kind of learn." (Student Focus Group 1, 2024)

Through the practice-based design research methods in the Manifesto projects, this student and many others learnt that their opinions matter and grew in confidence. It was clear that students became more conscious and self-aware in their design practices through the adapted practice-based design research; however, it is also evident that this was the first step in their journey towards a fully conscious, self-aware design practice. Undergraduate students' development in this regard cannot compare to that of postgraduate doctoral students. Nonetheless, in that process, they also gained confidence and critical agency in their diverse design voices and spatial histories.

This critical agency contributed to a critical view of the institution, particularly the architectural culture into which students were being indoctrinated both within the institution and outside of it in the architectural profession. The *Communities of Practice Archive* questioned existing mastery in the South African architectural profession by expanding the canon beyond the architects whose mastery has been established in narrowly defined and judged awards, predominantly by white male architects. Students were also tasked with situating themselves in relation to the SoAP architectural culture. For many students, this was revealing; they regarded the architectural culture within which

they were studying as normative, never having critically engaged with it. They also realised the extent to which the professional architectural culture was untransformed in gender and racial terms. Thus, the *Communities of Practice Archive*, which at the postgraduate level differentiates the architect's research from that of neighbouring peers, at the undergraduate level at Wits became a political tool to critique the architectural culture of the institution and the profession and situate the student either within these cultures or in counterpoint to them.

Adapting the practice-based design research methods to undergraduate students in the South African context had both a personal and institutional impact. On a personal level, each student took steps towards a more conscious, critical, self-aware and confident design practice, according to their journeys. However, they also actively built the Ubuntu "pluriversity" [Mbembe 2016] and participated in the transformative and decolonial mission of the post-colonial, post-Apartheid and post #FeesMustFall institution by contributing their diverse spatial histories and ways of knowing and being to the curriculum.

5.8 References

Archer, B. (2012) "The nature of research." In Grand, S and Jonas, W (eds.). Mapping design research. pp 109-121. Basel: Birkhäuser.

Bachelard, G. (1994) The poetics of space. Boston: Beacon Press.

Barad, K. (2007) Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Durham: Duke University Press.

Barad, K. (2014) "Diffracting diffraction: Cutting together-apart." Parallax. Vol. 20, no3, pp 168-87. https://doi.org/10.1080/13534645.2014.927623

Blythe, R. and Stamm M. (2017b) "Doctoral training for practitioners: ADAPTr (Architecture, Design and Art Practice Research) a European Commission Marie Curie Initial Training Network." In Vaughan, L (ed.). Practice-based design research. 1st ed., pp 53-64. London: Bloomsbury Publishing Plc.

Blythe, R. (2016) "ADAPT-R : An approach to practice-based PhD training in architecture design and art." In Hamman, C (ed.). ADAPT-r exhibition. pp 65-72.

Blythe, R. and van Schaik, L. (2013) "What if design practice matters? Part 2." In Fraser, M (ed.). Design research in architecture: An overview. pp 61-69. Surrey: Ashgate Publishing.

Borden, I. (2008) "The value of arts and humanities research to life in the UK." Architectural Research Quarterly. Vol. 12, no3-4, pp 216-222. https://doi.org/10.1017/S1359135508001140

Cross, N. (1999) "Design research: A disciplined conversation." Design Issues. Vol.15, no2, pp 5-10. https://doi.org/10.2307/1511837

Fraser, M. (2013) "Introduction." In Fraser, M (ed.). Design research in architecture: An overview. Surrey: Ashgate Publishing Company.

Frayling, C. (2012) "Research in art and design." In Grand, S and Jonas, W (eds.). Mapping design research. Positions and perspectives. pp 95-107. Basel: Birkhäuser.

Haraway, D. (1988) "Situated knowledges: The science question in feminism and the privilege of partial perspective." Feminist Studies. Vol. 14, no3, pp 575-599. https://doi.org/10.2307/3178066

Heron, K. and Shiqiao, L. (2019) By practice, by invitation: design practice research in architecture and design at RMIT, 1986-2011. 3rd ed. New York: Actar Publishers

Hlatshwayo, M. (2023) "Decolonising the South African university: First thoughts." South African Journal of Higher Education. Vol. 37, no3, pp 100-112. https://doi.org/10.20853/37-3-4854

Lucas, R. (2016) Research methods for architecture. UK: Hachette UK.

Malins, J. and Gray, C. (1995) Appropriate research methodologies for artists, designers, and craftspersons: Research as a learning process. Malins & Gray. INTERNET. http://carolegray.net/Papers%20PDFs/cc.pdf. Cited 22 June 2024.

Marcus, CC. (2014) "Environmental autobiography." Room One Thousand. Vol. 2, no2, pp 32-42.

Mbembe, JA. (2016) "Decolonizing the university: New directions." Arts and Humanities in Higher Education. Vol. 15, no1, pp 29-45. https://doi.org/10.1177/1474022215618513

Mbiti, JS. (1969) African religions & philosophy. London: Heinemann.

Mignolo, W. (2011) "Epistemic disobedience and the decolonial option: A manifesto." Transmodernity: Journal of Peripheral Cultural Production of the Luso-Hispanic World. Vol. 1, no2. https://doi.org/10.5070/T412011807

Ngubane, NI. and Makua, M. 2021. "Intersection of Ubuntu pedagogy and social justice: Transforming South African higher education." Transformation in Higher Education. Vol. 6, a113. https://doi.org/10.4102/the.v6i0.113

Nilsson, F. and Dunin-Woyseth, H. (2014) "Research as a driving force for change: On triadic practice in architecture." Reflections. Vol. 17, pp 15-27.

Ramose, MB. (2003) "The philosophy of Ubuntu and Ubuntu as a philosophy." In Coetzee, PH and Roux, PJ (eds.). The African philosophy reader. 2nd ed., pp 270-280. New York: Routledge.

Rendell, J. (2021) "A way with words: Feminists writing architectural design research." In Fraser, M (ed.). Design research in architecture. 1st ed., pp 117-136. London: Routledge.

Sarvimäki M. (2017) Case study strategies for architects and designers: Integrative data research methods. Routledge.

Schön, DA. (1987) Educating the reflective practitioner: Toward a new design for teaching and learning in the professions. San Francisco, CA: Jossey-Bass.

South African Council for Architectural Profession. (2023) SACAP 2022-2023 Annual Report. INTERNET. https://www.sacapsa.com/html/SACAP_Annual_Report_2022_2023/index.html#page=28. Cited 13 February 2025.

Stangeland, SH. (2016) Performing relational design - PRS Europe, RMIT University Practice Research. INTERNET. https://practice-research.com/presentations/prs-europe-april-2016/performing-relational-design. Cited 12 September 2024.

Statistics South Africa. 2022. (2023) Statistical release. P0301.4. Department of Statistics, South Africa. INTERNET. https://census.statssa.gov.za/assets/documents/2022/P03014_Census_2022_Statistical_Release.pdf.Cited 18 June 2024.

Thompson, J. (2019) Narratives of architectural education: From student to architect. 1st ed. London: Routledge.

Van Schaik, L. (2004) Mastering architecture: Becoming a creative innovator in practice. Chichester: Wiley.

Van Schaik, L. (2008) Spatial intelligence: New futures for architecture. Chichester, England: Hoboken.

Van Schaik, L. (2016) "The design practice research model of ADAPT-r." In Hamman, C (ed.). ADAPT-r exhibition. pp 19-25. London: University of Westminster.

Van Schaik, L. (2020) Building a culture: Reflections on three decades of design practice research at RMIT. Melbourne, Australia: Uro Publications.

Vaughan, L. (ed.). (2017) Practice-based design research. London: Bloomsbury Publishing Plc.

6 CHAPTER SIX: TRACING THE EVOLUTION OF A PARALLEL-ENGAGED ARCHITECTURAL PEDAGOGY OF CARE IN SOUTH AFRICA[26]

Paper published in International Journal of Architectural Research, September 2024,online ahead of publication in a volume (Felix 2024)

Abstract

Purpose – Tracing the development of a parallel-engaged pedagogy of care that extended and adapted the critical and transformative pedagogies of Freire, De Sousa Santos and hooks to the South African context. The development of this transformative pedagogy addresses the local conditions of an architectural design studio at a postcolonial, post-Apartheid and post "Fees must Fall" protests South African university. This pedagogy used practice-based design research to build a more conscious, critical and careful design practice in both students and educators.

Design/methodology/approach – The pedagogy was developed through participatory action research, over five years, from 2019 to 2023 including two years of the COVID-19 pandemic. Parallel and active engagement of students and educators within a nurturing and caring environment evolved from year to year, through a conscious and critical reflection on the process. Student surveys, reflective essays and focus groups unearth the impact of the parallel-engaged pedagogy of care.

Findings – The parallel-engaged pedagogy of care was shown to support and scaffold students becoming more conscious, critical and careful in their design practices validating diverse lived experiences as generative for design and important for social justice and transformative equity.

Research limitations/implications – The parallel-engaged pedagogy of care is part of a global shift to more transformative pedagogies that address student diversity and decoloniality.

[26] This paper, published in the International Journal of Architectural Research (https://doi.org/10.1108/ARCH-05-2024-0204), has been reformatted according to the thesis. No other parts of the paper have been amended.

Originality/value – Through dismantling traditional hierarchical teaching modes, the pedagogy is more student-led, agile and adaptable. Through centring and demonstrating care in the pedagogy, students are encouraged to develop both self-care and care in their design practice. This is especially critical in the South African context where the cultural capital of the institution, with its roots in colonial and Apartheid education differs from that of the majority of students of colour.

Keywords Transformative architectural pedagogy, Engaged, Care, Decolonial, Social justice

Paper type Research paper

Architectural pedagogy in South Africa has historically been based on imported colonial European models:

> "(The) condition of architectural education and practice in Sub-Saharan Africa, where most educational models were imported from, when not even imposed by, colonising countries... (requires) reconceptualising curricula to allow for a plurality of different voices to be heard." (Berlanda 2017, 69)

These imported models have created an "abyssal line" (De Sousa Santos 2014) dividing South African society decades after the end of historical colonialism and apartheid. Whatever lies on the indigenous side of that line is still largely invisible and deemed irrelevant. The global resistance against abyssal thinking acts against epistemicide, where colonial domination involves the deliberate destruction of other cultures' knowledge, memories, ancestral links and manner of relating to others and nature (De Sousa Santos 2014). In South African higher education, apartheid followed colonialism in the suppression of diverse local ways of knowing and being.

The contestation of inherited models of architectural education commenced shortly after the end of Apartheid in 1994 with the opening up of South African universities to previously excluded students of colour. At the time, Low and Smuts questioned whether existing architectural schools in historically white universities could provide a transformative[27] architectural pedagogy noting the depth of their institutional culture based on these imported models (Low et al. 1997). Under Apartheid only historically white universities offered architectural programs, as the universities set up separately for the Black, Coloured and Indian populations had limited courses and reduced academic scope. Therefore, "black" students, incorporating Black, Coloured, Indian and Asian students wanting to study architecture were required to obtain special ministerial permission to study at historically white institutions[28]. Berlanda on arriving at the School of Architecture at the University of Cape Town fifteen years later noted that these inherited colonial models of education were still present and questioned both the scholarly value of the imported models and the discrepancy between the formal aesthetics and the material living conditions of local people (Berlanda 2017, 69).

In South Africa architectural programmes were slow to transform their curriculum after the end of Apartheid. Saidi (2015, 13) foresaw the student protests of 2015 when in 2005 he noted that "to continue to teach in the way they had always done in the past would lead to learner dissatisfaction at some point in the future". These "Fees Must Fall" and "Rhodes Must Fall" student protests prompted a thorough examination of the pedagogy across all schools of architecture, indeed across all universities. "Fees Must Fall" protests commenced with challenging the increase in fees

[27] "Transformation" in the South African context is rooted in the political discourse following the end of Apartheid in 1994. It encompasses various aspects of societal change including economic, social and political transformation to address historical injustices, redress inequalities and empower previously disadvantaged groups.

[28] Aziz Tayob was the first black student to study architecture at the University of the Witwatersrand in 1964 having obtained ministerial permission to do so (Mothoagae, 2023; Tayob, 2024

amidst the student affordability crisis at universities. A parallel "Rhodes Must Fall" protest requested the removal of all colonial-era iconography from universities including the Cecil Rhodes statue at the University of Cape Town, and alongside this the reinvention of academic programs moving away from colonial-era models that had been slow to transform since the end of Apartheid in 1994. Both protests coalesced into demands for a "free decolonized education" (Jansen and Walters 2022, 51). At that moment it was acknowledged that a different kind of pedagogy was required that spoke to students' lived experience. Acknowledging indigenous knowledge systems as not only equal to a Westernised canon but more relevant to the South African context.

> "When protesting students demanded a decolonized curriculum, it was, therefore, a criticism lodged within a politics of knowledge that recognized the lingering intellectual legacies of colonial and apartheid education, reflected in what is taught (knowledge content), how it is taught (knowledge hierarchies), and, for some, by whom it is taught (knowledge authorities)." (Jansen and Walters 2022, 7)

These protests arose from the alienation experienced by black students who were now in the majority in historically white universities but still felt as if they did not belong. Claiming their space within institutions that did not recognise or acknowledge their identity and their history was part of the underlying issue that drove the protests, exemplified by one black woman student's protest placard "Look at me, I am here" (Lange 2019).

Architectural pedagogy, both what was taught, the curriculum, and how it was taught, the underlying pedagogy needed to be transformed. A decolonised architectural education was required which interrogated the institutional culture and its capacity for transformation. Could these institutions be changed and transformed from within? Makhubu (2021) questioned whether as per Lorde (2018) you can dismantle "the master's house with the master's tools?" echoing the questions Low and Smuts (1997) had asked. Toffa (2021) concurred, stating that the architectural

profession in South Africa is still complicit in reproducing colonial forms of domination and dispossession along racial lines. South African institutional culture was slow to transform in response to the 2015 student protests, where decolonization intentions were watered down through "bureaucratizing, disciplining, regulating, marginalizing, and domesticating radical curriculum change" (Jansen and Walters 2022, 20).

The changes were largely left up to individual academics to implement, based on various institutional decolonization strategies. In architecture schools, these changes started before 2015, with the Architectural Education Forum Africa at the International Union of Architects World Congress held in Durban, South Africa in 2014, and continued with the "Architectural Education @ all scales symposium" held at the University of the Witwatersrand, Johannesburg, in 2016.

Architectural schools within these institutions also have particular cultures that work against transformative change. Payne (2015) noted how through studio reviews and critiques architectural schools often reinforce their culture, and force students with different cultural capital to conform. South African students from diverse cultural backgrounds therefore face a double challenge when entering formerly white institutions, the lingering colonial and Apartheid culture of the institution and the culture of the architecture school. Students need to grow in confidence and resilience to deal with this continued acculturation. Concurrently, educators developed strategies which validate students' individual cultural capital, thereby supporting an alternative transformative architectural/design pedagogy at the intersection of class, race, gender and social justice:

(1) *Inclusive educational and professional access* (Felix 2018; Luckan and Pillay 2019)
(2) *Collaborative, socially and culturally sensitive* interdisciplinary learning (Szentesi 2022)
(3) *Care and support* especially for previously disadvantaged students (Felix 2018; Janse Van Rensburg 2016)
(4) *Student-centred approach*: recognizing students' indigenous knowledge, socio-cultural contexts, workload and

lived realities (Olweny et al. 2021).

(5) Teachers as *facilitators in an engaged pedagogy* (Hendricks et al. 2020; Saidi 2005)

(6) Playful learning: "embracing *local ways of knowing and being*" (Cassim 2020, 524)

(7) *Plurality of voices* (Berlanda 2017)

(8) *Multi-cultural curriculum* addressing a politically, socially and culturally changing society (Saidi 2005)

(9) *Nurturing creative confidence* (Gachago et al. 2024)

(10 *Embodied and reflective* material practices exploring diverse lived experiences (Bahmann 2022)

(11) *Feminist perspectives on material knowing* (Stone-Johnson 2022)

All these educators were working and trying to transform the system from within. At the University of Johannesburg, however, there was an opportunity to create something new. Lesley Lokko, Amira Osman and Finzi Saidi, amongst others, came together to found a new post-graduate school of architecture, the Graduate School of Architecture (GSA). Lokko spoke of shifting from the euro-centric Beaux-arts, Bauhaus and RIBA roots upon which architecture schools in South Africa based their education, to a more transformative pedagogy of diversity in choice and content (Lokko 2017). However, it is ironic that this new transformative pedagogy was another British derivative, the unit system, developed at the Architectural Association (AA) in London by Boyarsky in the 1970s. Thus, the opportunity to create a new architecture school structured by and for Africa was missed. Nonetheless, the new GSA, although still deriving its structure from elsewhere, did transform the curriculum, creating a space where students and staff who were marginalised at their previous institutions could redefine design research and practice on their own terms.

These transformative pedagogy strategies, at the GSA and other schools of architecture in South Africa reveal a "significant paradigm shift in the theoretical underpinnings of educational learning theory from 'behavioural' and

'cognitive' to 'humanist' and 'situated' theories of learning" (Webster 2008, 64). Transformative architectural design pedagogy builds on critical pedagogy in rethinking the relationship of educator and student in the design studio, critically questioning traditional assumptions and norms. It seeks to reveal the studio, the central site in architectural education, as not neutral but "integral to social, cultural, and political relations that characterize real-life conditions" (Salama 2021, 25) with Salama noting the urgency with which the reimagination of architectural education is required in the current context internationally.

In "Studio recipes for systemic change" the Helsinki Design lab notes similarly that "a successful education system in the future will be defined by how well it handles diversity and enables all students to participate and thrive" (Boyer et al. 2011, 54). Similarly, Bell (2014, 90) posits a culturally relevant architectural pedagogy by promoting "invisible cultures" in the design studio, incorporating "practices of critical race theory into a collective pedagogy... engaging diverse cultural experiences in teaching and learning" (Bell 2022, 206). An architectural pedagogy as per Travis (2012, 1–2) focuses on the student's learning, developing positive cultural and social identities and supporting students' critical consciousness.

In South Africa this urgency to transform architectural education from its colonial and Apartheid past addressing equity and social justice is felt more keenly after the student protests of 2015/2016. These "Fees must Fall" protests started at the University of the Witwatersrand (Wits), in Johannesburg historically the site of student activism even during Apartheid. Wits students have always been at the vanguard of demanding transformation and change. Many staff members, including myself, are alumni and can still remember the Anti-Apartheid protests often violently suppressed by the security apparatus of the Apartheid Government. Wits University, and more particularly, the School

of Architecture and Planning (SoAP) as a site of transformation and decoloniality is continuing its activist role within South Africa through the actions of staff, now agents within the institution.

The parallel-engaged pedagogy of care illustrated in this paper was developed within the third-year undergraduate design program over 5 years at Wits' SoAP. The pedagogy is developed alongside curriculum methods, which adapt postgraduate practice-based design research methods to an undergraduate cohort. The research presented at previous conferences focused on this adaptation of practice-based design research methods from 2019 to 2022 at Wits, SoAP (Felix 2018; 2022). The practice-based design research methods focus inward on the student, unearthing personal narratives, and position the student critically within the institution. These methods have been proven to develop conscious self- awareness in postgraduate students (Van Schaik 2020), and develop positionality (Rendell 2020). This paper extends that research by focusing on the underlying parallel-engaged pedagogy of care, which was developed alongside the practice-based design research methods, to support decolonial and transformative imperatives. Both the pedagogy and the curricular methods were implemented through cycles of participative action research, which echo the aims of the engaged pedagogy by engaging students in the ongoing development of their education.

6.1 Developing a parallel-engaged pedagogy of care in architecture

A parallel-engaged pedagogy of care, my term, developed at Wits, SoAP supports students' becoming more conscious, critical and careful in design practice in the context of a South African university, with the attendant issues of racial, cultural and gender diversity and socio-economic precarity.

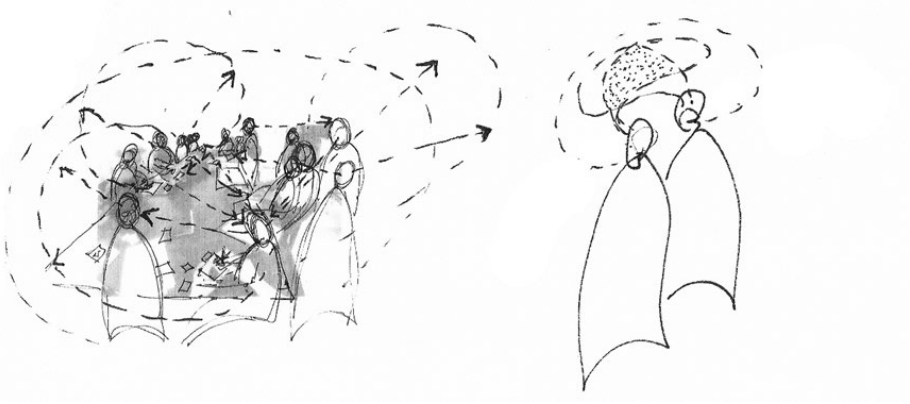


Figure 6.1 Drawings showing the parallel-engaged architectural design pedagogy in action with students and educators sitting together in studio on left and walking alongside each other on the right (drawing by author)

The parallel-engaged pedagogy of care is multi-faceted, parallel, engaged and careful. "Parallel" dismantles the power relations, and racialised constructs between the educator and the student. "Engaged" students and educators are active participants towards their own well-being and actualization. "Care" nurtures the well-being and personal development of students, thereby instilling in them care for themselves, for others and for the life-sustaining web that is our world (refer to Figure 6.1).

The parallel-engaged pedagogy of care was a supporting framework for a practice-based design research dialogue between educators and students at SoAP, merging self-ethnography, with design pedagogy. In the South African context of racial, gender, economic and cultural diversity, this transformative pedagogy values each student's voice and lived spatial experience as generative for their present and future design practice, thereby promoting social justice and inclusivity.

In designing a transformative architectural pedagogy in South Africa, what is the desired outcome?

Firstly, there is a need for a pedagogy which is reflective of the local socio-economic, cultural and political context. Secondly, it is important to recognise the qualities, values and skills desired in future South African architects.

Arguably, there is a core competency of skills which all architects no matter which country they practice in would require, usually legislated by various professional bodies. The South African Council for the Architectural Profession (SACAP) lists these essential skills as:

(1) "Office practice, legal aspects and ethics
(2) Computer applications
(3) Urban relationship
(4) Architectural history & theory
(5) Architectural design
(6) Environmental relationship
(7) Contract documentation and administration
(8) The structure of buildings
(9) Construction technology
(10) Building services & related technologies" ("2021 New_Appendix A The SACAP Competencies.pdf" 2021)

However, it is broadly perceived that these competencies all have related important behavioural qualities and values, as demonstrated by Savic and Kashef (2013, 999) when correlating the European Association for Architectural Education (EAAE) survey results with the Architects' Council of Europe list of competencies.

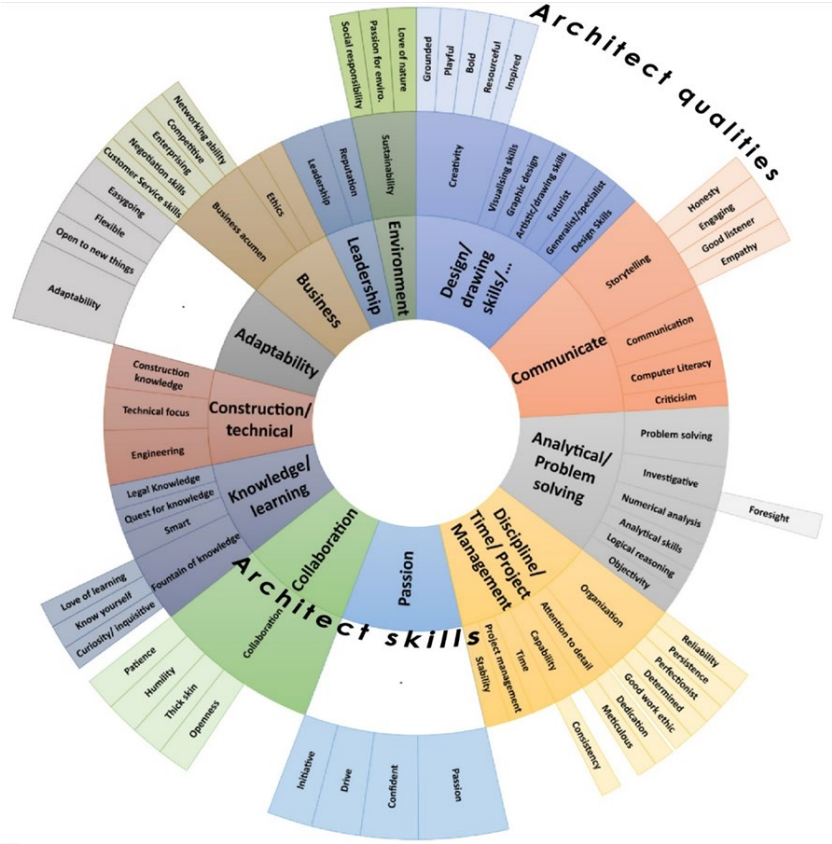


Figure 6.2 Pie -graph showing weighted Social Media survey results of a search "qualities of an architect": inner most tier shows the categories of skills/qualities; the middle tier lists the skills associated with the categories; the outer tier lists the qualities of an architect (graph by author)

What are the values and qualities perceived as important for practising architecture globally, and in a postcolonial and post-Apartheid society specifically? To understand society's perception of these qualities, social media data collection is contrasted with South African student and practitioner surveys, as methodological tools for research.

Data responding to the search term "qualities of an architect" was collected from blogs, architecture social media sites and educational and architectural practice sites[29]. The data, including both hard skills and soft qualities and values was weighted for frequency (refer to Figure 6.2). This list was compared with a local student survey (refer to Figure 6.3) and practitioner focus groups and survey (de Jager 2023). In both surveys (refer Figures 6.2 and 6.3), the most common skills noted for architects were creativity, problem-solving and communication. The most common quality is passion. However, in the local students' survey other qualities and values came to the fore: understanding, compassion, care, patience, personal and social awareness, adaptability and confidence.

[29] Easy reader n.d.; Sage Cottage Architects n.d.; "Qualities of an Architect Perspectives on Strategy & Architecture", n.d.; Archinect – Discussion Forum n.d.; Teslo Outsourcing Services n.d.; "What are the essential skills and qualities of a successful architect? - Egemen Mustafa Sener" n.d.; Bullet-Core, 2023, Ennis, 2019, Nelson, 2023.

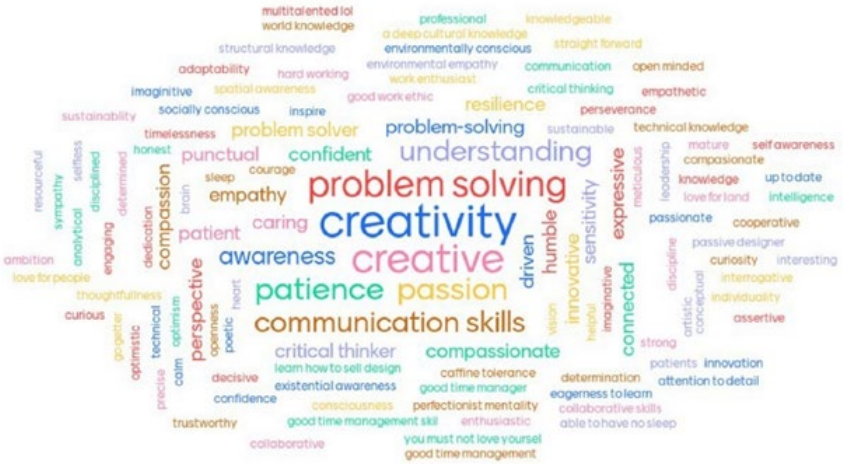


Figure 6.3 Menti-meter app word cloud of third-year student survey of "qualities of an architect in South Africa" – the most often a quality is repeated the bigger the font in the word cloud.(by author)

These values and qualities were not as highly rated in the social media survey, and therefore might suggest a more local postcolonial, post-Apartheid way of practicing.

This is corroborated by local practitioners' who spoke of the need for a "sensitivity to everyday lives/practices of people"; "patience and understanding" of local conditions, and a "commitment to transforming the built environment to support spatial justice" (Architects' Focus Group 1.2). Another local practitioner survey also reinforced this view with the top values including adaptability; passion; resilience and being people-oriented (de Jager 2023). The first group of skills can be taught through technical and studio training, but the values require a different kind of pedagogy, that supports being and becoming, rather than knowing (Dall'Alba 2009, p. 34).

Reflective-diffractive practice-based design research methods were implemented to support and develop students' being and becoming more conscious, critical and careful in design practice. Reflective methods developed self-awareness, unpacking personal spatial memories and lived experiences, thereby unearthing particular design fascinations in past practice.

Diffractive methods critically situated students within a particular postcolonial socio-economic, political, cultural and institutional context.

These methods are appropriate for a postcolonial and post-apartheid context because they value a different kind of becoming and being that breaks from a colonial and Apartheid past.

In the context of a postcolonial university and a decolonial project, validating ways of being and knowledge that were actively denied and delegitimized is an "embodied re-membering of the past . . . against the colonialist practices of erasure and avoidance" (Barad 2017, 56). This re-membering or reconstituting of alternative histories validates the "alternative ways of doing things" or practicing which are embedded in alternative knowledges (Smith 2012, 52). The reflective-diffractive practice-based design research methods, validate the students' culture, their particular ways of seeing and being and position it within the postcolonial and post-Apartheid institution, architectural discourse and practice. However, It is a decolonial transformative pedagogical practice not only in its methodology but also in the way it is implemented, through a parallel-engaged pedagogy of care, developed over a series of participative action research cycles. All three, the method, the pedagogy and the action research, centre and engage the student in actively reimagining their architectural practices for this place and time. A place rooted still in its colonial and Apartheid past.

The evolving parallel-engaged pedagogy of care used to implement these practice-based design research methods had as much impact on students' design practice as the actual content itself. This paper unpacks this parallel-engaged pedagogy of care and traces its development over 5 years at SOAP, from 2019 to 2023 in cycles of participatory action research. The participants, including myself as architect-researcher-educator, students and colleagues, co-constructed learning for a more conscious, critical and careful design practice for all. Reflections on

the pedagogic process from year to year prompted incremental adjustments. The participatory part of the research is a direct reflection of the "parallel" pedagogy. I learnt about myself, alongside students and colleagues learning about themselves. Together we engaged in a collaborative dialogue with each other unearthing tacit knowledge about our design practices. Luckan (2020) noted that participatory pedagogy was essential in South African decolonial education, that teachers should be educators who facilitate learning rather than teach or transmit knowledge. This has also been reported internationally with Salama confirming that " educators need to move away from thinking of students as passive listeners and encourage them to be active learners" both inside and outside of the classroom setting, enabling socio-behavioural qualities such as "listening and respecting the views of others" (Salama and Maclean 2017, 171).

The implementation period from 2019 to 2023 included almost two years of COVID-19 lockdown. Learning moved online in 2020 and 2021 and was hybrid, in-person and online in the last two years. This affected the pedagogy both positively and negatively.

6.2 Engaged pedagogy

In 2019, when commencing third-year design teaching, the new team inherited a rational curriculum developed by Ludwig Hansen, within the Wits model of "engineering with arts" (Luckan 2020, 141). Self-reflection and social reflection were added to this curriculum to support a more conscious design practice. As per the inherited curriculum, students were tasked in their first project of the year with de-constructing their archives of design practice, through analytically re-drawing previous projects. To this re-drawing, reflective engagement with past practice was added, unearthing fascinations and preoccupations. Students engaged with their past design practice, through a

meta-reflection across all their previous projects in their undergraduate years. They also engaged with each other and with tutors through social reflection.

This reflection added mutual and active engagement between students and educators towards self-actualization. Social reflection and self-reflection were a starting point for students in the process of finding their own ways of seeing and designing. These local, indigenous ways of knowing are slowly being validated at institutions of higher learning within South Africa shifting away from established knowledge systems.

In this project, the design problem to be solved was the students' own design practice; therefore, all insights and reflections were valuable.

> "engaged pedagogy highlights the importance of independent thinking and each student finding his or her unique voice, this recognition is usually empowering for students. This is especially important for students who otherwise may not have felt that they were "worthy," that they had anything of value to contribute." (hooks 2009, 21)

Engaged pedagogy builds on Freire's (2017) *Pedagogy of the Oppressed*, a seminal work in critical pedagogy that addresses transformation, diversity and marginalisation. Freire proposed a "problem-posing education" model where both students and teachers become conscious makers of their own culture through dialogue, being jointly responsible for a process in which all grow (Freire 2017). This dialogic engagement requires both action and reflection, as Freire viewed the omission of action as verbalism and the omission of reflection as empty activism.

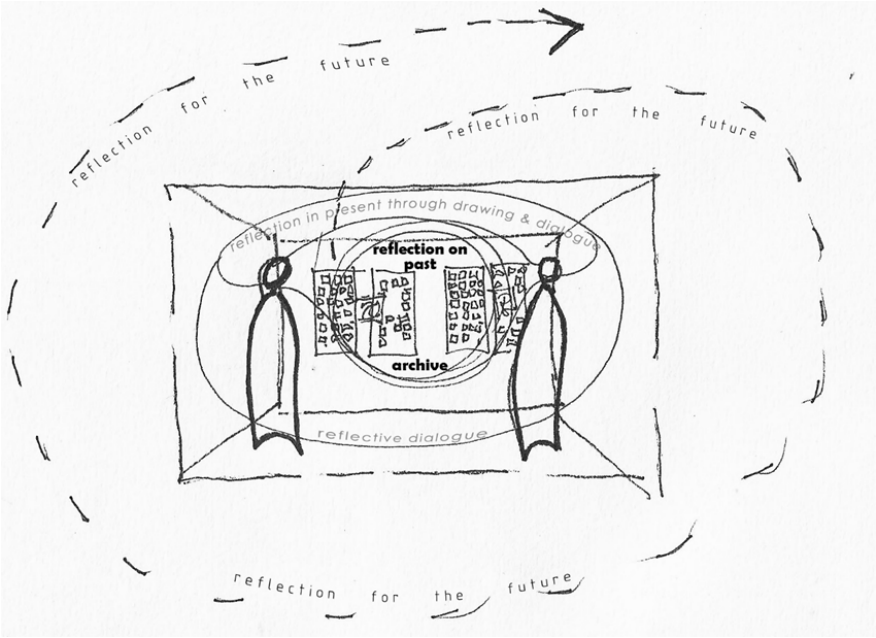


Figure 6.4 Drawing showing the loop of reflection between pairs of students in the practice-based design research - reflecting on/into/about past practice through the personal design archive moves to a reflective dialogue in the present, culminating in reflecting for future practice (drawing by author)

The reflective dialogue at SoAP, includes reflection on two levels, the self and the social (refer Figure 6.4). It is also activism, in the sense that the students reconstruct themselves through deconstructing their archives, and their design practices, by drawing, self-reflecting and social reflection

bell hooks' (1994) *Teaching to Transgress* developed on the critical pedagogy of Freire at the intersection of anti-colonial, critical and feminist pedagogies.

This radical pedagogy included the recognition of differences of class, race, sexual practice and nationality. She translated Freire's conscientization to critical awareness and engagement, seeing education as a practice of freedom where the engaged voice of all active participants is not static or fixed.

She focused on this engagement, noting that for education to be the practice of freedom everyone needs to labour in the field of knowledge. This "engaged pedagogy" (hooks 1994, 15) is thus more demanding than critical pedagogy. It is a holistic education that recognizes the value of each student's voice.

Each student sees the value of their overall life experiences and how they connect to what they are learning.

Students and teachers learn to accept different "ways of knowing, new epistemologies in a multi-cultural setting" (hooks 1994, 40). The implementation of engaged pedagogy at SoAP, through collaborative dialogue begins to cross the boundaries of race, gender, class or professional standing (Figure 6.4). In this dialogue educators share their own practice reflections, becoming vulnerable and demonstrating to students how lived experience can be generative for design practice.

Through this openness to each other and sharing, the classroom becomes a

> "field of possibility, [where] we have the opportunity to labour for freedom, to demand of ourselves and our comrades an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom." (hooks 1994, 207)

6.3 Parallel pedagogy

The engaged pedagogy in South Africa emerges from a specific contextual understanding of Freire's and hooks' pedagogies within racially marginalized contexts. South Africa's context is, however, not identical, requiring an unpacking and situating of both the educators' and students' cultural and educational backgrounds. South African educators have suggested that Freire's "pedagogy of hope" was an ontological need (Le Grange 2011), and "not only... resonat[ed] with a revitalized 'pedagogy of liberation', or a 'pedagogy of social justice' but also... [was] an antithesis of a 'pedagogy of domination' which was a defining feature of South Africa's apartheid legacy" (Ndlovu 2011, 42).

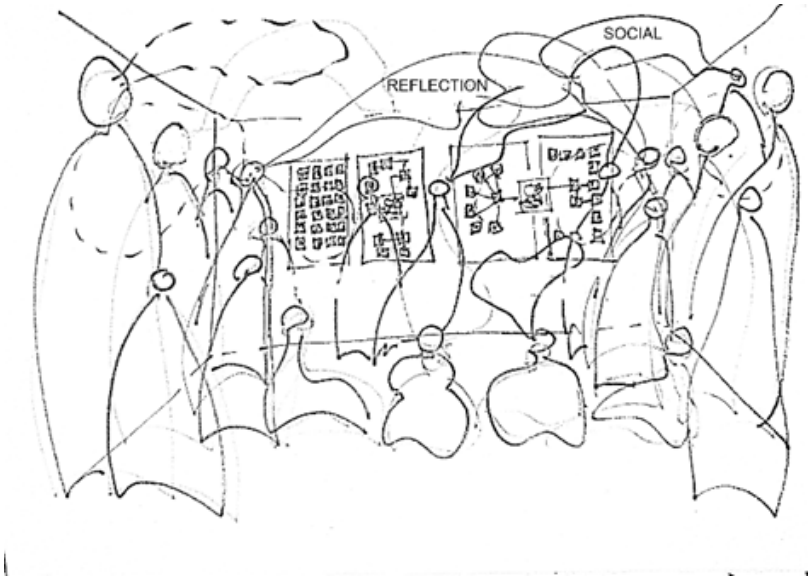


Figure 6.5 Drawing of the expanded social dialogue where educators and students reflect on their personal design archives in studio with colleagues and the whole class. (drawing by author)

However, Freire's application in a South African context needed to acknowledge that oppression cannot be simply defined, that there are multiple systems of context-specific oppression within an interconnected and changing rapidly world resulting in super-complexity of power relations (Le Grange 2011, 86).

Therefore, the unpacking of the "pedagogy of domination" (Ndlovu 2011, 42) requires a new type of relationship between students and teachers, one that is more parallel in nature and subverts the power dynamics at play.

In 2019, as an architect-researcher-educator, to increase engagement and counter the traditional power dynamics in the studio, I decided to complete the same practice-based design research exercises alongside students, as both a parallel pedagogy, and an autoethnography. It facilitated a different kind of relationship between educator and student in the design studio, one that extended hooks and Freire's notions of an engaged pedagogy. I re-drew projects from my own past design practice alongside students in the studio and filmed the experience (refer Figure 6.5).

In the parallel pedagogy, I became a student alongside them, I responded to their questions by reflecting on my own work. I was no

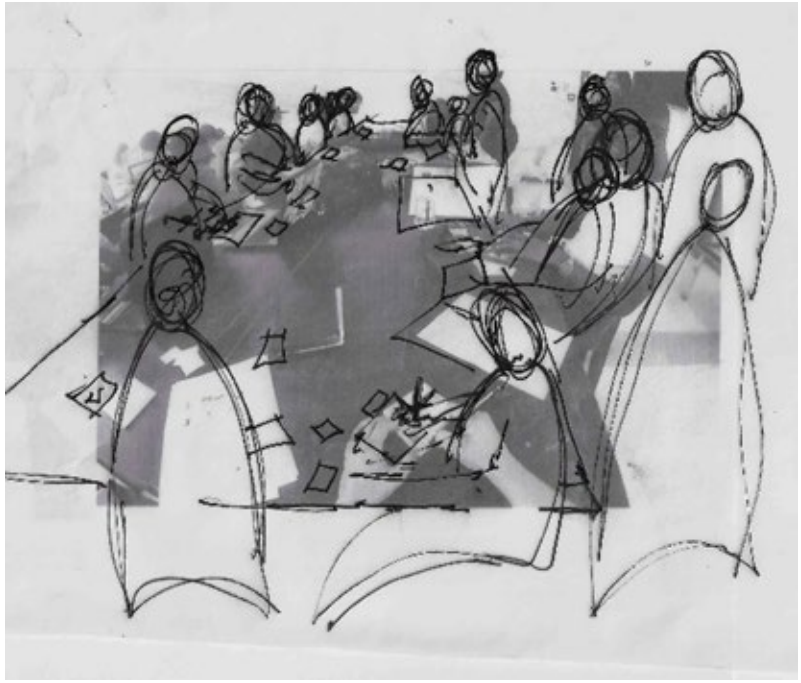


Figure 6.6 Figure 6.6 Drawing over photograph of the parallel pedagogy in studio. Me drawing my personal design archive in the foreground alongside students drawing their archives in the background (drawing over photo from film by author)

longer a teacher but rather a facilitator, co-constructing knowledge with students.

After the re-drawing process, all participants engaged in a social reflective dialogue around their de-constructed archives, commencing around my own de-constructed archive (refer Figure 6.6). The rules of engagement were different from the usual design studio critiques, which can be confrontational and negative. A safe space was created for personal and social reflection, tasking participants with supporting each other's self-reflection by seeking to understand and find evidence of that reflection within the archive. Alternatively, they could suggest fascinations or preoccupations that they saw within one others' archive. The pedagogic engagement occurred on several levels. Educators and students actively engaged with each other in a safe space. Participants reflectively engaged with their past practice, unpacking and unearthing new insights using drawing as a research tool.

In a parallel pedagogy, the educators do not teach in the traditional sense of transmitting knowledge. They rather facilitate and scaffold the student's conscious and critical becoming alongside their own becoming process.

This "parallel" pedagogy echoes De Sousa Santos' (2014) "knowing with, understanding facilitating, sharing and walking alongside" students. A collective formation of knowledge and intercultural translation, developing new hybrid forms of cultural understanding and intercommunication by asking for deep listening (De Sousa Santos 2014). Exploring how an individual's social formation influences their practice and understanding in communities that struggle against marginality and notions of inferiority.

De Sousa Santos (2014) goes further by requesting an epistemological transformation. Moving towards an ecology of knowledge which asks if what one is learning is valid or if what has already been learned should be forgotten or unlearned. In South Africa, when the educator and the student co-construct knowledge in this parallel way, the educator needs to interrogate what remnants of their own Apartheid education should be unlearned, forgotten or contested.

Alongside the feminist epistemology of Grosz (1995), De Sousa Santos (2014) underlies the corporeality of knowledge, acknowledging that struggles are carried out by bodies, and therefore that the body is a necessary mediator of our representation of the world. The relevance to South African architectural design pedagogy is in revealing the postcolonial conditions that linger in architectural cultural production.

In the SoAP third-year design studio, the self-reflective moment at the beginning of the year brings the individual design voice to the fore. It reminds students and educators that design is a tension between what we individually bring with us, our fascinations and preoccupations, and a considered response to site and context. However, our response is also coloured by our institution's and school's learning culture.

6.4 Pedagogy of care

Shortly after this parallel reflection in the studio in 2020, we moved to emergency online learning due to the COVID-19 lockdown. It was a stressful time for everyone, students returned home, some to difficult circumstances while educators were grappling with redesigning courses for an online environment. Everyone was struggling with the health, economic and social fallout of the COVID-19 lockdown. The teaching team realised immediately that a different approach was required, one that acknowledged the stress under which everyone was living.

Thirty years after the transition to democracy, South Africa remains a highly unequal society. However, various spaces have emerged which offer historically deprived individuals a measure of freedom, sociability and opportunity. One of these is the university campus, and, for architecture students in particular, the design studio. The design studio is a place where underprivileged students can find an enabling environment, space for learning, computer hardware and software and good connectivity (Felix and Silverman 2021).

However, these spaces of freedom were severely compromised by the COVID-19 pandemic closure of the universities, and the move to online learning. The pandemic sharpened a range of social, economic and digital divides, which were legacies of colonialism and Apartheid. Our initial response as educators was to devise uniform systems of online teaching to replace face-to-face interactions. However, within days of the move to online learning, we discovered that this was not possible without widening the divides between rich and poor, urban and rural, connected and disconnected. We therefore had to devise responsive, customised and flexible ways of teaching to reach every student. This in turn required care and flexibility from educators (Felix and Silverman 2021). Some students, especially those from rural areas, and/or disadvantaged backgrounds, suffered the most. The design studio for them was a site of freedom, which could not be replicated online.

At SoAP, care was still a largely hidden part of the pedagogy before COVID-19. A cohort of educators were implementing diverse views of care and nurturing in their pedagogies including in the third-year studio[30]. These care strategies attempted to address students' social and economic differences, largely still colonial and Apartheid legacies. During COVID- 19, however, care became central, defining approaches, methods, processes and content.

A pedagogy of care nurtures the being and becoming of students. One cannot teach careful practice without embedding and demonstrating care within the pedagogy itself, within the architectural studio. Care speaks to the respect, concern, consideration and sensitivity which we show ourselves and each other within the studio. If students feel that their needs, desires and lived experiences are met, acknowledged and validated, they can then begin to show the same care and consideration for their design practice, for others and for the life-sustaining web that is our world.

Care has a dual meaning, it is both a mental disposition of concern and a practice as a result of that concern. Care is

> "a species activity that includes everything that we do to maintain, continue and repair our "world" so that we can live in it as well as possible. The world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web." (Tronto and Fisher 1990, 40)

This definition includes action and puts care into practice. Tronto and Fisher (1990) further identify four phases of care: caring about; caring for; caregiving and care-receiving.

[30] Discussions and implementations of pedagogical care in the third-year undergraduate studio at SoAP, Wits were rooted in some of Ariane Janse Van Rensburg's (2016) pedagogical research) and continued through the care of Melinda Silverman; Tunde Oluwa; Gustavo Triana; Gerald Chungu; Alexia Cocolas; Patricia Theron; Avish Mistry; Deborah Kirkman; Kevin Goncalves.

The practice of care in architecture means "understanding the interdependence of the economy, ecology, labour and future repair" (Krasny et al. 2019). The four phases of care as applied to architecture are care for land and water; care for the repair of buildings and environments; care for skills and care for production (Krasny et al. 2019). Developing care in architectural practice means "architects, urban designers and spatial practitioners may be more enabled to cultivate and protect today's and future generations' social well- being and biodiversity" (Rawes 2013, 53). Care is required in architectural practice to address the multiple crises of our world (Krasny et al. 2019).

Within the South African context care is also a commitment to unpack the hidden curriculum within the design studio, the unnoticed discriminatory practices. This unpacking of unacknowledged bias and internalised dominance (hooks, 1994) can be difficult, and therefore needs to be done with consideration and understanding but also critically.

> "To re-think design approaches and methods around a notion of care that centres on addressing inequality and includes a commitment to social justice is difficult, politically charged and fraught with complications." (Boys 2016, 175)

The teaching team and the university responded to the technical problems that hindered students' online learning during COVID-19 by delivering laptops and data packages to students without access to these necessities. We explored a myriad of different ways to engage with students, from online whiteboard-enabled apps to WhatsApp exchanges of hand-drawn sketches, or telephonic critiques for students who didn't have data or reliable Internet signal. The class was split into smaller groups, with tutors following up regularly with students work and their mental health. We adjusted previously hard deadlines for projects, becoming more flexible and adaptable in our teaching strategies. We were, in other words, student-led, actively listening to students' requirements for learning and support, responding to these as best we could.

In this respect, the COVID-19 lockdown had a positive effect on our pedagogic approach. Care became central to the pedagogy, care for ourselves, for our students, for others and for our shared world. Care and empathy were developed by sharing and listening to each other's reflections. Care also cushioned the emotional, and psychological heavy lifting that was done in the reflective-diffractive exercises where students and educators become vulnerable in their introspection. Unfortunately, in the still racialised South African society, most of the students who required the most care, and support, whose living conditions were not conducive to learning were black. Care was appreciated by middle class students, but critical to students living in conditions of precarity. Care could thus be seen as a radical decolonial pedagogical practice.

6.5 Parallel-engaged pedagogy of care in progress

The parallel-engaged pedagogy rooted in care, developed fluidly by responding to reflections on its development year on year. The personal spatial memory exercise was one such methodological development which arose from the process itself.

As an architect-researcher, the research into my own practice had evolved. I had noticed a gap that redrawing my past design archive had not addressed. Thus, I used photography as a tool to further reflect on my archive. The photographic archive revealed a fascination with colour, texture and materiality the roots of which did not lie in my earlier unpacking of institutional influence (refer to Figure 6.7). Where did it come from? Upon reflection it became clear that this fascination originated from childhood, playing with colour and patterned scraps of fabric alongside my seamstress mother's sewing machine (Felix 2021). This connection to memory was pivotal to my practice-based design research. Hence, I shared this with students through photographs, drawings and reflections on the texture and materiality in my design practice, entitled "Playing with fabric" (Felix 2021).



Figure 6.7 Colour study façade drawings above some photographs from the photographic design archive showing a fascination with colour, texture, pattern and materiality, the roots of which lie in memories of playing with fabric as a child – drawing on right (drawings and photographs by author)

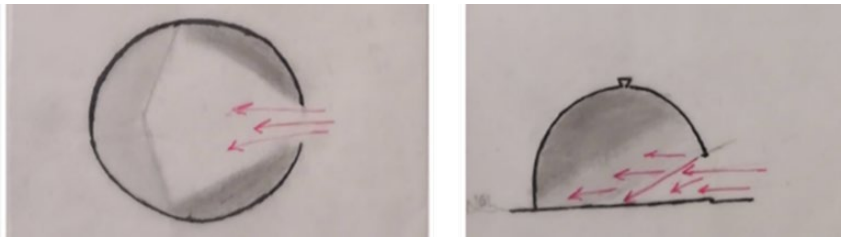


Figure 6.8 Drawings by a student exploring the experience of light living in a Zulu hut. On the left the plan, and the right a sectional drawing showing the limited light penetration from the single opening, and the low opening. (Drawings by Student1902;2021)

Could students connect their past lived experiences with their design fascinations? One student who had been struggling with the initial exercise, reflected on his past, drawing parallels from experiences of living in a Zulu hut with his fascination with light and dark in his design projects (refer Figure 6.8):

"I spent more than ten years staying in a Zulu hut... It shifted my thinking when coming to structures... The main challenge in staying in such a space was natural light and ventilation... This made me consider natural light as an important element... In all the projects I harness natural light to create a special language in all the designs." (Student1908-2021)

This parallel engagement between myself and this student, and our past spatial experiences, was generative, triggering the inclusion of this personal spatial narrative exercise with future students.

This personal spatial narrative commenced with students and educators sitting outside in a grassed amphitheatre under the shade of trees.

This natural environment was conducive to deeper self-reflection. Being outside the classroom introduced students to a different relationship with educators. We all closed our eyes, and remembered a special place in our personal history, sitting with that memory, colouring it in our minds for a few minutes. That intense spatial memory was then sketched in our journals. Educators shared their personal spatial drawings, reflecting on how their design practices could be read through their lived experience of that space. One educator spoke of how the boundaries, liminal spaces and thresholds in their spatial memory echoed in their design practice. Students then reflected on their own spatial memory drawings, unearthing possible spatial principles or catalysts for their design practices. They were invited to share if they felt comfortable to do so.

Not all students found the personal spatial memory exercise formative for understanding their design practice. In a focus group discussion, one of the male studio tutors thought that the students were not mature enough in third year to unpack the meaning-making (Focus Group 3; Tutor 2; 2024). However, a few students commented on its impact:

> "My earliest memory of spatiality is my childhood home. I may not remember every single detail of the home, but I do remember the way it made me feel. I felt safe, comfortable and heard in this house... I am able to feel comfortable even in the way I express myself in design. Feeling like I have a voice. Feeling heard. Feeling seen... When looking at my earliest spatial memory and my fascination with experience, one can see why it is something that manifests in my work today. By looking at my previous projects, it is evident that the deeper meaning and the emotional impact of the space is what I naturally gravitated to." (Student8860-2022)

For some students, the personal spatial memory was generative in a positive way as can be seen above, but others sought to escape their memories:

> "The common design element amongst my prior designs was an extensive use of glazing allowing generous amounts of light and giving the perception of a much larger, more open space. This all stemmed from an attempt to escape my earliest spatial memory which was a dark and confined passage from a miserable time of my life." (Student2005-2022)

Students were supported in their reflective unearthing of these ways of seeing through their personal spatial memory. Interestingly, many students chose to either reinforce their lived experiences in their design practice or counter them. In both cases, a more conscious practice was encouraged, with students critically questioning whether their personal lived experience was relevant and generative for a particular project's social context, or whether this natural bias needed to be countered in their design response. The personal spatial memory exercise, both in its content and its pedagogical implementation has proven to be valuable in building students' conscious and critical practice. One of the tutors in discussing the personal spatial memory exercise's effect on students in a focus group noted:

> What I do think is quite valuable and this is maybe where they get quite passionate is when they have to personalize. (They) remember this particular space... as a child or a first memory and then understand how that has potentially impacted their understanding of space... and understanding that who they are now is a process... a journey... of where they grew up, how they grew up... I think that's quite powerful. I think some of them make that correlation. Not all of them, but I think the ones that do... it's quite powerful for them. And maybe,... it starts giving them permission to take their practice of architecture more seriously, that there are patterns that are starting to develop." (Focus Group 3; Tutor 3; 2024)

The embedded principles of parallel engagement resulted in a flattened power dynamic between educators and students, greater care and connection between students, and respect and validation for the different ways of seeing

and knowing in the class. These principles had initially been embedded in the reflective projects at the beginning and end of each year. However, through reflection, it became clear that the self-actualization that arose from this reflective research needed to be expanded and put into practice in the design projects themselves. Once again, the reflective participatory action process resulted in ongoing changes to the pedagogy.

In 2023, all design project briefs explicitly included reflective questions about the students' own becoming process throughout the year. Not only were students expected to address the complex programmatic, contextual and theoretical issues that were the external project parameters. They also needed to address how their own practice was becoming more conscious, critical and careful. To further encourage reflection on their self-actualization, students wrote an essay at the end of the year reflecting on their development. One student wrote "Architecture is (a) receptive journey, an experience that challenges you to go through a process of self-discovery" (Student3485-2019). The reflection process initiated more questions than answers, with students questioning the nature and meaning of their society (Student3263; 2019) and embracing local ways of being (Student9621-2019). Students became aware of the evolution of their design processes, reflecting on past failures and incorporating issues they had seen as gaps in their processes such as sustainability and contextual sensitivity (Students0674,4647,8953-2019).

6.6 Significant findings

How have students responded to this parallel-engaged pedagogy of care? Unsurprisingly during the COVID-19 pandemic students responded to the care and agility embedded in the pedagogy with a quality of learning which exceeded what we had previously seen. In surveys conducted during the year, students wrote:

> "I have appreciated how much the tutors have been checking up on us individually to make sure that we are alright." (Student2064000-2020)

> "(I appreciate that educators could) maintain the requirements of the course but care more about what's happening to your students." (Student206405-2020)

However, the impact is critical for students from disadvantaged backgrounds, who would have struggled to succeed without care:

> "... has gone far beyond what is required as a lecturer to help me. I was in an uncomfortable situation during the first weeks of lockdown and I was falling further and further behind. … personally messaged me to see how I was doing and continued to encourage me and arrange extra critiques with me throughout project 2. I honestly would not have gotten through Project 2 without the extra concern and help that provided me." (Student206400-2020)

In a South African university those students who feel left behind are most commonly students of colour, who struggle to assimilate into a culture so different from their own. Therefore, it was not surprising when student focus group discussions revealed that care was important for the academic success of black women students in particular "We were genuinely cared about" (Black woman student; Student Focus Group 1, 2024). They reported that the level of care, consideration and support received from educators was central to building their confidence for professional practice: "because teachers showed up then we could too" (Black woman student; Student Focus Group 1, 2024). They also reported being told in their first year that the highest percentage of dropouts were black women students. These research findings echo that of other researchers that care needs to be foregrounded "to support black women to remain and prosper in higher education" (Diouf et al. 2023; Zerai et al. 2023, 1). Pedagogical care in this context can therefore be seen as a radical decolonial practice supporting students who have multiple odds stacked against their success.

What of the parallel-engaged aspect of the pedagogy? The research findings confirm Hooks' (2009, 21) assertion that engaged pedagogy is essential for students in finding their own design voice, of gaining conscious self-awareness of their own ways of seeing and exploring space. Black and women students, however, spoke, of how this process towards conscious self-awareness built confidence in their own practice. Notably, white male students did not mention confidence, perhaps as was noted by one black woman student, confidence was natural and normative for them?

> "I realised during my time studying that okay as a black woman,... confidence wasn't something that I grew up having. It was like something I needed to come into. I would notice my other classmates, the white counterparts... they seem confident and almost seems very natural to them."

> "I was thinking about how the differences in how we grew up as black children. It's like... you're not told this, but it's more something that's implied. Like you just sit there. Yeah. We don't want to hear you. Your opinion doesn't matter as much as anyone else. So it's something that you have to kind of learn." (Black woman student; Student Focus Group 1; 2024)

Black students spoke about learning to defend their own ideas, in university spaces where they didn't feel like they belonged, "As a young woman, especially in spaces that are not for young black (women) . . . so coming to university, being in a prestigious degree like architecture, your job is to listen and learn" (Black woman student; Student Focus Group 1; 2024).

The pedagogy engaged students on their own ideas, validating them. Unlike some students' experiences in earlier years, design ideas were never labelled bad. The student's core idea was identified and "even if it had a very weak

starting point, you could somehow either find the kernel and then through constant iterations make that alive in some way" (Design Tutor Focus Group 1; 2024). This careful engaged pedagogy slowly built confidence in students. As one black male student explained, in first year he felt like he couldn't "relate to these people" meaning his classmates and educators; in second year he felt deeply insecure "working in the CAD lab with mostly black students", but in third year whilst he initially struggled alone, the early manifesto, and personal spatial memory exercises significantly built his confidence in design and he became able through the engaged pedagogy "to back himself up" in terms of his design choices (Black male student, Student Focus Group 4, 2024). His experience was echoed by many students of all races and genders, that finding their own design voices and exploring them, built confidence.

However, for black students, it is also a practice of epistemological freedom corroborating research that "pedagogical justice for disadvantaged students lies in providing a pedagogical scaffold between their life world knowledge's and accessing school knowledge codes" (Fataar 2012, 52). Thereby developing "compensatory (cultural) capital" (Cross and Atinde 2015, 309) which assists marginalised students in confronting an at times alien institutional culture through conscious self-awareness and critical positionality.

In the South African context, an evolving parallel-engaged pedagogy of care has supported students' conscious "becoming" journey. This pedagogy explicitly supports epistemic diversity in a "pluriversity" (Mbembe 2016), through validating multiple and diverse ways of seeing and being as generative for design practice and paying attention to changing circumstances and the context both inside the institution and outside of it. In a postcolonial setting, this validation of local, diverse, often pre-colonial spatial sensibilities, as seen in the student example is an act of decoloniality.

In contrast with Lokko's GSA program, it breaks with historical architectural education precedents from Europe and looks to other sites of decoloniality, and marginalisation for theoretical grounding. The pedagogy develops and adapts precedents from the global south (De Sousa Santos 2014; Freire 2017), and from transformative pedagogies (hooks 1994), for a local South African architectural pedagogy. However, similarly to the GSA the parallel- engaged pedagogy of care creates a space "for both educators and students to find their voice" (Matsipa 2021, 4).

Even though this pedagogical case study is situated at a South African university, it hopes to contribute to a larger decolonial and transformative imperative in architectural education. The dichotomy of seeing the world as developed or developing, as global north versus global south in many ways belies the complexity of the educational system and migratory patterns of students across the world. The student cohort facing architectural educators the world over is more diverse racially, culturally and linguistically than has ever been seen before as noted by some researchers (Salama and Maclean 2017, 172). Engaging with Therefore, educators need to examine their own and their institution's culture, ensuring that the architectural pedagogy is not an act of "epistemic violence,. . .dressed down as a remnant of colonial and apartheid epistemologies" (Jansen and Walters 2022, 53).

Constantly evolving the pedagogy through care and parallel engagement educators thus facilitated and scaffolded all students' conscious, critical and careful becoming alongside their own becoming. However, for black students, the pedagogy was about much more than becoming, it was liberatory, "making space" (Smith 2012, 195) in the institution for their voices, their histories, their particular ways of seeing and being. This is as important in universities sited in postcolonial contexts, as it is at universities with high numbers of culturally, racially and economically diverse students in the global north. The colonial abyssal line (De Sousa Santos 2014) might be physically eroding due to student

migratory patterns, but its epistemological erosion requires intentional transformative work both in curriculum and pedagogy. Transforming h*ow you learn, is after all, as important as what you learn*.

6.7 References

Archinect - Discussion Forum. (n.d.) What are important qualities of an architect? Forum Archinect. INTERNET. https:// archinect.com/forum/thread/150389373/what-are-important-qualities-of-an-architect. Cited 11 July 2024.

Bahmann, D. 2022. "Making atmospheres." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa. Conference. https://doi.org/10.54223/10539/35893

Barad, K. (2017) "Troubling time/s and ecologies of nothingness: Re-turning, re-membering, and facing the incalculable." New Formations. Vol. 92, no92, pp 56-86. https://doi.org/10.3898/NEWF:92.05.2017

Bell, CJ. (2014) "African American education." In Bell, CJ (ed.). Space unveiled: Invisible cultures in the design studio. pp 1-7. London: Routledge.

Bell, CJ. (2022) "Critical race theory as architectural pedagogy." Journal of Architectural Education. Vol. 76, no2, pp 206-209. https://doi.org/10.1080/10464883.2022.2097561

Berlanda, T. (2017) "De-colonising architectural education: Thoughts from Cape Town." Built Heritage. Vol. 1, no3, pp 69-72. https://doi.org/10.1186/BF03545677

Boyer, B., Cook, JW. and Steinberg, M. (2011) In studio: Recipes for systemic change. Helsinki, Finland: Sitra.

Boys, J. (2016) "Architecture, place and the 'care-full' design of everyday life." In Bates, C Imrie, R and Kullman, K (eds.). Care and design: Bodies, buildings, cities. pp 155–177. Chichester, UK: John Wiley & Sons, Ltd.

Bullet-Core. (2023) What qualities make you a great architect and what do you like most about being an architect? R/Architecture, Reddit Post, 9 October. INTERNET https://www.reddit.com/r/architecture/comments/173su8m/what_qualities_make_you_a_great_architect_and/, Cited 11 July 2024.

Cassim, F. (2020) "Decolonising design education through playful learning in a tertiary communication design programme in South Africa". International Journal of Art and Design Education. Vol. 39, no3, pp 523-535, https://doi.org/10.1111/jade.12294

Cross, M. and Atinde, V. (2015) "The pedagogy of the marginalized: Understanding how historically disadvantaged students negotiate their epistemic access in a diverse university environment." Review of Education, Pedagogy, and Cultural Studies. Vol. 37, no4, 308-325. https://doi.org/10.1080/10714413.2015.1065617.

Dall'Alba, G. (2009), "Learning professional ways of being: Ambiguities of becoming." Educational Philosophy and Theory. Vol. 41, no1, pp 34-45, https://doi.org/10.1111/j.1469-5812.2008.00475.x

de Jager, P. (2023) Your journey in South Africa's architectural profession - survey. SurveyMonkey. INTERNET https://www.surveymonkey.com/r/629HNR7. Cited 22 January 2025.

de Sousa Santos, B. (2014) Epistemologies of the South: Justice against epistemicide. 1st ed. New York: Routledge.

Diouf, E., Dyer, U., Ecclesiastes, A. and Gilbert, M. (2023) "Our Ubuntu: A Black feminist turn." Agenda. Vol. 37, no2, pp 32-43. https://doi.org/10.1080/10130950.2023.2229572

Easy Reader. (n.d.) 9 Qualities a professional architect needs to have to become successful" INTERNET. https:// www.easyrender.com/a/9-qualities-a-professional-architect-needs-to-have-to-become-successful. Cited 11 July 2024.

Ennis, P. (2019) 5 qualities of a top architect. INTERNET. https://www.paulennis.co.uk/5-qualities-of-a-top-architect/. Cited 11 July 2024.

Fataar, A. (2012) "Pedagogical justice and student engagement in South African schooling: Working with the cultural capital of disadvantaged students." Perspectives in Education. Vol. 30, no4, pp 52-75.. https://doi.org/10.38140/pie.v30i4.1782

Felix, S. (2018) "Architecture for all." In Janse Van Rensburg, A (ed.). Architectural Education Forum Symposium: Architectural Education at Different Scales. pp 50-55. School of Architecture and Planning, University of the Witwatersrand, Johannesburg, South Africa.

Felix, S. (2021) "Playing with fabric - Design research reflections on colour, materiality and texture in architectural projects." In Fernández Guardado, M and Ballestrem, M (eds.). CA²RE / CA²RE + Hamburg. Conference for Artistic and Architectural Research - Book of Proceedings. pp 364-371. Hamburg, Germany: HafenCity Universität Hamburg.

Felix, S. (2022) "Exploring the transformative potential of Practice-Based Design Research (PBDR) methods in architectural design pedagogy," 16 September. Wits University: Arts Research Africa. http://hdl.handle.net/10539/35908.

Felix, S. and Silverman, M. (2021) "Agile and adaptable teaching strategies in an unequal society: Reflections from the design studio at Wits University, Johannesburg, South Africa" [Video]. INTERNET. https://www.youtube.com/watch?v=acPP5---eCQ. Cited 28 August 2024.

Freire, P. (2017) Pedagogy of the oppressed. South Africa: Penguin Random House.

Gachago, D., Van Zyl, I., Morkel, J. and Ivala, E. (2024) "Nurturing creative confidence and learner empathy: Designing for academic staff development." Proceedings of the International Conference on Networked Learning. Vol. 12, pp 100-107. https://doi.org/10.54337/nlc.v12.8642

Grosz, E. (1995) Space, time, and perversion: Essays on the politics of bodies. New York: Routledge.

Hendricks, D., Meyer, M., Deeg, L., Metz, T. and Tursky, R. (2020), "Fostering innovative entrepreneurial design students: Exploring the relationship between innovation characteristics and attitudes towards entrepreneurship in South African design students." Architecture_MPS. Vol. 18, no1. https://doi.org/10.14324/111.444.amps.2020v18i1.005

hooks, b. (1994) Teaching to transgress: Education as the practice of freedom. New York: Routledge.

hooks, b. (2009) Teaching critical thinking: Practical wisdom. New York: Routledge.

Janse Van Rensburg, A. (2016) "Enabling transformation: A model for facilitating successful design learning outcomes in first year Bachelor of Architectural Studies." PhD Thesis. University of the Witwatersrand, Johannesburg, South Africa. http://hdl.handle.net/10539/20172

Krasny, E., Fitz, A. and Wien, A. (eds.). (2019) Critical care: Architecture and urbanism for a broken planet. Cambridge, Massachusetts: The MIT Press.

Lange, L. (2019) "The institutional curriculum, pedagogy and the decolonisation of the South African university." In Jansen, J (ed.). Decolonisation in universities: The politics of knowledge. pp 79-99. Johannesburg, South Africa: Wits University Press.

Le Grange, L. (2011) "A pedagogy of hope after Paulo Freire." South African Journal of Higher Education. Vol. 25, no1, pp 183-189.

Lokko, L. (2017) "uKuhumusha: From 'here' to 'there' – Transplanting the unit system from Europe to Africa (and back again)." Charrette. Vol. 4, no2, pp 13-26.

Lorde, A. (2018) The master's tools will never dismantle the master's house. London: Penguin Classics.

Low, I., Smuts, C. and Architects Support Group for South Africa. (1997) A new school of architecture in South Africa?: A study launched by Architects Support Group for South Africa, ASGSA-UK. Johannesburg, South Africa: Daedalus Press.

Luckan, Y. 2020. "The transformation of architectural pedagogy towards a new model for architectural education at universities of technology in South Africa." PhD Thesis. University of KwaZulu Natal, Durban, South Africa. http://rgdoi.net/10.13140/RG.2.2.30432.84480.

Luckan, Y. and Pillay, N. (2019) "Practice based research in the context of spatial transformation: A South African perspective." In Blythe, R and De Walsche, J (eds.). 2019 ACSA Teachers Conference, Practice of teaching - Teaching of practice: The teacher's hunch. pp 410-414. June 28-29, 2019 - Antwerp, Belgium ACSA Press. https://doi.org/10.35483/ACSA.Teach.2019.66

Makhubu, J. (2021) "Decolonising architectural education" [Webinar]. South African Institute of Architects. 29 April.

Matsipa, M. (2021) "Lesley Lokko." The Architectural Review. Vol. 1479, pp 108-111.

Mbembe, JA. (2016) "Decolonizing the university: New directions." Arts and Humanities in Higher Education. Vol. 15, no1, pp 29-45. https://doi.org/10.1177/1474022215618513

Mothoagae, O. (2023) In plain sight: 5 decades of Aziz Tayob. Interview. SSL Studio Production. INTERNET. https://www.youtube.com/watch?v=VUpmd8Pn7Os. Cited 22 December 2024.

Ndlovu, M. (2011) "The pedagogy of hope at IMSTUS: Interpretation and manifestation." South African Journal of Higher Education. Vol. 25, no1, pp 41-55.

Nelson, D. (2023) What are the qualities of a good architect? - XUL architecture. RIBA Chartered XUL Architecture, 31 March. INTERNET. https://xularchitecture.co.uk/skills-experience/what- are-the-qualities-of-a-good-architect/. Cited 11 July 2024.

Olweny, M., Morkel, J., Delport, H., Whelan, D. and Ndibwami, A. (2021) "Zombies in the studio: Towards nurturing pedagogical approaches for architectural education in sub-Saharan Africa." Charrette. Vol. 7, no2, pp 57-83.

Payne, JC. (2015) "Investigating the role of cultural capital and organisational habitus in architectural education: A case study approach." International Journal of Art and Design Education. Vol. 34, no1, pp 9-24, https://doi.org/10.1111/jade.12018

Rawes, P. (2013) "Architectural ecologies of care." In Relational architectural ecologies. Architecture, nature and subjectivity. London: Routledge.

Rendell, J. (2020) "From critical to ethical spatial practice." In Bean, J Dickinson, S and Ida, A (eds.). Critical practices in architecture. The unexamined. 1st ed. Newcastle upon Tyne: Cambridge Scholars Publishing.

Sage Cottage Architects. (2023) 15 Personality traits of an architect - Critical qualities. INTERNET. https://www.sagecottagearchitects.com/personality-traits-of-an-architect/ Cited 11 July 2024.

Saidi, FE. (2005) "Developing a curriculum model for architectural education in a culturally changing South Africa". PhD Thesis. University of Pretoria, Pretoria.

Salama, AM. (2021) Transformative pedagogy in architecture and urbanism. London: Routledge.

Salama, AM. and Maclean, L. (2017) "Integrating Appreciative Inquiry (AI) into architectural pedagogy: An assessment experiment of three retrofitted buildings in the city of Glasgow." Frontiers of Architectural Research. Vol. 6 no2, pp 169-182. https://doi.org/10.1016/j.foar.2017.02.001

Savic, M. and Kashef, M. (2013) "Learning outcomes in affective domain within contemporary architectural curricula." International Journal of Technology and Design Education. Vol. 23, no4, pp 987-1004. https://doi.org/10.1007/s10798-013-9238-8

Smith, LT. (2012) Decolonizing methodologies: Research and indigenous peoples. 2nd ed. London: Zed Books.

Stone-Johnson, B. (2022) "The body matters: Making the body and materials present in post-extractive urban terrains in response to issues of the Anthropocene through speculative and performative practices." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa.

Szentesi, A. (2022) "It depends on the lens: Film as experimental teaching in architectural design and design representation." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa.

Tayob, H. (2024) Going according to plan, The architectural journey of Aziz Tayob. Pretoria, South Africa: Digniti. INTERNET. https://www.polity.org.za/article/going-according-to-plan-the-architectural-journey-of-aziz-tayob-2024-10-24 . Cited 18 February 2025.

Tesla Outsourcing Services. (n.d.) What are the qualities of a skilled architect? - Tesla OS. INTERNET. https://www.teslaoutsourcingservices.com/blog/what-qualities-should-a-good-architect-possess/. Cited 11 July 2024.

Toffa, S. (2021), "SAIA many voices webinar -decolonising architectural education - South African Institute of Architects", 29 April.

Travis, J. (2012) 10 principles final BlackSpace design: Hidden in plain view. Issuu.com. INTERNET. https://issuu.com/jacktravisfaia/docs/10principlesofblackdesign. Cited 18 February 2025.

Tronto, JC. and Fisher, B. (1990) "Toward a feminist theory of caring." In Abel, E and Nelson, M (eds.). Circles of care. pp 36-54. Albany, New York: SUNY Press.

Van Schaik, L. (2020) Building a culture: Reflections on three decades of design practice research at RMIT. Melbourne, Australia: Uro Publications.

Webster, H. (2008) "Architectural education after Schön: Cracks, blurs, boundaries and beyond." Journal for Education in the Built Environment. Vol. 3, no2, pp 63-74. https://doi.org/10.11120/jebe.2008.03020063

Zerai, A., Mabokela, RO., Carolissen, R., Sader, S., Mthiyane, N. and Skahan, M. (2023) "Feminist decoloniality as care in higher education." Agenda. Vol. 37, no2, pp 1-7. https://doi.org/10.1080/10130950.2023.2255441

"Qualities of an Architect Perspectives on Strategy & Architecture" (n.d.) INTERNET. https://perspectivesonsa.wordpress.com/2012/03/10/qualities-of-an-architect/. Cited 11 July 2024.

"What are the essential skills and qualities of a successful architect? - Egemen Mustafa Sener" (n.d.) INTERNET. https://www.quora.com/What-are-the-essential-skills-and-qualities-of-a-successful-architect-Egemen-Mustafa-Sener. Cited 11 July 2024.

PART C: DISCUSSION AND CONCLUSION

7 CHAPTER SEVEN: DISCUSSION AND CONCLUSION

The primary research questions focused on the impact of autoethnographic practice-based design research within a transformative pedagogy, both on my students and myself. The findings showed that addressing the curriculum through the autoethnographic practice-based design research methods and developing a caring parallel-engaged pedagogy together had the greatest impact. This impact varied from student to student but included a more conscious, self-aware, critical, careful and confident practice in differing measures.

I start the discussion with an autoethnographic reflection on the impact of the research on my design and teaching practice, as these were the initial questions that prompted the research. Then, the ways in which students' design practices became more conscious, critical and careful are outlined. Interrelated to these changes in students' design practices, the question of whether the pedagogy was transformative in a South African context is addressed. Finally, the research's relative relevance and contributions to broader knowledge fields are outlined, and a way forward is posited as the research elicited more questions.

7.1 Autoethnographic reflection

Returning to the questions posed at the beginning of the research, the first questions answered were those on the origins of my architectural practice:

How do I know what I know?

Where and when did I learn how to practice architecture in this manner?

The autoethnographic practice-based design research revealed that the origins of my design practice lie at the intersection of my personal spatial history and a sphere of institutional and contextual influences. My childhood playfulness with fabric developed into playing with materiality, colour and texture in architectural projects. SoAP, in South Africa and FAUP, in Portugal, influenced a type of topographical architecture which explored the relationship between building and landscape.

This tacit knowledge of how I design, along with the fascinations and tropes of my practice, was unearthed through researching the artefacts of design practice and built projects. However, studying the conditions, networks, agents and relationships that came together to design, create and build those very artefacts revealed that collaboration was integral to my practice. This collaborative socio-relational way of practising meant that my design fascinations or tropes were not always foregrounded in a project. They were always present to some extent, but the collaborative process also pulled in the teams' fascinations, skills and craft. The final product was not a reflection of the architect's voice but a synergy of all voices on the team.

Why does unearthing this tacit practice knowledge matter and how can it transform design practice?

Prior to the autoethnographic practice-based design research, I was only tangentially aware of this tacit knowledge. Becoming consciously aware led me to carefully unpack my design fascinations in design practice, exploring how they might apply to a specific project within the collaborative team process[31]. This has made me more conscious, deliberate and careful in my design practice.

[31] Demonstrated in the autoethnography paper

I began the research process with a self-confessed lack of confidence in my design practice. I felt that I needed to control the design intent and process more, hoping that this confident control would result in better, more successful design projects. I had seen this total design control when working for award-winning men architects. I assumed that this was how great architecture was made.

However, through autoethnographic research, I realised that inherently collaborative ways of practising are the antithesis to total egocentric design control. Thus, I gained a quiet, subdued confidence in my collaborative design practice processes—in openness and adaptability. I concluded that a lack of bombastic confidence is, in fact, necessary for the collaborative design process. An acknowledgement that in seeking egocentric design confidence through the research, I let go of the need for it, transforming my design practice by being more open and intentional in the collaborative process.

The autoethnographic research validated my ways of designing, allowing me to realise that I needed to be true to myself and my processes rather than trying to emulate the processes of others. In many ways, I validated my design practices, processes and fascinations, recognising their difference and worth. In articulating this difference, I realised its validity. In exploring this difference through ongoing design practice, I consciously developed my inherent fascinations, critically positioned myself within a network of collaborative agents and nurtured emergent care in the processes and networks of practice.

While researching, practicing, writing and teaching, some of the self-care strategies I encouraged in students started to become part of my practice. Allowing perceived obstacles to percolate overnight and seeing them in a new light physically and metaphorically the following morning solved many research, design and writing problems that seemed insurmountable the night before.

Writing outside under an indigenous deciduous tree helped to keep me from being distracted by the messiness of my office, my phone and other people. Birdsong and neighbourhood sounds were my companions. I settled into the rhythm of writing, so different to the rhythms of practising and teaching. I wrote with the seasons, in deep shade in the summer, dappled light in spring and autumn, and bare branches in winter. I watched nests being built, broken down and built again. The landscape turned yellow and dry in winter and blossomed green in spring. I learnt to work with my own seasons and rhythms, working long hours when it came naturally and stopping for a break—to cook, join the family for dinner, sleep or walk—when my brain signalled it needed a break. I express this because architectural education teaches that architecture requires long arduous hours, little sleep and negating your own circadian rhythms. Normatively, we teach students the path to burnout, whereas we should be teaching the path to well-being (Holgate and Jones 2011; Thompson 2019; Dukhan 2022). I nurtured my careful practices much in the same way in which I nurtured careful practice in students.

I commenced this research with a sense that I would like to complete it with a design award, which would validate my design practice. I have come to the end of the research, achieving a radical acceptance of my design processes and ways of being and seeing. I have also realised that an award is an extrinsic rather than intrinsic confirmation of my value. That intrinsic validation is not dependent on others. Also, awards are, in many ways, a reflection of normative ways of practising; not only normative but also patriarchal and representative of a narrow culture where gatekeeping bias is part of the award process. Therefore, I questioned its validity, being between two colleagues' points of view. One colleague repudiates the awards process and, therefore, does not want an award, and the other acknowledges the problematic heritage but sees awards as serving a purpose to build a reputation both locally and internationally (Colleagues Focus Group 1, 2024).

However, as an educator, I realised that while my design voice is not well known, this was an advantage in facilitating students' own design voices. It meant that students could not default to mimicry and rather had to find and develop their voices. It went deeper than that, though. As a white educator deliberately refraining from elevating my design voice as an example to follow meant that I confirmed Vice's (2010) research that silence, the silence of my design voice, was a useful decolonising strategy.

What was the relative relevance of my autoethnography? Through autoethnography, I situated myself within a culture of practice and pedagogy. The practice relevance was personal, unearthing tacit knowledge of my design practice, developing and exploring it. This echoed research that advocates for the development of design intuition through autoethnography to critically situate the architect within their practice context (Schouwenberg and Kaethler 2021).

7.2 How did students' design practice change?

How the autoethnographic practice-based design research and the parallel-engaged pedagogy changed students' design practice was assessed through cross-validating qualitative and quantitative data. The initial qualitative data was the architectural work completed in the design projects through the year, but principally the two Manifesto projects. The quantitative data were the T-SEL surveys, which served to provide a class-wide lens. The focus groups provided the final qualitative lens. Conscious, critical, careful practice was developed in various interrelated ways and to varying degrees in different students. One case study shows this interrelation clearly. This student commenced the year with her architectural intentions responding to the ancestors, people and the environment in her Manifesto: "I want my work to speak for me, my ancestors, the environment and the people and places I design for… through the lens of life experience, about my deep and meaningful connection to the environment, to make my work a testament of people, real people, everyday people." (Student4774-2023, Manifesto)

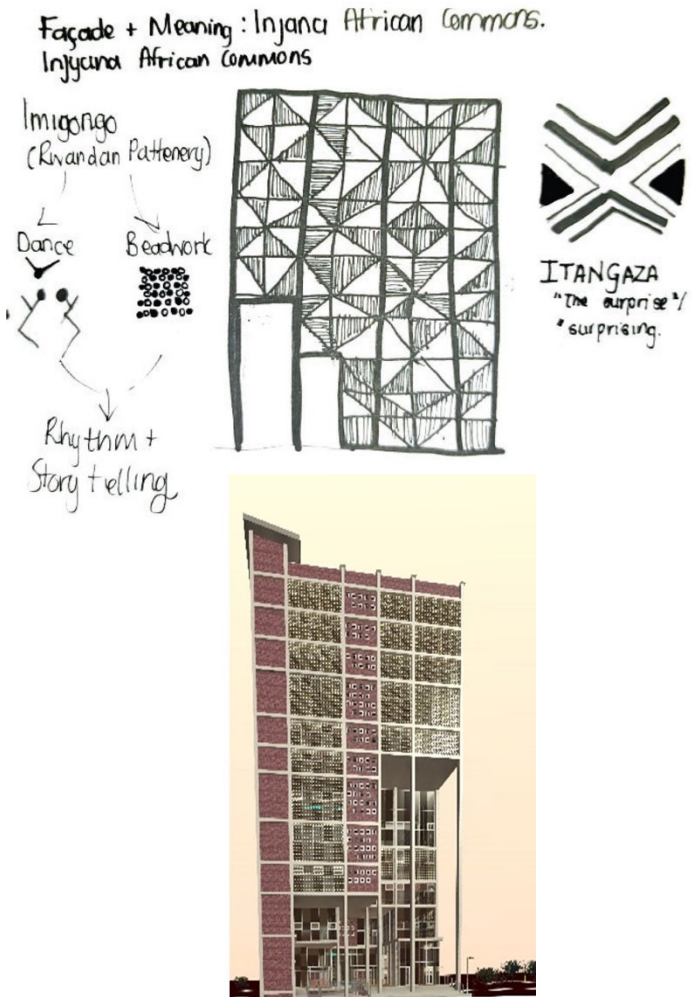


Figure 7.1 Ritual and tradition (an echo of the ancestors) expressed through brickwork rhythm in the façade of the Injana African Commons Project (Student4774-2023)

Her conscious awareness of these three interlinked themes in her work through the Manifesto project led to a sensitive exploration, unpacking what this meant in spatial terms in the design projects throughout the year, as is seen in Figure 7.1. This student concluded the year by reflecting on this detailed unpacking of history and ancestors in the design and on how she practised more ethically, carefully and critically.

> "Ritual and tradition are central to my critical practice… to reimagine an African built environment that makes space for all the stories that shaped the current version of Africa… [Figure 7.1]. This year, I have given myself the challenge of working with rest as an intentional and integrated moment in my design process. Given the work ethic built in architecture school, making time for rest can often be an afterthought. The moments where I rested were moments where I was able to really take care in what I designed. A crucial part of my careful practice is about transmittance and archive of memory… toward forgotten histories and use them as a way to reimagine what the African built environment can be." (Student4774-2023, Final Reflective Essay).

This student noted the impact of the third-year pedagogy through her focus group comments. She was "drawn to inspire like [she] was inspired" and had grown in confidence to feel that she could "culturally defend [her] opinion" (Student4774-2023, Focus Group).

It was a very specific thing to say, not only defend her position but "culturally" defend it. It meant that her worldview had changed but she still felt rooted in her culture. In a later interview (Interview 008, September 2025), this student confirmed that architectural education had initially caused a split in her being, worldview and identity. She would be a certain way in the institution and another way in her community. However, this ontological split had resolved itself into a hybridized ontological becoming, with values from both worldviews coming together into ways of being which could still relate to both worlds without splitting. She was more assertive in her community, but always within the bounds of respectfulness and asserting others' dignity. She had also brought her communal values to the institution, creating a supportive community when she did not find one. Thus, this student not only developed conscious, self-aware practice but also critically positioned herself within her community context and developed caring strategies for her community's archive of memory and her design practice.

However, not all students developed a pronounced conscious, critical, careful practice. In the focus groups, students spoke of what had been the greatest impact on their practice, which differed from student to student. The following sections unpack how particular students developed a more conscious, critical, careful practice.

7.2.1 Developing conscious practice

In student focus groups, conscious practice and self-awareness were among the most commonly attributed impacts of the third-year curriculum and pedagogy. Students especially noted how projects one and five, the Manifesto and

Manifesto Revisited, which contained the autoethnographic practice-based design research, were foundational to how they see themselves as designers and the top thing they took away from third-year:

> "… everything ties back to the Manifesto project and my earliest spatial memory; these made me who I am". (Student Focus Group 4; 2024)

> "The Manifesto. I constantly think about that project because I always think about what I wanna [sic] do, what type of architect I wanna [sic] be, and what I presented in that manifesto is literally what I wanna [sic] be and do…. So that project is the foundation for what I want to achieve in life." (Student Focus Group 3, May 2024)

> "I think project one was definitely valuable in sort of, uh, exercise in self-awareness… Project[s] one and five [have], um, continued to pay dividends. I think that, that idea of self-awareness, so what you like and what you tend to go for in terms of design response, um, is nice to be able to pay attention to and either lean into it or go against it." (Student Focus Group 2, May 2024)

The triangulation of self-assessment, self-reflection and external verification assessed whether reflective practice-based design research methods improved and supported students' conscious practice. Firstly, in the Manifesto project's *Personal Spatial Narrative*, students self-reflected and explored the spatial sensibilities they brought with them as they entered the design studio. Secondly, through the Manifesto project's *(De)constructed Archive,* students reflected on their past design practices, unearthing tacit fascinations. Lastly, the Manifesto Revisited reflective essay at the end of the year prompted students to reflect on the process and their growth through the year.Students formed *Personal Spatial Narratives* by exploring personal spatial memories through drawing, writing, discussing and reflecting. In this way, they became more conscious of the origins of their ways of seeing, being and designing.

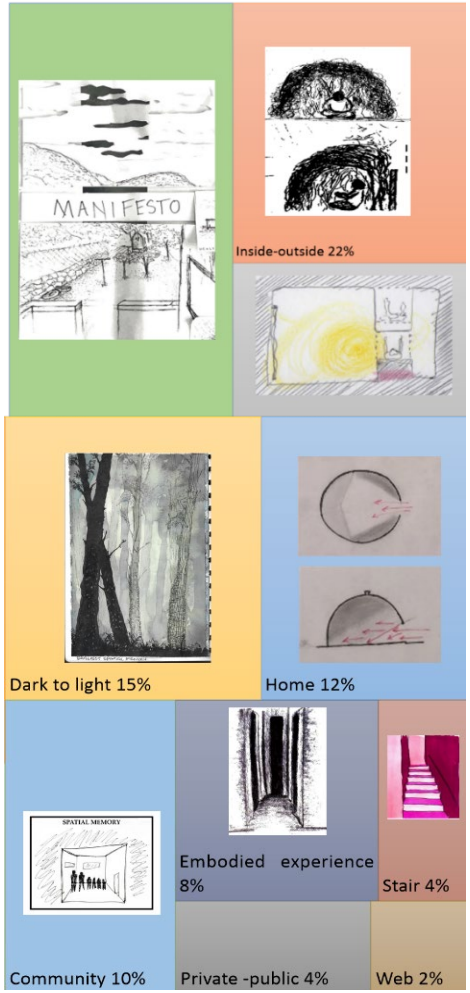


Figure 7.2 The breakdown of Manifesto themes (Author's construct)

This was a meaning-making process where "personal stories find new ways of connecting past, present and future selves", evoking and developing psychological resilience by locating personal and social identities within a social context (Thompson 2016, 2).

The *Personal Spatial Narrative* validated students' background and past lived experiences as generative for design practice, thus developing consciousness of the student's own design voice and revealing the diversity of design histories within the class. This created, much like Bazana and Mogotsi (2017, 11) did, "less-threatening spaces where students [could] interact with and learn about each other". When assessing students' *Personal Spatial Narratives*, some common themes emerged (as depicted in Figure 7.2): 35% were about nature or landscape, 22% about the threshold between inside and outside, 15% about light or scale (small to big), 12% about home, 10% about community, 8% about embodied experiences that centred the person, relationship or culture rather than the space or place itself, 4% included stairs or private to public that did not feature the inside-outside threshold and 2% were about the web of our world.

These were all, in some ways, archetypal experiences of place, revealing the students' fascination with a particular archetype

Although there **were common themes,** it was clear that each student approached these archetypes in **different ways**, **dependent on their personal ways of being and seeing**. Student experiences of nature depended on their rural or urban upbringing. Some students (26%) expressed spatial memories of nature mediated by urban structures, buildings or thresholds, whereas only 3% of students' spatial memories included an unmediated rural experience of nature. In the same way, 10% of students had spatial memories of communal living, yet this communal living was differentiated between rural traditional communal living and high-density urban communal living. Similarly, the light/dark theme exposed the rural/urban schism, with students either speaking of light mediated by built structure or mediated by nature.

However, some themes, such as scale, shared very particular yet similar spatial memories. Students whose spatial memories were rooted in compact, tight spaces shared by many family members spoke of scale and spaces within spaces. These students' understanding of space was very different to students who did not have a lived experience where private to public thresholds were constantly contested and negotiated.

For students where a built place was drawn as their personal spatial memory, these were mainly memories of their home or a grandparent's home. The only other building typologies that featured in personal spatial memories were religious or spiritual buildings. Through the personal spatial memory exercise, students gained perspectives on how their particular ways of seeing, being and knowing about space and architecture were different and yet similar to those of other students. Thereby, the personal spatial memory narrative developed a conscious, self-aware practice within a diverse classroom. Validating these different lived spatial experiences in the context of South Africa built a multi-versity or "pluriversity" (Mbembe 2016, 36) as opposed to the colonial hegemony of the uni-versity that elevates the singular viewpoint.

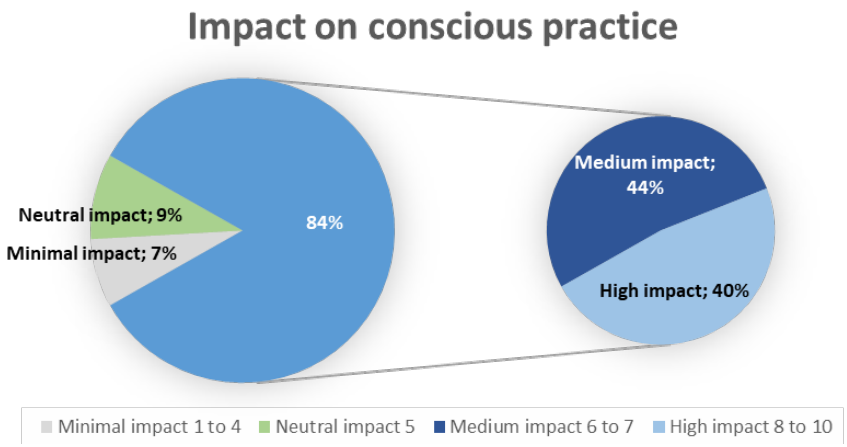


Figure 7.3 Pie graph showing assessment of Manifesto Revisited, indicating the assessed impact on conscious practice (Author's construct)

Conscious self-awareness, therefore, develops not only the individual student but also the institution.

Students' newfound self-awareness from the *Personal Spatial Narrative* was initially cross-validated through the social reflective dialogue and further validated by the final reflective essay at the end of the year, the Manifesto Revisited. The social reflective dialogue compared the *Personal Spatial Narrative* to the *(De)constructed Archive* to see if the archetypal spatial fascination revealed in their lived spatial experience was also present in a significant way in the archive of their past design projects.

The Manifesto Revisited reflective essay asked students how the fascinations and roots of their ways of seeing unearthed at the beginning of the year were explored in their design projects during the year. In this way, they developed self-awareness of their lived spatial experiences and understood how this impacted their design practice. I assessed the impact on conscious practice when marking these Manifesto Revisited reflective essays. The essays revealed that 84% of the class demonstrated a medium to high impact on their conscious practice. However, only 40% of the class was judged to have demonstrated a high impact on conscious practice (Figure 7.3).

One student wrote in their Manifesto Revisited reflective essay:

> "Through the manifesto project, I was able to discern exactly where that gut feeling came from, what I was trying to accomplish and how I could do it better, or even how I could do something completely different." (Student4782-2022, Final Reflective Essay)

In the Honours Theory course a few years later, this same student having gained a conscious self-awareness of their ways of seeing and being and how these were created in part by the spaces they have interacted with and experienced throughout their life, wrote:

> "The human psyche and the spaces one uses are intertwined, always in constant dialogue. They can influence emotions, actions, likes and dislikes. Many aspects of a person's personality can be linked to the spaces they have used throughout their life." (Student4782-2024, Manifesto, Honours)

Another student noted in the focus group discussions that the Manifesto project had felt more like "manufacturing interests rather than unearthing them… [which] defeated the purpose… but now [two years later], the value of Project[s] 1 and 5 [Manifesto and Final Reflective Essay] pays dividends in self-awareness and design response… seeing patterns re-emerging in Honours" (Student6755-2022, Student Focus Group 3, 2024).



Figure 7.4 Personal Spatial Memory Drawing: My bunk-bed within the Manifesto Poster (Student6755-2022)

Figure 7.5 Making Meaning Sculpture: 'Duality'(left) and a perspective of the student's University Commons design project (right) (Student6755-2022)Figure 7.6 Personal Spatial Memory Drawing: My bunk-bed within the Manifesto Poster (Student6755-2022)

In his Manifesto, this student's *Personal Spatial Memory Drawing* was generative for his conscious self-awareness (Figure 7.4).

> "I am sceptical to draw parallels, but one could see how my spatial memory is linked to my innate desire to separate public and non-public... one learns to respect what is private. Boundaries are set using very architectural means: level changes, thresholds, [colour], position, time of day, size, materials." (Student6755-2022, Manifesto)

In his final reflective Manifesto Revisited reflective essay, he spoke of having grown "aware of [his] biases and inclinations" in the Manifesto. He was

> "supervising [his] intentions while designing… [A]rchitecture should reflect the needs of all conscious beings around it and the effects of the world it is in, limiting self-expression of the architect within the building." (Student6755-2022, Final Manifesto Revisited Essay)

Thus, he showed a high level of conscious self-awareness in his design practice.

However, he then confirmed that materiality was the principal architectural means by which he explored the thresholds of public



Figure 7.7 Making Meaning Sculpture: 'Duality' (left) and a perspective of the student's University Commons design project (right) (Student6755-2022)

and private space, attributing an elective course in his second-year, Making Meaning, presented by Dirk Bahmann (2022), opening him up to sculpturing, materiality and post-humanist thinking. Figure 7.5 shows his sculpture produced in second year in the Making Meaning course (left) compared to a University Commons design project in third-year (right). The student described contrasting the public and private parts of the building:

> "The architectural expression and materiality of the ground floor were like that of a typical residential home. While the private programme put forward a more commercial, unique and austere façade." (Student6755-2022, Final Reflective Essay)

For this student, the public-private theme unearthed in the Manifesto was explored through materiality in his design projects, albeit with a high degree of self-awareness in terms of its relevance to the context. During the focus group discussion, he noted that the two years after completing the third-year reflective exercises were an important first step in self-awareness and conscious design practice. This student, having gained conscious self-awareness of his ways of seeing and being in third-year, endeavoured to quieten his designer's voice when he returned to university to complete his Honours degree, as evident in his Honours Theory Manifesto:

> "We believe architecture should reflect less and less self-expression of the architect… simple architecture denounces the ego." (Student6755-2022, Honours Manifesto)

Following this student's trajectory from the Manifesto project through his design projects during the year, the Manifesto Revisited reflective essay and the Honours-level focus group discussions, it is clear that the impact of the pedagogy lies partly in reinforcement and repetition of conscious self-awareness on different levels in different projects over a longer period of time.

This student's development of a more conscious and self-aware design practice echoed the development of a more conscious practice in most students. The T-SEL surveys of 2023 demonstrated that the number of students who reported self-awareness as easy rose by 10% to 81% of the class (refer chapter 3.2.1).

The Manifesto project's *Personal Spatial Narrative* and the *(De)constructed Archive* required a pedagogy that engaged with students' particular ways of seeing and being in a validating, non-judgemental way. In architectural education, it is not often that critiques are non-judgemental and that students' particular ways of seeing and being are valued. This might not seem empirically important in the education of an architect, but in the context of South Africa, it could be radical. To validate students' ways of seeing and being means to value diverse voices and spatial experiences. It also means that we, as educators, consciously let go of the expectation that all good designers design in the same way. Especially in the shadow of receding colonialism, we created space for an architectural cultural expression which forges new paths.

The relative relevance of this research on conscious and self-aware design practice lies not only in personal student development within a decolonial institutional imperative, contributing to the "pluriversity" (Mignolo 2011; Mbembe

2016) but also in methodological innovation. As previously discussed (refer to Chapter Five: Paper 2), the adaptation of practice-based design research methods to an undergraduate curriculum and younger cohort of students extended postgraduate practice-based design research by Van Schaik (2004; 2008; 2013; 2016; 2019; 2020), Blythe (2013; 2016) Blythe and Stamm (2017a; 2017b) and Vaughan (2014; 2017) at the RMIT and Adapt-R, as well as that of Noble (2018a; 2018b; 2024) at UFS. In adapting and extending these practice-based design research methods to undergraduate study, the theoretical groundwork laid in practice-based design research by Cross (1982; 1993; 1999), Archer (2012), Frayling (2012) and Schön (1984; 1985; 1987) was instructive.

The *Personal Spatial Narrative* method was introduced in the process of adapting reflective archive methods from these postgraduate programmes to undergraduate students whose archives were limited. The *Personal Spatial Narrative* method was an innovation that arose from the pedagogical action research process, as well as autoethnography. It proved to be instrumental in helping students understand their design processes and fascinations better. The importance of the *Personal Spatial Narrative* method in developing architectural students' design practices is confirmed by other researchers who explored similar methods in architectural and arts education (Daitch et al. 1996; Marcus 1992; 1995; 2014; Ten Brink et al. 2022). It also proved significant in validating diverse spatial experiences and histories, thus contributing to building the "pluriversity" (Mignolo 2011; Mbembe 2016, 36).

7.2.2 Building critical practice

The "pluriversity" (Mignolo 2011; Mbembe 2016, 36) was not only built through validating diverse ways of seeing and being but also through critically situating these different viewpoints within the institution. Thus, critical spatial practice (Rendell 2020) was supported by diffractively assessing influences on the students' design practice, thereby

positioning the student's own design habitus in relation to the institutional habitus[32] and to the greater architectural discourse.

Critical practice was more difficult to assess than conscious, self-aware practice. Critical practice asks where I stand in relation to another, my community and my institution. Therefore, the social dialogue with students discussing their positions with one another was where critical practice was first developed. The nature of the dialogue was twofold. Firstly, students reflected inwardly on their work, unearthing their fascinations across projects. Then they diffracted outwardly, positioning themselves in relation to other students, other architects and within a larger architectural discourse and the institution. This dialogue thus developed conscious practice, with the student gaining new insight into their practice, but also critical practice through situating themselves within the larger discourse and in relation to the institutional habitus.

As the practice-based design research exercises embedded in the Manifesto project were adapted from postgraduate programmes where mid to late-career architects reflect on their established practice, the question of whether these same exercises would be fruitful for undergraduate students needed to be answered. A tutor mentioned that they thought students were not sufficiently mature at the third-year level to gain much from the Manifesto project. Yet, students revealed in the focus group discussions how the Manifesto project was a valuable exercise in awakening self-awareness and how it continued to pay dividends in their 'year out'[33] working experiences.

[32] 'Habitus' (Bourdieu 1977) a term meaning 'Cultural capital' "broadly defined as a representation of one's cultural value, and includes a variety of traits and behaviours, such as posture, dress, language, preferences, academic credentials and social networks" (Payne 2015, 10)

[33] At SoAP, the first undergraduate degree, the Bachelor of Architectural Studies (BAS) is three years. After that, students need to do a work experience year, colloquially called the 'year out', before they can apply for Honours. Honours entry is depedent on a year's work experience, as well as a minimum mark of

> "Doing it [Manifesto project] in third-year definitely does have value, but perhaps you can't, um, interact with it fully as you envisioned. Um, that being said, I think it has tremendous value being taught in third-year because then you can start… postgrad with some sort of self-awareness of your interests." (Student Focus Group 2, May 2024)

Even though some students admitted that the relevance of that project was only seen in hindsight, they all agreed that it was important to begin the journey of self-exploration before they graduated from their first degree. It equipped them with tools to comprehend where they wanted to fit into the professional practice environment, allowing them to critically position themselves within it.

> "I think it helps… what kind of employees you look for... it just helps you steer your career a bit more.
>
> Yeah. I think kind of similar to that point is, it gives you a starting point of where you think that you want to be or would like to head in the direction of." (Student Focus Group 2, 2024)

In essence, the two Manifesto projects not only supported a more conscious and self-aware design practice but also fostered a more critical practice in students' engagement with the institution and in professional practice. The impact of this critical engagement developed a more open studio environment. During the focus group discussion, some students reported that third-year built their resilience and confidence to speak up and critically engage.

One student volunteered for a class representative position when she realised the lack of racial representation, "I felt I needed to represent persons of colour" (Student Focus Group 1, 2024). It was only in third-year that she gained

60% for Architectural Design and Theory in third-year BAS, and an overall average above 60%. Attaining an average of 65% or more and 65% in Architectural Design and Theory in third-year BAS gives students automatic entry to Honours.

sufficient confidence to put herself in that position and she had the necessary critical understanding of the institutional habitus that prompted her to claim that leadership role. Thus, not only was she able to critically situate herself within the institution but she also critically engaged with institutional processes on behalf of other students of colour.

Another student explained how he had contested white students' superficial readings of a project in Soweto, as he felt that he understood the broad range of social contexts having grown up there (Student Focus Group 4, 2024). Design and research projects had a wide range of sites, specifically to encourage students to rely on each other's embedded understanding of different contexts. In this way, students who might be seen to have little institutional cachet find themselves leading study groups due to their expertise and deep understanding of a particular context. The validation of different ways of being and seeing is extended to be a resource for all students to gain an understanding of a particular context with which they might not be familiar.

Yet another student reported that the Manifesto project helped them understand themselves better, allowing them to critically push boundaries within their practice, the institution and the work environment (Student Focus Group 3, 2024). Critically situating themselves within the institution and in relation to practice was one aspect of the process of building critical spatial practice.

Within their design practice during the year, students were encouraged to question and critically reassess the site, programme or any established norms associated with the design project briefs. One of the design projects was situated within the university, which required students to critically re-evaluate institutional patterns. Another, situated within an inner-city urban context, asked students who they were designing for and how to design for multiple and competing users. In all of these cases, students were expected to critically engage with their position within the brief, whether they were outsiders or part of a dominant or peripheral user group.

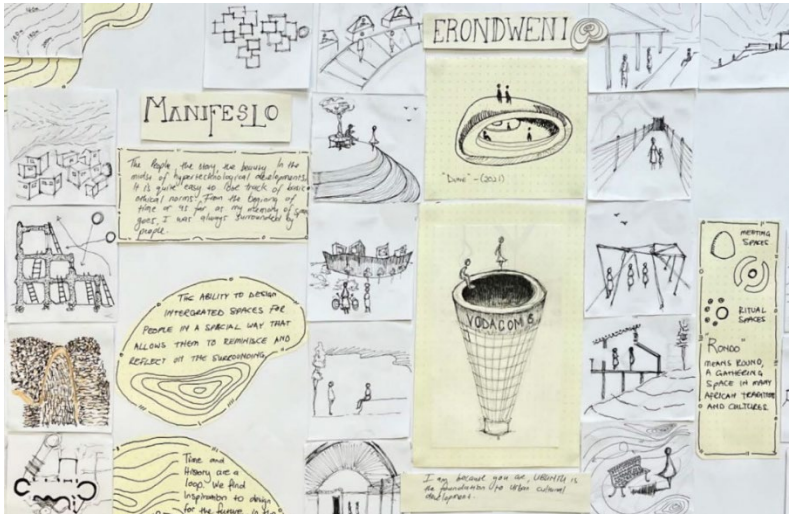


Figure 7.8 Manifesto Poster with the Personal Spatial Memory Drawing of Ponte in Hillbrow, Johannesburg, surrounded by sketches of people (Student 7260-2023)

Students questioned whether the design fascinations unearthed in the Manifesto project were generative for a particular project or if any design bias that was unearthed needed to be countered in their project designs.

The Manifesto Poster of one student spoke of the need to centre people and ethics at the centre of architecture, drawing from Ubuntu (Figure 7.6).This student's personal spatial memory was of living in Hillbrow, Johannesburg, an inner-city neighbourhood with one of the highest population densities in Southern Africa.

His *Personal Spatial Memory Drawing* was of Ponte, an iconic high-density residential round tower building. "I am because you are, Ubuntu is the foundation to urban cultural development"(Student 7260-2023, Manifesto *Personal Spatial Narrative*). He spoke of always being surrounded by many diverse people: "abantu/ batho/ wanthu/ mense/ vhubu/ tawo/ vanhu/ watu/ eniyayi/ iwi…" and equated the communal spirit of Ponte with "Erondweni. A round hut in the rural areas, where meetings of importance are held. I had an urban taste of that with my earliest spatial memory. The People, the story, the beauty… To prioritise the connection from one human to the next… My name is your name and my mother is yours… Our differences are

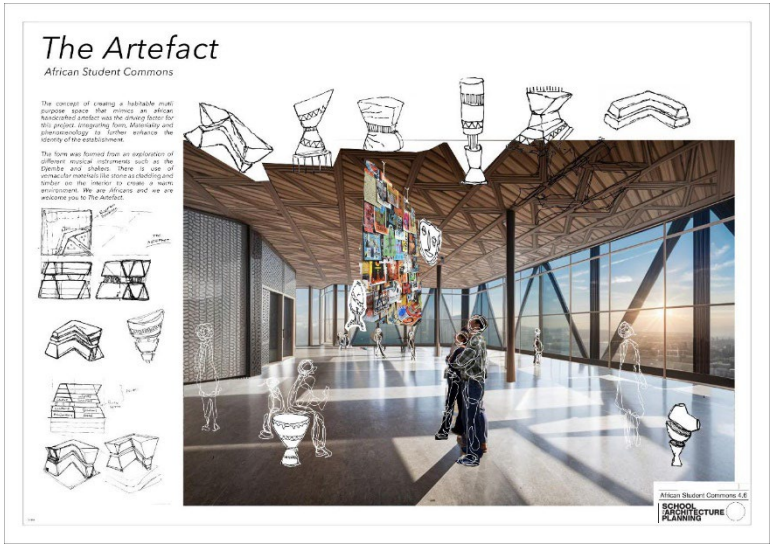


Figure 7.9 The Artefact student design project, which explored music and African drums as the connection between African cultures (Student 7260-2023)

but a stepping stone and doorway to solutions." (Student7260-2023, Manifesto *Personal Spatial Narrative*).

He asked what made an African building, drawing from his experiences growing up among people of multiple African backgrounds. He explored the spatial embodiment of the similarities and core values across diverse African cultures in his projects (Figure 7.7). In his final Manifesto Revisited reflective essay, he spoke of critical practice as an ethical practice that centres labour, employment and local materials and unpacked "an African identity outside of the colonial point of reference" (Student7260-2023, Manifesto Revisited reflective essay). This student consciously explored his identity, critically positioning himself within the diverse communities of his projects. He asked critical questions about post-colonial African identity and explored how this could be expressed through architecture. He gained critical practice through understanding the subjective ways in which his current and past context determined his knowledge of design, displaying Haraway's (1988) critical reflexivity and "situated knowledges". However, he also went further, displaying some qualities of Rendell's (2020) "critical spatial practice" by exploring the nature of collective identity, seeking to posit a new future expression of African architecture.

This relational view of critical practice, with students positioning themselves within their communities, was also analysed through the T-SEL surveys. Critical positioning was assessed through the competencies of Social awareness, Relationship skills and Responsible decision-making, which more than 70% of the 2023 third-year students found easy in the T-SEL Self1 survey. This increased to above 80% in the 2023 T-SEL Self2 survey, demonstrating the impact of the pedagogy.

The evidence from the T-SEL surveys, focus groups and student projects indicates improvement in critical practice, especially in relation to the student's positionality and agency in the institution and in engaging with the socio-economic and spatial context of projects. This was built through integrating Haraway's (1988) "situated knowledges" into the architectural curriculum and projects, with students gaining conscious and critical positionality. This built confidence in the student's ability to defend their views and challenge institutional and project norms, which correlates with research by Cross and Johnson (2008, 305) that to successfully navigate academic life, students require an "openness to being challenged, or to having enough self-confidence to challenge or defend one's view and actions". This is particularly relevant in the South African higher education context, which is slowly transforming from its colonial heritage. Thus, the research in this thesis confirmed and correlated with research in the South African higher education sector seeking to decolonise institutions of higher learning, critiquing the Eurocentric politics of knowledge within these institutions (De Sousa Santos et al. 2022).

Building critical practice in architectural students also extended the research done in architectural education, seeking a critical and transformative pedagogy (Boyer et al. 2011; Salama 2021; Bell 2022), particularly research on transformative architectural pedagogy in the South African context (Luckan 2020; Olweny et al. 2021; Gachago et al 2024). It also extended research exploring transformative strategies for first-year undergraduate students at SoAP

(Janse Van Rensburg 2016; Szentesi 2022). The findings of this research also built on the foundations of critical spatial practice (Rendell 2016; 2018; 2020; Schalk, Kristiansson, and Maze 2017; Petrescu 2007; Stratigakos 2012) by developing pedagogical strategies which support a more critical practice in students.

7.2.3 Nurturing careful practice

One cannot teach careful practice without embedding and demonstrating care within the pedagogy. This pedagogy of care dominated some focus group discussions, most noticeably of women, particularly black women:

> "We were genuinely cared about… [You asked us] What can we do to make it easier?" (Student Focus Group 1, 2024)

Students spoke of this care as general catchups in class to ascertain if students were coping with the pace or complexity of a project or with the coordination between courses. This level of consideration and support was reported as being instrumental in building their confidence and in successfully completing their degrees.

Within this pedagogy of care, students were encouraged to practice care with themselves through self-care, with others through collaborative practices and social use mappings, and with the environment through material creative reuse practices, energy-efficient designs and care for processes of building and labour.

Care in the pedagogy was a notable difference from the previous pedagogy, with one tutor who had taught at the third-year level before 2019 noting that we "were more empathetic. I don't think we had boot camps in any of the other years… put time aside to, first of all, identify the struggling students… and have a programme for giving them an

opportunity to improve themselves... extra attention… I think that the empathetic aspect in what I thought I was seeing helped to pull up more students" (Colleague 07Interview 005, 2024). This tutor further noted in the interview that the empathic and caring ways in which third-year was taught from 2019 were markedly different from the previous lecturers, who "didn't sort of cry over [spilt] milk over students that were just not getting it… [and] let the chips fall where they fell" (Colleague 07 Interview 005, 2024).

The empathy aspect of the pedagogy was described by one student as:

> "I don't know how to put it, but I actually genuinely felt like you, you know when, a proud mother is like, I want this to be the best human being that can be out there. I felt like that. But with the lectures, just by the effort, you're putting in extra credits like you were showing up, and for me, I feel like you get me… I felt like as a student, because you are showing up, I also had to show up, and I should. So that really I don't know emotionally for me that really just put me in a place where I'm like, I feel safe." (Student Focus Group 1, 2024)

Even though the pedagogy of care was proven in the focus groups to be transformative for women students, particularly for black women students, it must be noted that care was not implicitly tested in the T-SEL surveys. The T-SEL survey metrics of self-management, emotion regulation, university work and goal management were considered as related to self-care in practice. These sections of the survey included questions that could be construed as either testing self-discipline or self-care:

-Working on things even when I don't like them
-Doing my university work even when I do not feel like it
-Getting through something even when I feel frustrated
-Thinking through the steps it will take to reach my goal

-Staying focused even when there are distractions

-Being prepared or planning ahead

These self-management metrics were initially the lowest of all metrics, with less than 50% of the class reporting these as easy in the 2023 T-SEL Self1 survey. However, by the end of 2023, all but Emotion Regulation had become positive. Students in focus group discussions attributed this to the pedagogy of care. In 2023, the discussion in the design studio and lectures around self-management was about self-care; therefore, students understood the three self-management competencies sections as measuring self-care.

One of the outcomes of the first T-SEL Self1 survey in 2023 showed that most students felt overwhelmed, struggling with self-management of their university work and emotional regulation. Yet, they also reported difficulty in sharing what they felt with others and talking to a lecturer or counsellor about their problems at university. Essentially, even though they were struggling, they were trying to cope on their own and not reaching out for help. The group counselling session that followed was beneficial, with students reporting that it was good to know that they weren't the only ones feeling overwhelmed. Students shared their concerns and struggles while the counsellor led the discussion and guided them with possible coping strategies. In a later focus group discussion, students reported that the counselling session left them feeling more empowered to reach out for help and also able to be more open to each other and educators about their struggles:

> "… people that didn't actually feel confident enough to go to the CCDU [Counselling and Careers Development Unit], and you brought it to them in an open space [for] everyone… I really do think it helped because also, for the first time in my life, I'm like, help is not a bad thing… when you brought the CCDU, I felt like a lot more people that maybe were too scared to take that… you introduced it to them. So, for me, that played a huge role." (Student Focus Group 1, 2024)

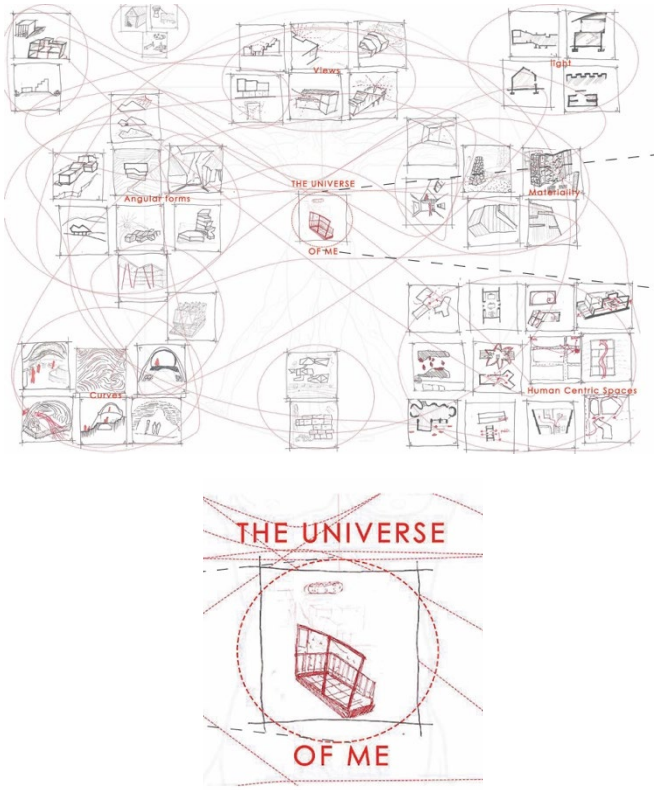


Figure 7.10 Manifesto Poster and detail of Personal Spatial Memory from the centre of the poster (Student 4070-2022)

The class counselling session resulted in an openness to seek help and the realisation that students weren't alone in their struggles, which contributed to better self-managing university work. This improvement in university work was confirmed in the T-SEL Sefl2 2023 survey. Thus, the teaching team demonstrated care for the students through the survey's implementation and subsequent adjustments to the pedagogy, including the counselling session.

This encouraged students to think of their design practice as an act of self-care and social care and a way to build careful relationships and become more socially aware. This increased attention to care for themselves and their design practice was personally transformative.

This personal empathic transformation was seen in a student whose spatial memory was generative for design practice. The student recalled following the Soweto Soccer City Stadium's construction from his balcony at home. His Manifesto Poster centred this memory and linked it to his design projects through the principles of views, light angular forms, materiality, curves and human-centric spaces (Figure 7.8).

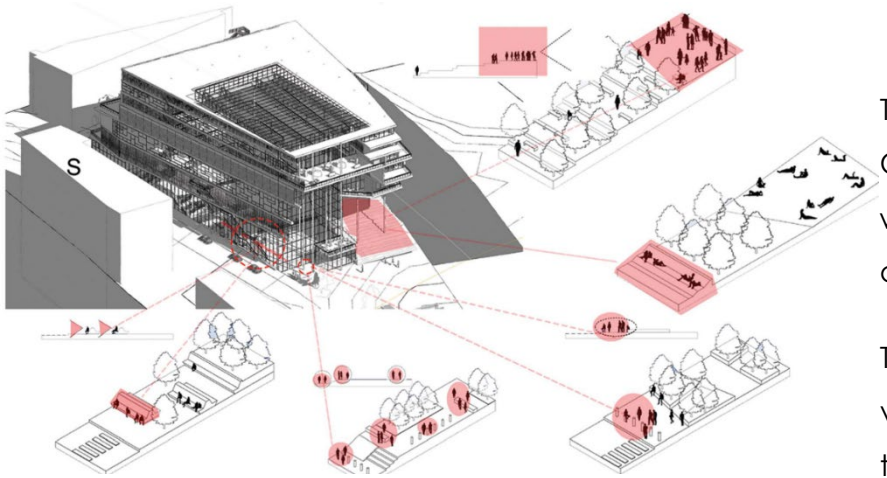


Figure 7.11 Drawing indicating the different human activities designed for in the building envelope – the threshold between the campus and the building (University Commons design project, Student4070-2022)

> "My spatial memory was the view of Soccer City Stadium from my balcony. Whenever I was bored, I used to always go stand on my balcony to track the progress of construction." (Student 4070-2022)

These spatial principles were explored in his third-year University Commons design project, where the public thresholds of the building were designed as spaces for viewing the city, observing student activity, chatting with friends, and relaxing or learning.

These human-centric spaces are seen in Figure 7.9. The large internal volume, flooded with light, was reminiscent of his "love for stadiums… the space between Soccer City's façade and grandstands" (Student4070-2022).

He noticed "certain patterns in [his] work" (Student4070-2022, Manifesto Revisited reflective essay). Years later, in a focus group discussion, he confirmed that the Manifesto was the "top thing [he] took away" from his third year (Student4070-2022, Focus Group 4).

This student not only developed conscious self-aware design practice but also empathy:

> "In any form of design, the human comes first, not just through functionality but also through mental well-being; thus my design philosophy is that of being conscious as to how spaces can affect all aspects of human life including mental wellbeing." (Student4070-2022, Manifesto Revisited reflective essay)

The findings of this research echoed research that foregrounds the ethics of care as central to "our conceptualisation of relations in higher education and contemporary society and the place of women generally, and black women in particular" (Zerai et al. 2023, 2). The student's responses to the pedagogy of care confirm research indicating care in architectural pedagogy is needed to counter the often toxic overworking culture of architectural studio education(Holgate and Jones 2011; Duong and Brew 2021; Rice et al. 2021; Stead et al. 2022).

The ethos of care in architectural pedagogy also supported the recent discourse of care in architectural pedagogy by Frichot et al. (2022), Holgate and Jones (2011), Olweny et al. (2021), Duong and Brew (2021), Stead et al. (2022) and Rice et al. (2021). The current research further extends the feminist discourse on care in architecture and architectural practice by Krasny and Fitz (2019), Rawes (2013), Mattern (2018), Imrie and Kullman (2016) and Cohen and Fenster (2021), as well as the phenomenological care of Pallasmaa (2016).

7.2.4 A return to confidence

What is meant by confidence in this thesis? Confidence in design practice is akin to self-efficacy—one's belief in the ability to succeed in specific situations and accomplish certain tasks (Bandura 2012). Bandura (2012) noted how perceived competence impacts motivation and performance. Therefore, confidence in design practice is the

perceived ease or difficulty of practice or the various tasks associated with practice. The term confidence is used, rather than self-efficacy, as this was the term students commonly used during the focus group discussions.

One of the main findings confirmed by the student focus groups was that third-year had built the student's confidence. This was a full-circle moment, linking to the start of the research.

Initially, this thesis was entitled 'Building confidence'. The research started from a personal place; a lack of confidence in my practice echoed the crisis of confidence among women, especially of my generation (Ahmed 2016; Gill and Orgad 2017). However, when asking a class of third-year students early on in the research questions about their confidence, the crisis of confidence appeared to be a thing of the past, or was it?

The initial raw data results of the 2023 T-SEL Self1 and the T-SEL of Others surveys, suggested that students' perception of others was much greater than their self-perceptions. Despite this data later being shown to only be statistically significant in the item '*Reaching goals that I set for myself*', it did initiate an informal class discussion.

During the discussion, one student noted that no matter how overwhelmed they felt, they had to project confidence in the design studio they did not necessarily feel. Most students agreed with this statement. Both the surveys and these statements confirmed that the confidence students initially projected when asked whether they were confident in their practice abilities was, in fact, false. Students in public were projecting a confidence they did not necessarily feel.

So, did students' confidence levels improve over the course of the year?

At the end of the 2023 academic year, the T-SEL Self2 survey results were collated and compared to the initial T-SEL Self1 and T-SEL of Other survey results. Generally, the raw data of the T-SEL Self2 survey demonstrated improved

outcomes across all competencies compared to the T-SEL Self1 survey (Figure 3.16). This included a marked improvement in Self-management: University work. Also, interestingly, the gains in Self-awareness, Social Awareness and Responsible decision-making exceeded even the seemingly high perceptions of the rest of the class in the T-SEL Of Other survey. Unfortunately, student's Self-management: Emotion regulation was still in negative territory.

However, these improved outcomes across all categories were not shown to be statistically significant. Only in the Self-management category did 50% of the survey items show a statistically significant improvement (Figure 3.16). Nonetheless, this seemed to suggest that students' confidence had increased, which was also confirmed in the subsequent focus group discussions.

In a thematic analysis of the focus group discussions, it was clear that increased confidence was the most commonly reported impact of the third-year pedagogy on students. However, this confidence varied across focus groups. Interestingly, confidence was largely absent in the discussion with white men students. Looking at the 2023 T-SEL Self1 surveys, 67% of white men found university work easy or very easy, which can be inferred as displaying confidence in their abilities. Therefore, it seemed clear that the reason for the absence of confidence in the discussion with white men students was that they already had a high degree of confidence in their abilities to manage their university work, including design practice, even before third-year commenced. In the statistical analysis of the Self1 survey, only three items out of forty showed a statistically significant difference in terms of race, one of these was in Self-management: University work – '*Being prepared for project presentations*' where white students reported a much greater ease proportionally with this item. However, as white men only made up 9% of the class, their low numbers potentially skewed the data. Nonetheless, the perception that white students arrived at university more confident than other students came through in the focus groups,

> "As a black woman, you needed to come into confidence, whereas the white counterparts seemed confident, it seems natural to them." (Student Focus Group 1, 2024)

International research has shown that historically, men students at higher education institutions had greater confidence. Yet, recent studies have shown that women students' confidence has caught up as the demographics in higher education institutions in the United States and United Kingdom have shifted to a majority women representation:

> "Female students are more confident… more conscientious and more agreeable but have higher neuroticism scores" and yet are "less confident than their male peers in talking about their studies." (Sander and De La Fuente 2020, 10)

However, while Sander and De La Fuente's (2020) study only considered gender, the T-SEL surveys and subsequent focus group discussions conducted at SoAP reveal a much deeper understanding of confidence at the intersection of race, background and gender. South African research in architectural education has shown that:

> "The student who feels less confident will hold back on engaging in the class, experience criticism as an indictment and a confirmation of her inability to rise above circumstances rather than a helpful indication of what she has the power to improve. This often causes her to stay in the comfort zone of her own cultural group, she does not ask questions and does not learn the nuances of architectural language which will enable her to better." (Janse Van Rensburg 2016, 183)

In terms of race, research in the United States has shown that "white students have greater social and cultural capital", which contributed to perceptions that university was easier for them due to better school preparedness,

familial support, prior knowledge about university and informal resource networks (Dancy et al. 2020, 11). Payne (2015) also saw this in research on architectural education, noting that students with a similar habitus to the institution were seen by educators as higher functioning despite their design abilities.

However, the T-SEL surveys showed that, in South Africa, this does not necessarily translate into greater success. This is shown in the disjunct between white men and white women students, the majority of whom in the South African context come from middle-class backgrounds with well-resourced schools and a good command of English, and, therefore, similar cultural capital/ habitus. The gender and racial statistical analyses of the surveys demonstrated that only 3 to 8% of the items in the three surveys showed a statistically significant difference due to gender or race. Therefore, the racial or gender differences that appeared from an initial reading of the data were not borne out in the statistical analysis. This showed once again that a straight-forward gender or racial analysis does not reveal the intersectional and more nuanced experiences of students where "the aspects of… race, gender, class, sexual orientation… are not mutually exclusive but instead interact to construct one's identity" (Dancy et al. 2020, 2).

In the focus groups, white women students discussed confidence not as something you had or gained but rather as something you needed to 'show' or 'project' to claim space both in academia and professional practice, which was perceived to be dominated by men. White women students, in unpacking possible reasons for needing this confidence façade, noted that they had emotional breakdowns in the design studio on several occasions. However, white woman students believed these breakdowns release their emotions like a valve, so they could move on and complete their work. One student reported that "women expressing emotion is seen as a weakness, but it is our strength", with others concurring that they are perhaps the only group that can be emotional in public and "get away with it" (Student Focus Group 2, 2024).

Black students brought up issues of upbringing, family background and culture during the focus group discussion about confidence. Several black woman students noted that black children, especially black girls from traditional cultures and backgrounds, are brought up to "listen and learn", to be seen but not heard:

> "As a young woman, especially in spaces that are not for young black [children]... so coming to university, being in a prestigious degree like architecture, your job is to listen and learn. It's listening in any space in your household. Listen, listen." (Student Focus Group 1, 2024)

This student recounted being at home and at university, where she felt socially ingrained to be quiet. In discussions with a white man colleague around race, she said, " I had to do the work; as black women, we have to do the work of making sure everybody else is fine first before I am okay". Even in the face of racist jokes, she was "swallowing all of that, I am letting him say these things, but he also said that I scare him because I am so confident" (Student Focus Group 1, 2024).

It is illuminating that this student casually referred to university as not a space for black women. This was expressed by other black women students who reported forming WhatsApp groups to share information and provide emotional support, as they felt they were outsiders, on the periphery, and would receive information last. This is despite forming the majority demographic group within the class. This focus on the collective self-esteem of black women students through the chat group confirms Thomas and Wagner's (2016) findings of positive correlations between collective self-esteem, ethnic identity and academic self-efficacy for black students but not for white students in South Africa. Black women students reported being told in their first year by a black tutor that black women students have the highest dropout rate, and how this motivated them to prove this tutor wrong. This desire to be strong and resilient reflected the cultural pressure to be a "strong black woman"(Student Focus Group 1, 2024), as one student put it. This need to

project strength and confidence echoed the responses by white women students, but in the case of black women students, the class perception as per the T-SEL surveys of 2023 was that they were stronger and more confident than white women or than they themselves felt. In contrast to white women, black women did not feel comfortable expressing their emotions in public, which was also reflected in the survey results that showed a higher emotional regulation, both self-assessed and perceived by other students.

Some black students related how it took three years of the architectural undergraduate degree to start to develop the confidence to defend their design decisions in a critique or review. As two students put it, you have to learn that your opinion and your voice matter:

> "As black people, it is implied that you just sit there and humble yourself; we don't want to hear you." (Student Focus Group1, 2024)

Some black students reported hesitating to ask questions in class, "Black males have a level of confidence and pride… struggling to ask for help" (Student Focus Group 4, 2024). Yet even within this struggle, they acknowledged that they are determined to succeed; as one black man student put it, "You don't have anything to fall back on, you have to create stability for yourself and your family beyond you… this degree guarantees a future" (Student Focus Group 4, 2024). Even when they were suffering, they reported not showing this, rather carrying themselves better. This is shown in the T-SEL survey outcomes, where black men showed the highest self-reported rates of emotional knowledge, emotion regulation, responsible decision making and self-control (Figure 3.15).

Most students reported that confidence was built through the extended time allowed for projects in third-year, with only two main design projects. Being back in the design studio after COVID-19, working closely with peers and tutors,

was also reported to have increased their confidence. The manner with which tutors engaged with students, motivating students to develop their ideas and voice and never dismissing ideas as bad was also highlighted by students as confidence boosting. Students reported that in previous years, tutors dismissed some student's ideas as 'bad' and encouraged them to design in specific ways, which lowered their confidence in their design abilities.

This echoed research where different conceptions of ability, either "inherent aptitude or acquirable skill" (Druckman and Bjork 1994, 20), were used as learning constructs. The outcomes proved that self-confidence increased if students were told that ability was an acquirable skill not an inherent aptitude. Women students, particularly black women, noted in the focus groups that the care, support and positive reinforcement demonstrated by tutors were instrumental in feeling heard and building confidence. In essence, they were led to believe they could acquire the necessary skills and confidence, and so they did. As Johnston et al. (2021) put it, "believe in me and I will too".

This was seen in many students' trajectories, with one student noting in the focus group discussion, a year after graduating from the BAS degree, that:

> "Third-year was significant in gaining confidence in your design; it instilled understanding and holding on to concept. The sense of confidence emerged through holding on to concept, that the final oral was the best experience." (Student 7260-2023, Student Focus Group 4, 2024)

This is an important milestone in a design student's journey because up until this point, students tend to change their concepts when they receive critical feedback rather than resolve the problems inherent in any concept. The confidence that comes from an educator validating a student's ways of seeing means the student is empowered to resolve those problems.

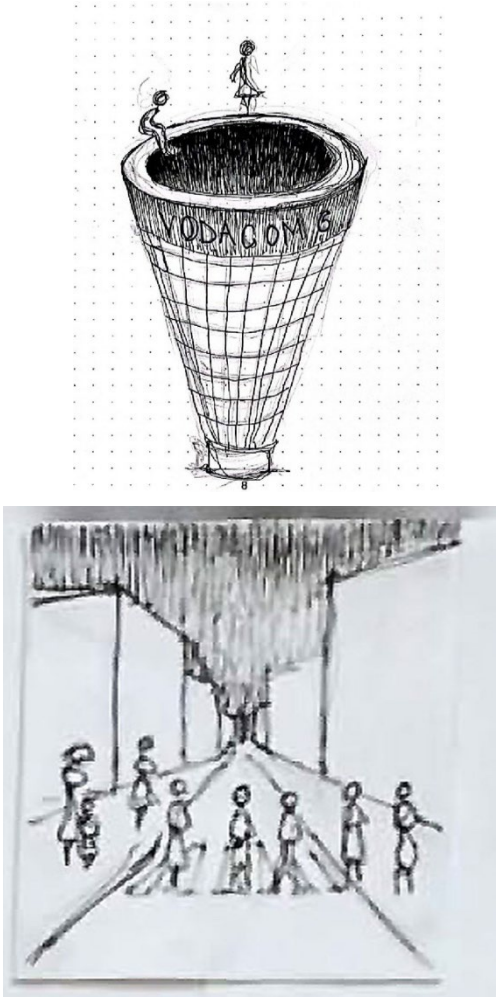


Figure 7.12 Personal Spatial Memory drawing of high-density communal living in Hillbrow (Student7260-2023)

Student 7260-2023 experienced his first two years of the BAS degree in lockdown during COVID-19. Studying online, he felt hesitant to ask questions, and he missed the community of students, feeling that he needed people around him to boost his confidence. However, with the return to on-campus learning in his third-year, his trajectory was different. This student spoke in his Manifesto project about growing up in Hillbrow, one of the most densely populated areas in South Africa: "From the beginning of time or as far as my memory of space goes, I was always surrounded by people" (Student7260-2023, Manifesto) (Figure 7.10).

Being part of a community, learning together was clearly part of this student's inherent processes of being and learning. Returning to in-studio communal learning was critical for him to develop confidence in his own voice. However, he also acknowledged the role of the design tutors and Kevin Goncalves, in particular, for walking alongside him and enabling him to explore and hold on to those past spatial experiences and conceptual roots as productive for his design practice. Together, his studio learning community—students and tutors—were essential in developing his confidence.

Therefore, confidence was built through a parallel-engaged pedagogy, walking alongside students, validating their particular ways of seeing and being as generative and productive for their design practice development. However, although through surveys and focus groups, it was clear that students' self-management and confidence had improved, this confidence was expressed differently by students.

In all students, however, the levels of confidence in their self-management and self-assurance improved. This confidence is related to their abilities to successfully complete the BAS undergraduate degree, as well as their confidence in going out into the professional world and practice as aspiring architects. This confidence in practice was contingent on having developed conscious and critical practice. Through unearthing conscious self-awareness of their particular design voices and practicing and exploring this in the design studio, they developed confidence in their particular ways of seeing. Through critically assessing their positionality within the institution and within the architectural field, confidence was developed in their agency within the profession. Therefore, when students spoke in their focus groups of confidence and unpacked it, it was clear that it was built on conscious self-awareness and a critical engagement with their position within design practice and within the institution.

7.3 Was the pedagogy transformative?

The transformative aims of the research went beyond the individual students, aiming to address transformative social justice and equity for the class as a whole within the South African higher education context, essentially addressing the demands of the #FeesMustFall student protests. Transformation in this context means changing the curriculum, including previously excluded voices in the canon, changing student and staff demographics and recalibrating teaching to change power relations (Mbembe 2019).

In the context of a post-colonial university and a decolonial project, the research validated ways of being and knowledge previously denied and delegitimised, thereby transforming the curriculum and canon. The research sought to unearth the roots of the students' spatial intelligence (Van Schaik 2008). These roots lay not only within the institutional studios of architectural education but also within the students' lived spatial experiences even before they entered formal architectural education. Validating these pre-institutional ways of knowing and being contested established institutional norms. Validating different world views across the class exposed students to different ways of seeing, being and designing, acknowledging that there is no one way to design; therefore, building "alternative knowledges" (Smith 2012, 52) in the design studio.

This was seen in the student focus groups, where students spoke of being validated and seen, possibly for the first time. It was also confirmed in one colleague focus group, during which a tutor who had taught in third-year for seven years noted the transformative progress over that period, especially for black women students, who "in those seven years became more confident and did not lag behind the rest of the class" (Colleague 07; Teaching Colleagues: Focus Group 3, March 2024). This tutor also initially thought that students' cultural capital, in terms of their prior exposure to architecture and art, would impact their success at university, but he was surprised that towards the end of his teaching tenure, students without this exposure were still succeeding and doing well (Colleague 07; Teaching Colleagues: Focus Group 3, March 2024). This demonstrated the transformative impact of the pedagogy, in which students' different ways of being and seeing were validated to the point that they became a type of "compensatory capital" (Cross and Atinde 2015, 308).

Therefore, the research, much like Cross and Atinde (2015), questioned the assumption made by South African researchers following Bourdieu(1977) that students whose habitus differs from the institution's would struggle to

succeed. The research demonstrated that through validating their ways of seeing and being, these students succeeded despite having a habitus that does not reflect that of the institution. This corroborates Fataar's (2012, 52) findings that validating "life world knowledges" or life experiences develops conscious self-awareness and critical positionality, thereby positively impacting all students, including marginalised students, as this develops "compensatory capital" (Cross and Atinde 2015, 308). This "compensatory capital" enabled students, even from backgrounds different from the institutional habitus, to succeed and develop confidence in their design practice.

Validating these diverse ways of knowing and seeing not only built "compensatory capital" (Cross and Atinde 2015, 308) but also, in real ways, expanded the canon of architectural knowledge. This expansion of the canon of knowledge is in itself transformative and decolonising, bringing into the curriculum spatial knowledges that were previously disregarded. This expansion of the canon supports the empathic engagement of architects within a diverse South African society, acknowledging different ways of seeing, being and living and how these impact the spaces they design.

However, the "compensatory capital" (Cross and Atinde 2015, 308) differed from student to student, as was seen in the two T-SEL surveys and the focus groups. Some students developed greater self-awareness and self-management but very little additional confidence, as their confidence levels were already high. Other students responded to the ethics of care by developing confidence and critically claiming their places and voices within the institution.

The transformative potential of the pedagogical research within a South African context of transformation was partially achieved. The question that comes to mind is whether these "differences make a difference" (Bateson 1972, 386). To understand how the transformation and decolonial aim of the university was supported by the T-SEL surveys were analysed through the lens of race and gender. This confirmed the usefulness of "strategic essentialism" (Spivak

and Grosz 1990, 11) to analyse research outcomes through lenses used under colonial and Apartheid rule to measure change. In doing this analysis, the results showed that the impact of the pedagogy lay at the intersection of not only gender and race but also more individual factors such as culture and socio-economic upbringing. The research, therefore, moved from analysing the class and multiple years as a collective to focusing on students' personal insights and outcomes, telling individual stories of the impact of the research on students' design practices.

Nonetheless, some trends emerged from the T-SEL surveys. Women students started with lower benchmark ratings in the 2023 T-SEL Self1 survey but showed the most improvement in the 2023 T-SEL Self2 survey. Black students were the only racial group to improve to above 50% in all competencies. The pedagogy impacted black students most of all, followed by women students. It was also clear from the focus groups that the pedagogy of care in 2023 had the most impact on black women students. Despite these demographic trends, there were gender disparities in the racial groups and racial disparities in the gender groups, bringing into question the trustworthiness of the racial and gender averages. These racial and gender averages were proven to be statistically insignificant in statistical analyses of the T-SEL surveys, despite the small statistically significant differences pointing to black and women students greater improvement.

The closer reading of the intersectional, cultural background of students led to understanding the impact on the individual student and the class as a whole. It became clear that agile, adaptable, student-led teaching strategies were required to respond to diversity and social justice. Consequently, then, difference or diversity does make a difference to the pedagogy, just not in the lazy assumptive ways we were bred to believe make a difference during Apartheid. Each student in this thesis' research was seen as an individual, and their individual response to the pedagogy was validated. Each student's voice and lived experience mattered.

Even though any initial demographic trends were de-bunked through a closer reading, and statistical analysis of the data, the focus groups conducted in small groups of students from similar backgrounds were instructive. These small focus groups allowed educators to get a deeper insight into how students supported each other to persevere and succeed. This was especially clear with black women students' successful group dynamic in 2023, which was informally observed in different classes over the years. Going forward, these informal social groups could be encouraged as ways that students can support each other. Black women students' trajectory in third-year over the period of the study was already noted by a tutor as remarkable. The number of black women students over the study period almost doubled from 18% to over 30% of the class. This increase in numbers cannot be attributed to the third-year pedagogy, though, but their remarkable trajectory within third-year can be attributed to the caring pedagogy, as was confirmed in the student focus groups, as well as to the support they gave each other.

Lastly, the parallel-engaged pedagogy confirmed Alexander's (2016) position that autoethnographic pedagogy could be used to subvert the power relations in the teacher-student relationship. The findings of this research found that the autoethnographic pedagogy engendered trust and understanding between educators and students, subverting the power relations and developing multi-cultural understandings of design practice, building the "pluriversity" (Mignolo 2011; Mbembe 2016, 36). The findings in this thesis showed that this was particularly impactful for black students, whose histories and diverse ways of seeing and being were validated, thus developing greater confidence. This confirmed previous research on the impact of autoethnographic research on all students, particularly students of colour (Chang 2008; Camangian 2010; French and French 2024).

The more open and caring relationship between educators and students meant that much of the learning and development of the socio-emotional competencies came from discussions and informal chats in and out of the design studio and the consistent and careful monitoring during each project.

In the South African context, in particular, where racial and cultural diversity still mires higher education in deep misunderstandings of the other, this research sought not necessarily to find common ground but rather validate the differences. This building of a "pluriversity" (Mignolo 2011; Mbembe 2016), where a single, unified way of understanding the world is rejected in favour of multiple co-existing realities, is not only relevant within the South African context but also for all institutions grappling with increasing student diversity. Therefore, the findings of this research have potentially broader relevance.

7.4 Validity of the research

The validity of the research described in this thesis was established by addressing the various types of validity required for emancipatory and practical action research: catalytic/ transformational, democratic, dialogic, outcome, process/ construct and face validity (Lather 1986; Newton and Burgess 2008; McNiff and Whitehead 2011).

The first test, catalytic/ transformative research, was demonstrated through findings that validating diverse students' ways of knowing and being both increased their confidence in their practices and situated them critically within the South African post-colonial, post-Apartheid and post #FeesMustFall institutional and architectural practice context. This enabled students to "know their own way" (McNiff and Whitehead 2011, 14). This also transformed the institution by opening the canon and curriculum to previously silent voices.

Process and construct validity were demonstrated by adapting and adjusting the pedagogy in response to student learning experiences, becoming student-led and student-centred. This was most clearly demonstrated through one of the methodological innovations in the research, the introduction of the *Personal Spatial Narrative*, which arose partly from the generative personal spatial memories of Funani (refer to Chapter Five). The autoethnographic paper (Chapter Four) also supports the process validity test by McNiff and Whitehead (2011) that researchers, like myself, should understand what they (I) have done and by reflexively demonstrating how the research impacted them (me) personally, situating themselves (myself) within, in my case, the higher education and architectural practice context of South Africa.

The parallel-engaged pedagogy supported the development of students' socio-emotional competencies through collaborative student-educator engagement and discursive and parallel research practices in the design studio. This contributed to the democratic validity of the research as it contested the traditional power relations in the architectural studio.

Outcome validity was confirmed through the triangulation of various research methods and data sources, both qualitative and quantitative. These included qualitative data from student's projects, which gave insight into the individual student's progress, as well as the quantitative T-SEL surveys, which provided a lens into the class as a whole and into the transformative outcomes of the research. The student and teaching colleagues focus groups' data provided a final qualitative lens into the trends that emerged from the quantitative T-SEL surveys and unpacked the impact on students' design practice of the research process as a whole. Thus, through this triangulation from qualitative to quantitative and back to qualitative, as well as moving from the scale of the individual student to groups of students to viewing the class as a whole, the research outcomes were validated.

The student and teaching colleague focus groups also served to give the research face validity, which requires that participants are engaged at the end of the research process to discuss "what the results of the research meant to them" (Lather 1986, 72). In this case, students brought the research back to one of its original aims, building confidence, by speaking about how the pedagogy in third-year had built confidence in their voices . The teaching focus groups confirmed the impact that students reported and critiqued whether students were mature enough to fully engage with some of the autoethnographic practice-based design research. This critique was debunked by students, who years after the completion of third-year, spoke of how it sparked the beginning of a more self-aware and conscious design practice.

Finally, dialogic validity was ongoing during the action research cycles through peer reviews received at several conferences and symposia where the research was presented (listed below; Appendix D for abstracts, dates and conferences). Peer review and feedback were generously given by academic peer-reviewers, presentation responders, colleagues and conference attendees. This ongoing process was critical to the development of the design pedagogy, as well as the validation of conclusions drawn from the outcomes presented. These peer reviews were also critical for validating the conclusions I was drawing about my practice-based design research on my practice.

Cycle #1: 2018 to 2019

- *What modes of design research are transformative and venturous?*
- *A PhD in practice-based design research in architecture at Wits*

Cycle #2: 2020

- *Practice-based design research: Iterative cycles of research*
- *Back to the future: Unearthing tacit design knowledge through experimental frameworks of reflective past practice design research*

Cycle #3: 2021

- *Agile and adaptable teaching strategies in an unequal society: reflections from the design studio at Wits, Johannesburg, South Africa*
- *Playing with fabric: photographic design research reflections on colour, materiality and texture in architectural projects*

Cycle #4: 2022

- *Exploring the transformative potential of practice-based design research methods in architectural design pedagogy.*

Cycle #5: 2023

- *Which pedagogical strategies support the conscious, critical, careful design practice of students?*

Cycle #6: 2024

- *Questioning Mastery – Unpacking black women architects' absence in the SAIA – Architectural Awards of Excellence*

Dialogic validity was further confirmed through the three papers that were submitted for publication (refer to PART B of this thesis). The pedagogy paper (Chapter Six) received two blind peer reviews and an editor review. The peer reviews resulted in this paper focusing on the decolonisation impact of the pedagogy. The practice-based design

research paper (Chapter Five) also received two peer reviews and was revised to focus on the contribution to knowledge, which was seen by reviewers as the adaptation of the practice-based design research from postgraduate to undergraduate study within a South African context of Ubuntu. The autoethnography paper (Chapter Four) is still under review.

Therefore, the research in this thesis underwent internal validation from participants and educators, as well as external validation from various peer reviews.

7.5 Ontological limits…a contribution?

Being a white woman educator at this time of transformation is deeply uncomfortable and yet in this discomfort lies a possible contribution. This discomfort is a formative, necessary place to dwell, both globally and in South Africa with its enduring legacy of Apartheid and the need to decolonise curriculum and pedagogy. Whilst I could uphold my position as a teacher as neutral disciplinary authority, I stay in a position of vulnerability, of often not knowing what the answer is, but venturing forth together with students in exploring this new terrain.

In some ways my whiteness still has enduring power and agency. I stand before a class of racially and culturally diverse students, vulnerably stating that the decolonisation project requires engagement from both of us. White students cannot easily dismiss what I say, with the lingering ties that racially bind us. I critically challenge them on their unquestioned white biases emanating from worldviews rooted in a racially segregated past. Nonetheless I also commiserate on the shared ongoing work of being white in the current South Africa, of finding one's place as a white student, a white architect, a white educator. Yet black students also respond positively to my teaching. Perhaps that is also a legacy of Apartheid, the racially unearned respect. Perhaps it's a response to the care demonstrated. The research has shown that the pedagogy in this research has the largest impact on black women students, who in

many ways begin to contest their own patriarchal worldviews and find their place, their voice, within the institution and within practice. To some this might be evidence of ontological violence, the pedagogy serving to replace their worldviews with a westernised feminist version. Is it ontological violence or liberatory? It is probably both. Adjusting to an institution still steeped in Western colonial systems and ontology requires some form of personal transformation. Yet returning home to one's culture means returning to ways of being that are contrary to success in the institution. This splitting of the self is messy, and violent, yet every student navigates this process. It is perhaps acknowledgement that worldviews and ontological positions are not static, they respond to threats, clashing with other worldviews and absorbing some values, discarding others, as confirmed by one student (Interview 008, 2025).

Here lies the tension. In becoming more conscious, critical and careful, we contest our worldviews or re-affirm them. In so doing our worldviews change and shift. This is perhaps why students often spoke of having to "show confidence". Is this self-awareness or confidence performative, whilst at a deeper ontological level they remain the same? These are difficult questions to answer and beyond the scope of this thesis.

I cannot change my race, but I can change my worldview. I grew up under Apartheid, and though I am a first generation South African, my race meant that I had unearned privileges not shared by black South Africans who had lived in this place for generations. As I grew into adulthood I started to question the worldviews of my parents, of some of my peers. Upon entering university this process of reimagining my values, my beliefs accelerated. My worldview shifted as it clashed or pushed up against other worldviews. The pluriversity that Mbembe(2016) speaks of in the South African university is not an abstract concept. It is a difficult fraught process to re-examine one's belief and value systems to essentially shift one's ontological position. Yet the university is perhaps positioned to be the place that supports these shifts or enforces them. The university is the place where students encounter many other students from

different ontological backgrounds with diverse worldviews. This is the melting pot, where worldviews are questioned, challenged, shifted or re-confirmed. In an informal social media survey of third-year students (2019-2025), 96% confirmed that their worldviews had changed during architectural education, whilst 40% of these admitted that this had affected their relationships with their family and their community. This is reported anecdotally without statistically validating these results.

This is in effect a type of ontological rupture, where students' worldviews are shifted and changed to adapt to the institution, whose habitus is still rooted in coloniality. This extends Payne's (2015) research which noted that architectural students whose habitus mirrored that of the institutions were seen as higher functioning. In the South African context it appears that students whose habitus or worldview differs from that of the institution shift to and change their worldviews to fit in, perhaps to as per Payne be more successful academically.

This ontological rupture fits with notions of the "coloniality of being"(Mignolo 2011, 48; Maldonado-Torres 2007, 253) where the subjects of colonialism do not have ontological resistance or ontological weight(Fanon et al. 2002). In the South African context students do not have the ontological weight to resist the ontological rupture imposed by the institution. The ontological rupture is as a result of the direct or indirect pressure of the institutional norms and habitus. However, is it ontological rupture, or a process of ontological becoming, which is ongoing? A student noted how her being had originally split, occupying two opposing worldviews, that of before and after the university. Yet this rupture led to a "hybridized, integrated worldview" merging values of both (Interview 008,2025).

The aim of this thesis was desiring change, transformation of self, of practice. It is therefore not surprising that worldviews also came into question. Nonetheless, one of the potential contributions of this research, is the acknowledgement that researching ways of knowing, seeing and designing inevitably leads to researching ways of

being; that the epistemological and pedagogical contributions lead to the ontological dimension, which remains unexplored, beyond the scope of this thesis. Yet by delineating this threshold, the limits of researching the epistemological and pedagogical dimensions of architectural practice without acknowledging the associated ontological realm, is itself a potential contribution.

7.6 Contributions to knowledge(s)

Notwithstanding meeting the aims of the research to different extents, as demonstrated in the previous sections, the research's contribution and relative relevance lie in various areas, such as research methods and pedagogy.

Firstly, this research contributes to methods of practice-based design research. By adapting practice-based design research to undergraduate students, it broadened the scope and impact that this type of research could have beyond mid-career architects and postgraduate programmes. Further, the *Personal Spatial Narrative* method that arose from the iterative research process and the limitations of undergraduate study was a relatively novel method invention. Subsequent to its emergence in the research, other similar memory and autobiographical methods were found (Marcus 1992; 1995; 2014 Daitch et al. 1996; Aldrich 2005; Ten Brink et al. 2022). Therefore, the *Personal Spatial Narrative* method contributes to growing this relatively small body of knowledge by using memory and lived spatial experiences as generative for design practice. This method also extends the use of these types of methods to a decolonial context and demonstrates its use in building a "pluriversity" (Mignolo 2011; Mbembe 2016; De Sousa Santos 2017).

The second methodological contribution lies in implementing the T-SEL surveys in a South African higher education context. What impact did the T-SEL have on teaching? Firstly, the surveys gave critical insight into how students were struggling with self-management across the board. No matter what gender, cultural or racial demographic, students overwhelmingly struggled with their emotional regulation, with managing their university work and goal management. In response to this initial finding, a class counselling session was initiated, bringing counsellors to students rather than waiting for students to access the available counselling. This proved instructive for educators and supportive for students. Students realised that everyone felt the same way; they all experienced overwhelming anxiety about their futures, whether they were students who were struggling to pass or students doing relatively well academically. The T-SEL surveys allowed educators to gain insight into students' well-being and provide the appropriate support for the whole class.

On the other end of the spectrum, the T-SEL surveys, in retrospect, were also an important indicator of those students who required more individualised support during the year, especially in terms of mental health, self-care or self-management, or students who might be struggling to fit in. Therefore, going forward, students can be monitored more closely and support given more pro-actively rather than reactively when problems become overwhelming for students. The class counselling sessions introduced in reaction to the first T-SEL surveys also proved to be invaluable tools. These counselling sessions introduced students to the available assistance and allowed students to see that they were not alone, as most students were experiencing similar feelings.

One of the values of the T-SEL surveys was that they provided an unbiased, objective, ongoing self-assessment measure against which students could judge their growth. Students became more critically aware of their attitudes,

skills and social-emotional competencies through the T-SEL surveys, allowing them to focus on improving these as they unpacked their own ways of seeing.

What other teaching or pedagogical value did the T-SEL surveys provide? Going forward, the intention is to implement a benchmark earlier on in the degree, say in the first year, and repeat the T-SEL survey annually, allowing a deeper understanding of students' personal development across the years and from one degree to the next. This would be valuable for educators and for the students themselves.

Lastly, the parallel-engaged pedagogy of care that was developed in the design studio with students demonstrated that how you teach is as important as what you teach. The changes in the curriculum needed to be underpinned by changes to the pedagogy. The pedagogy extended the critical and transformative pedagogies of Freire (2017), Des Sousa Santos(2014; 2017) and hooks (1994; 2009) to an architectural design studio in the global south. This student-led, agile and adaptable pedagogy focused on care was particularly relevant in the often toxic studio environments, confirming research on care in architectural pedagogy (Holgate and Jones 2011; Duong and Brew 2021; Rice et al. 2021; Olweny et al. 2021; Frichot et al. 2022; Stead et al. 2022). The parallel-engaged pedagogy of care also contributed to decoloniality through caring and deconstructing power relations in the design studio, echoing research in South African higher education (Zerai et al. 2023).

In assessing themselves through self-reflection in the Manifesto projects and the T-SEL surveys, students developed conscious, self-aware design practice. In engaging in social reflection on their findings in the Manifesto project, the diversity of design voices and ways of seeing in a multi-cultural studio become explicit and publicly validated. This critically situated students across architectural discourse and within the institution, thereby developing critical practice. The emphasis on care throughout the process and the vulnerability displayed by the teaching staff in

revealing their practices in parallel made the studio a safe place to share and develop a more careful practice. Together, these strategies supported a more conscious, critical, careful practice in undergraduate students who addressed the decolonial project and the interrelated crises our world faces.

7.7 What next?

The research has been both personally and professionally transformative. On a personal level, I have a deeper understanding of my design and teaching practice, which has transformed the ways in which I practice. I have become more self-aware and conscious of my processes while gaining critical agency both within practice and pedagogy. I have developed greater care with myself, my students and my practice. Students have similarly grown more conscious, critical and careful in their design practices, albeit to different degrees depending on their development and particular design practices.

Autoethnographic practice-based design research was central to this transformative process. However, the parallel-engaged pedagogy of care was just as important. How the research was carried out and supported through the pedagogy had as much impact as what was researched and the methods of research.

The next step in the research, post-doctoral, will include carrying out similar research with professional architects and designers at different stages in their careers. The pedagogy and methods from the undergraduate studio will be adapted to Continuing Professional Development workshops for professional architects. My own autoethnographic practice-based design research will be critically instructive as will the pedagogic experiences.

The parallel-engaged pedagogy of care is a type of pedagogy most professional architects have not experienced. It breaks from the normative, colonially derived pedagogies in which most architects were instructed, and which are

being contested and transformed across South Africa. It will be interesting to research how this type of pedagogy could directly impact professional practice by impacting how professional architects practice.

The next step in the pedagogy points to a collaborative social, emotional learning project across years, as well as exploring the ontological realm which underpinned the research but was not directly addressed or researched. A long-term research project is planned at SoAP, assessing students' social and emotional learning from the first year through to postgraduate study and beyond. This involves checking every year if students' practices are becoming more conscious, critical and careful and how these transformative shifts can be supported. This would co-opt educators at every level of study. Currently, similar research is being done with first and second-year BAS students by Anita Szentesi (2022), Dirk Bahmann (2022) and Brigita Stone-Johnson (2022). A collaborative research group has been formed to study how our research intersects and its multi-year impact on students.

There is a potential for this type of research beyond architectural education. However, noting the different ways in which engineering or science students are taught, the methods and pedagogy would need to be adapted to much larger classes than the smaller educator-to-student ratios of a typical architecture design studio. This potential study at the faculty level would require cross-disciplinary teams. Initial discussions with colleagues from educational psychology will be explored further.

It is clear that the research within this thesis has relevance beyond the narrow confines of my autoethnography or even beyond the third-year studio of architectural education. Any designer or student could follow the autoethnographic methods described in the thesis to transform their practices. On an educational level globally, higher education cohorts are becoming more culturally and racially diverse due to student migratory patterns.

Therefore, there is the potential for some of the insights and results to be applied to any educational classroom dealing with issues of social justice, decoloniality and diversity.

Finally, the next step in the pedagogical research was revealed when addressing readers' critiques on the completed thesis. Researching how present and past ways of seeing and knowing contributed to particular ways of designing also impacted ontological worldviews. This was confirmed in an informal social media survey where the majority of students noted that architectural education changed their cultural worldviews. In addition, 40% of these students confirmed that these changes in worldview had affected their relationships with their family and their community. In a subsequent interview with one of these students, the process of this change was revealed. Commencing initially with a split in ways of being, the pre-institutional and the institutional, their worldview has since hybridized. Incorporating values from both worldviews into an evolving worldview that critically situated their individual being still within their community. This ontological becoming was not materially engaged with within the thesis, and points to the next step in post-doctoral pedagogical research.

This post-doctoral pedagogical research potentially points to removing myself from the role of primary knowledge-holder even further than was done in the parallel engaged pedagogy. Resisting the urge to translate spatial experiences into an architectural lexicon, and rather letting them speak from different ontological positions; exploring that space not as an architect, or as a teacher, but as a learner of other worldviews.

REFERENCES

AbuJbara, NK. and Worley, JA. (2018) "Leading toward new horizons with soft skills." On the Horizon. Vol. 26, no3, pp 247-259. https://doi.org/10.1108/oth-10-2017-0085

Adams, E. (2017) "Thinking drawing." International Journal of Art and Design Education. Vol. 36, no3, pp 244-252. https://doi.org/10.1111/jade.12153

Ahmed, S. (2012) On Being Included: Racism and Diversity in Institutional Life. Duke University Press.

Aldrich, T. (2005) "Self awareness and empowerment in architectural education: A case study." In Miles, M (ed.). New practices - New pedagogies: A reader. pp 173-190. London: Routledge. https://doi.org/10.4324/9780203020807

Alexander, BK. (2016) "Teaching autoethnography and autoethnographic pedagogy." In Adams, TE Jones, SH and Ellis, C (eds.). Handbook of autoethnography. pp 538-556. London: Routledge.

"Apartheid." *Encyclopaedia Brittanica*. 2025. INTERNET. https://www.britannica.com/topic/apartheid. Cited 22 February 2025.

Archer, B. (1995) "The nature of research." Co-Design: Interdisciplinary Journal of Design and Contextual Studies. Vol. January, pp 6-13.

Archer, B. (2012) "The nature of research." In Grand, S and Jonas, W (eds.). Mapping design research. pp 109-121. Basel: Birkhäuser.

Bachelard, G. (1994) The poetics of space. Boston: Beacon Press.

Bahmann, D. 2022. "Making atmospheres." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa. Conference. https://doi.org/10.54223/10539/35893

Ball, S.J. (2003) "The Teacher's Soul and the Terrors of Performativity". Journal of Education Policy 18 (2): 215. https://doi.org/10.1080/0268093022000043065.

Bandura, A. (2012) "On the functional properties of perceived self-efficacy revisited." Journal of Management. Vol. 38, no1, pp 9-44. https://doi.org/10.1177/0149206311410606

Barad, K. (2007) Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Durham: Duke University Press.

Barad, K. (2014) "Diffracting diffraction: Cutting together-apart." Parallax. Vol. 20, no3, pp 168-87. https://doi.org/10.1080/13534645.2014.927623

Barad, K. (2017) "Troubling time/s and ecologies of nothingness: Re-turning, re-membering, and facing the incalculable." New Formations. Vol. 92, no92, pp 56-86. https://doi.org/10.3898/NEWF:92.05.2017

Barbero, L. and Saviddu, A. (1981) "A learning experience in IFE University." Spazio e Società. Vol. 14, pp 117.

Bateson, G. (1972) Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution and epistemology. London: Intertext Books.

Bazana, S. and Mogotsi, OP. (2017) "Social identities and racial integration in historically white universities: A literature review of the experiences of black students." Transformation in Higher Education. Vol. 2, a25. https://doi.org/10.4102/the.v2i0.25

Bean, J., Dickinson, S. and Ida, A. (eds.). (2020) Critical practices in architecture. 1st ed. Newcastle upon Tyne: Cambridge Scholars Publishing.

Beattie, L. (2022) Symbiotic autoethnography. Moving beyond the boundaries of qualitative methodologies. London: Bloomsbury Publishing.

Bell, CJ. (2014) "African American education." In Bell, CJ (ed.). Space unveiled: Invisible cultures in the design studio. pp 1-7. London: Routledge.

Bell, CJ. (2022) "Critical race theory as architectural pedagogy." Journal of Architectural Education. Vol. 76, no2, pp 206-209. https://doi.org/10.1080/10464883.2022.2097561

Berlanda, T. (2017) "De-colonising architectural education: Thoughts from Cape Town." Built Heritage. Vol. 1, no3, pp 69-72. https://doi.org/10.1186/BF03545677

Bezard, C. and Shaw, SA. (2017) "Developing multicultural self-awareness through a transformative learning experience." Journal of Research in Technical Careers. Vol. 1, no2. https://doi.org/10.9741/2578-2118.1011

Block, N. (1996) "How can we find the neural correlate of consciousness?" Trends in Neurosciences. Vol. 19, no11, pp 456-459.

Blythe, R. (2016) "ADAPT-R : An approach to practice-based PhD training in architecture design and art." In Hamman, C (ed.). ADAPT-r exhibition. pp 65-72.

Blythe, R. and Stamm, M. (2017a) "Creative practice research glossary." In Verbeke, J (ed.). The ADAPT-r creativity book. pp 335-348. Brussels: KU Leuven.

Blythe, R. and Stamm M. (2017b) "Doctoral training for practitioners: ADAPTr (Architecture, Design and Art Practice Research) a European Commission Marie Curie Initial Training Network." In Vaughan, L (ed.). Practice-based design research. 1st ed., pp 53-64. London: Bloomsbury Publishing Plc.

Blythe, R. and van Schaik, L. (2013) "What if design practice matters? Part 2." In Fraser, M (ed.). Design research in architecture: An overview. pp 61-69. Surrey: Ashgate Publishing.

Borden, I. (2008) "The value of arts and humanities research to life in the UK." Architectural Research Quarterly. Vol. 12, no3-4, pp 216-222. https://doi.org/10.1017/S1359135508001140

Bourdieu, P. (1969) "Intellectual field and creative project." Social Science Information. Vol. 8, no2, pp 89-119. https://doi.org/10.1177/053901846900800205

Bourdieu, P. (1977) "Cultural reproduction and social reproduction." In Karabel, J and Halsey, AH (eds.). Power and ideology in education. pp 487-511. New York: Oxford University Press.

Bourdieu, P. (2005) "Habitus." In Hillier, J and Rooksby, E (ed.). Habitus: A sense of place. 2nd ed., pp 43-52. London: Routledge.

Boyer, B., Cook, JW. and Steinberg, M. (2011) In studio: Recipes for systemic change. Helsinki, Finland: Sitra.

Boys, J. (2016) "Architecture, place and the 'care-full' design of everyday life." In Bates, C Imrie, R and Kullman, K (eds.). Care and design: Bodies, buildings, cities. pp 155–177. Chichester, UK: John Wiley & Sons, Ltd.

Bozalek, V. and Zembylas, M. (2017) "Diffraction or reflection? Sketching the contours of two methodologies in educational research." International Journal of Qualitative Studies in Education. Vol. 30, no2, pp 111-127. https://doi.org/10.1080/09518398.2016.1201166

Bremner, L. (2010) Writing the city into being: essays on Johannesburg, 1998-2008. Johannesburg: Fourthwall Books.

Britton, J. (2014) "Intersecting self reflection and skill development in landscape architecture pedagogy." Landscape Research Record. Vol.1, pp 45-54.

Buckland, LA. (2018) "On learning how to live in this strange place." South African Journal of Philosophy. Vol. 37, no2, pp 143-157. https://doi.org/10.1080/02580136.2018.1436256

Butts, A. (2019) Language, memory, place: Building on disappearance. Claremont, California: Scripps College.

Camangian, P. (2010) "Starting with self: Teaching autoethnography to foster critically caring literacies." Research in the Teaching of English. Vol. 45, no2, pp 179-204. https://doi.org/10.58680/rte201012745

Candy, L. (2006) "Practice based research: A guide." Creativity and Cognition Studios Report 1 (November). INTERNET. https://www.creativityandcognition.com/wp-content/uploads/2011/04/PBR-Guide-1.1-2006.pdf. Cited 12 February 2025.

Carden, J., Jones, RJ. and Passmore, J. (2022) "Defining self-awareness in the context of adult development: A systematic literature review." Journal of Management Education. Vol. 46, no1, pp 140-177. https://doi.org/10.1177/1052562921990065

Carolissen, R., Bozalek, V., Nicholls, L., Leibowitz, B., Rohleder, P. and Swartz, L. (2011) "Bell hooks and the enactment of emotion in teaching and learning across boundaries : A pedagogy of hope?" South African Journal of Higher Education. Vol. 25, no1, pp 157-167.

Carter, S. and Chu-May Yeo, A. (2014) "Developing undergraduate social and emotional competencies: A UK/Malaysian comparison." The International Journal of Educational Management. Vol. 28, no2, pp 152-172. https://doi.org/10.1108/IJEM-03-2012-0035

Cassim, F. (2020) "Decolonising design education through playful learning in a tertiary communication design programme in South Africa". International Journal of Art and Design Education. Vol. 39, no3, pp 523-535, https://doi.org/10.1111/jade.12294

Chang, H. (2008) "Autoethnography." In Autoethnography as method. pp 43-57. Walnut Creek, California: Left Coast Press, Inc.

Charalambous, N. and Christou, N. (2016) "Re-adjusting the objectives of architectural education." Procedia - Social and Behavioral Sciences. Vol. 228, pp 375-382. https://doi.org/10.1016/j.sbspro.2016.07.056

Clifford, J. and Marcus, GE. (1986) Writing culture: The poetics and politics of ethnography. Berkeley: University Of California Press.

Coetzer, N. (2024) "SEA and the Painted Shadow." Journal of Architectural Education. Vol. 78, no1, pp 66-74. https://doi.org/10.1080/10464883.2024.2316553.

Coffey, A. 2009. "Ethnography and self - Reflections and representations." In May, T (ed.). Qualitative research in action. pp 313-237. London: Sage.

Cohen, S. and Fenster, T. (2021) "Architecture of care: Social architecture and feminist ethics." The Journal of Architecture. Vol. 26, no3, pp 257-285. https://doi.org/10.1080/13602365.2021.1899263

Comer, JP. (1988) "Educating Poor Minority Children." Scientific American, Vol. 259, no5, pp 42-48. https://doi.org/10.1038/scientificamerican1188-42

Cowan, J. (2006) On becoming an innovative university teacher: Reflection in action. 2nd ed. New York: Society for Research into Higher Education and Open University Press.

Crenshaw, Kimberle.(1989) "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics". University of Chicago Legal Forum 1989 (1). https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8.

Creswell, JW. (2012) Educational research: Planning, conducting, and evaluating quantitative and qualitative research. 4th ed. Boston: Pearson.

Cross, M. and Johnson, B. 2008. "Establishing a space of dialogue and possibilities: Student experience and meaning at the University of the Witwatersrand." South African Journal of Higher Education. Vol. 22, no2, pp 302-321. https://doi.org/10.4314/sajhe.v22i2.25787

Cross, M. and Atinde, V. (2015) "The pedagogy of the marginalized: Understanding how historically disadvantaged students negotiate their epistemic access in a diverse university environment." Review of Education, Pedagogy, and Cultural Studies. Vol. 37, no4, 308-325. https://doi.org/10.1080/10714413.2015.1065617.

Cross, N. (1982) "Designerly ways of knowing." Design Studies. Vol. 3, no4, pp 221-227. https://doi.org/10.1016/0142-694X(82)90040-0

Cross, N. (1993) "A history of design methodology." In de Vries, MJ Cross, N and Grant, DP (eds.). Design methodology and relationships with science. NATO ASI Series. Vol. 71, pp 15-27. Dordrecht: Springer.

Cross, N. (1999) "Design research: A disciplined conversation." Design Issues. Vol.15, no2, pp 5-10. https://doi.org/10.2307/1511837

Czerniewicz, L. and Brown, C. (2013) "The habitus of digital 'strangers' in higher education." British Journal of Educational Technology. Vol. 44, no1, pp 44-53. https://doi.org/10.1111/j.1467-8535.2012.01281.x.

Daitch, V., Kweon, BS., Larsen, L., Tyler, E. and Vining, J. (1996) "Personal environmental histories: Expressions of self and place." Human Ecology Review. Vol. 3, no1, pp 19-31.

Dancy, M., Rainey, K., Stearns, E., Mickelson, R. and Moller, S. (2020) "Undergraduates' awareness of white and male privilege in STEM." International Journal of STEM Education. Vol. 7, no1, pp 52. https://doi.org/10.1186/s40594-020-00250-3

Davis, D. and Steyn, M. (2012) "Teaching social justice: Reframing some common pedagogical assumptions." Perspectives in Education. Vol. 30, no4. Pp29-38. https://doi.org/10.38140/pie.v30i4.1780

de la Bellacasa, MP. (2012) "'Nothing comes without its world': Thinking with care." The Sociological Review. Vol. 60, no2, pp 197-216. https://doi.org/10.1111/j.1467-954X.2012.02070.x

Dennett, DC. (2018) "Facing up to the hard question of consciousness." Philosophical Transactions of the Royal Society B: Biological Sciences. Vol. 373 no1755, pp 20170342. https://doi.org/10.1098/rstb.2017.0342.

de Sousa Santos, B. (2014) Epistemologies of the South: Justice against epistemicide. 1st ed. New York: Routledge.

de Sousa Santos, B. (2017) Decolonising the university: The challenge of deep cognitive justice. Newcastle upon Tyne: Cambridge Scholars Publishing.

de Sousa Santos, B., Ndlovu-Gatsheni, S. and Soudien, C. (2022) "Critical reflections on the place of the University in the 21st Century." South African Journal of Science. Vol. 118. 14835. https://doi.org/10.17159/sajs.2022/14835.

Dewey, J. (1922) "An analysis of reflective thought." Journal of Philosophy. Vol. 19, no2, pp 29-38. https://doi.org/10.2307/2939444

Dewey, J. (1933) A restatement of the relation of reflective thinking to the educative process. Boston, MA: DC Heath.

DiAngelo, R. (2011) "White Fragility." International Journal of Critical Pedagogy. Vol. 3, no3, 54-70.

Diouf, E., Dyer, U., Ecclesiastes, A. and Gilbert, M. (2023) "Our Ubuntu: A Black feminist turn." Agenda. Vol. 37, no2, pp 32-43. https://doi.org/10.1080/10130950.2023.2229572

Druckman, D. and Bjork, R. (eds.). (1994) Learning, remembering, believing: Enhancing human performance. Washington, D.C.: National Academies Press.

Dukhan, S. (2022) "Creating belonging in a changing world: Moves to refashion the Higher Education context by making space online for inclusion, care, and connectedness." Journal of Higher Education Theory and Practice. Vol. 22, no17. https://doi.org/10.33423/jhetp.v22i17.5660

Duong, H. and Brew, P. (2021) "Conceptual frames for the nurturing of professionalism and care in architectural education." Charette. Vol. 7, no2, 85-111.

Durlak, JA. Weissberg, RP., Dymnicki, AB., Taylor, RD. and Schellinger, KB. (2011) "The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions." Child Development. Vol. 82, no1, pp 405-432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Dutton, TA. (1991) Voices in architectural education: Cultural politics and pedagogy. New York: Bergin & Garvey.

Edutopia (2011) Social and emotional learning: A short history. Edutopia. INTERNET. https://www.edutopia.org/social-emotional-learning-history. Cited 25 March 2025.

Eicker, K., Poulsen, L. and Melinda S. (2012) The South African informal city. Johannesburg: Architects' Collective.

Ellingson, LL. and Ellis C. (2008) "Autoethnography as constructionist project." In Holstein, JA and Gubrium, JF (eds.). Handboook of constructionist research. pp 445-465. New York: Guilford.

Ellis, C. and Bochner, AP. (2000) "Autoethnography, personal narrative, reflexivity: Researcher as subject." In Denzin, NK and Lincoln, YS (eds.). Handbook of qualitative research. 2nd ed., pp 733-768. Thousand Oaks, California: Sage Publications.

Ericsson, KA., Krampe, RT. and Tesch-Römer, C. (1993) "The role of deliberate practice in the acquisition of expert performance." Psychological Review. Vol. 100, no3, pp 363-406. https://doi.org/10.1037/0033-295X.100.3.363

Eurich, T. (2017) Increase your self-awareness with one simple fix. TEDxMileHigh. INTERNET. https://www.ted.com/talks/tasha_eurich_increase_your_self_awareness_with_one_simple_fix?language=en. Cited 25 January 2025.

Eurich, T. (2018) What self-awareness really is (and how to cultivate it). Harvard Business Review, January 4, 2018. INTERNET. https://hbr.org/2018/01/what-self-awareness-really-is-and-how-to-cultivate-it. Cited 16 February 2025.

Fanon, Frantz, Constance Farrington, and Frantz Fanon. (2002) The Wretched of the Earth. Grove Press.

Fataar, A. (2012) "Pedagogical justice and student engagement in South African schooling: Working with the cultural capital of disadvantaged students." Perspectives in Education. Vol. 30, no4, pp 52-75.. https://doi.org/10.38140/pie.v30i4.1782

Feigenberg, A. (1991) "Learning to teach and teaching to learn." In Dutton, TA (ed.). Voices in architectural education: Cultural politics and pedagogy. pp 265-278. New York: Bergin & Garvey.

Felix, S. (2018) "Architecture for all." In Janse Van Rensburg, A (ed.). Architectural Education Forum Symposium: Architectural Education at Different Scales. pp 50-55. School of Architecture and Planning, University of the Witwatersrand, Johannesburg, South Africa.

Felix, S. (2019) "What modes of design research are transformative and venturous?" In Proceedings of the CA²RE conference at the KU Leuven, Faculty of Architecture, Ghent, Belgium. https://arch.kuleuven.be/ca2re-2019/proceedings/proceedings_CA2RE_2019.

Felix, S. (2020a) "A PhD in practice-based design research in architecture at Wits University." University of the Witwatersrand, Johannesburg, South Africa. https://hdl.handle.net/10539/29241

Felix, S. 2020b. "Back to the future. Unearthing tacit design knowledge through experimental frameworks of reflective past practice design research." In Berlingieri, F and Zanotto, F (eds.). Comparison, Conference for Artistic and Architectural Research Book of Proceedings. pp 375-388. Siracusa: LetteraVentidue.

Felix, S. 2020c. "Practice-based design research : Iterative cycles of research." In . Nelson Mandela University, Port Elizabeth, South Africa.

Felix, S. (2021) "Playing with fabric - Design research reflections on colour, materiality and texture in architectural projects." In Fernández Guardado, M and Ballestrem, M (eds.). CA²RE / CA²RE + Hamburg. Conference for Artistic and Architectural Research - Book of Proceedings. pp 364-371. Hamburg, Germany: HafenCity Universität Hamburg.

Felix, S. (2022) "Exploring the transformative potential of Practice-Based Design Research (PBDR) methods in architectural design pedagogy," 16 September. Wits University: Arts Research Africa. http://hdl.handle.net/10539/35908.

Felix, S. (2023) "Which pedagogical strategies support the conscious, critical, careful design practice of students?" Paper presented at AMPS - Teaching beyond the Curriculum conference.

Felix, S.L. (2024) "Tracing the Evolution of a Parallel-Engaged Architectural Pedagogy of Care in South Africa". Archnet-IJAR: International Journal of Architectural Research (ahead-of-print). world. https://doi.org/10.1108/ARCH-05-2024-0204.

Felix, S. and Silverman, M. (2021) "Agile and adaptable teaching strategies in an unequal society: Reflections from the design studio at Wits University, Johannesburg, South Africa" [Video]. INTERNET. https://www.youtube.com/watch?v=acPP5---eCQ. Cited 28 August 2024.

Feministkilljoys. (2016) Losing confidence. INTERNET. https://feministkilljoys.com/2016/03/01/losing-confidence/. Cited 13 February 2025.

Finlay, L. (2003) Reflecting on 'reflective practice.' Practice-Based Professional Learning Paper 52. INTERNET. https://oro.open.ac.uk/68945/1/Finlay-%282008%29-Reflecting-on-reflective-practice-PBPL-paper-52.pdf. Cited 16 February 2025.

Findeli, A. (2010) "Searching for design research questions - some conceptual clarification." In Chow, W Jonas, W and Joost, G (eds.). Questions, hypotheses & conjectures. Pp 286-303. Indiana: iUniverse.

Flas Borda, O. (2006) "The North-South convergence: A 30-year first-person assessment of PAR." Action Research. Vol. 4, no3, pp 351-358. https://doi.org/10.1177/1476750306066806

Flower, M. and Hamington, M. (2022) "Care ethics, Bruno Latour, and the Anthropocene." Philosophies. Vol. 7, no2, pp 31. https://doi.org/10.3390/philosophies7020031

Frampton, K. (2007) Modern architecture: A critical history. 4th ed. London: Thames & Hudson.

Francis, H. and Cowan, J. (2008) "Fostering an action-reflection dynamic amongst student practitioners." Journal of European Industrial Training. Vol. 32, no 5, pp 336-346. https://doi.org/10.1108/03090590810877067

Fraser, M. (2013) "Introduction." In Fraser, M (ed.). Design research in architecture: An overview. Surrey: Ashgate Publishing Company.

Frayling, C. (1993) "Research in art and design." Royal College of Art Research Papers. Vol. 1, no1.

Frayling, C. (2012) "Research in art and design." In Grand, S and Jonas, W (eds.). Mapping design research. Positions and perspectives. pp 95-107. Basel: Birkhäuser.

Freire, P. (1998) "Cultural action and conscientization." Harvard Educational Review. Vol. 68, no4, pp 499-521.

Freire, P. (2017) Pedagogy of the oppressed. South Africa: Penguin Random House.

French, A. and French, J. (2024) "Constructing commonality: Autoethnography in architectural pedagogy and practice." In Barnes, G and Satterfield, B (eds.). 112th ACSA Annual Meeting Proceedings, Disruptors on the edge. pp 474-479. ACSA Press.

Frichot, H/, Carbonell, A., Frykholm, H. and Karami, S. (2022) "Our infrastructural loves: Architectural pedagogies of care and support." Journal of Architectural Education. Vol. 76, no2, pp 52-69. https://doi.org/10.1080/10464883.2022.2097509

Frizelle, K. (2019) "Troubling whiteness: A critical autoethnographic exploration of being white in the context of calls for the decolonization of Higher Education." PINS-Psychology in Society. Vol. 58, no1, pp 4-26. https://doi.org/10.57157/pins2019Vol58iss1a6048

Gachago, D., Van Zyl, I., Morkel, J. and Ivala, E. (2024) "Nurturing creative confidence and learner empathy: Designing for academic staff development." Proceedings of the International Conference on Networked Learning. Vol. 12, pp 100-107. https://doi.org/10.54337/nlc.v12.8642

Galdon, F. and Hall, A. (2022) "(Un)Frayling design research in design education for the 21Cth." The Design Journal. Vol. 25, no6, pp 915-933. https://doi.org/10.1080/14606925.2022.2112861

Gero, JS. (1999) "Constructive memory in design thinking." In Goldschmidt, G and Porter, W (eds.). Design thinking research symposium: Design representation. pp 29-35. MIT: Cambridge.

Ghaye, T. and Ghaye, K. (1998) Teaching and learning through critical reflective practice. London: David Fulton Publishers.

Gignac, GE. and Ekermans, G. (2010) "Group differences in EI within a sample of black and white South Africans." Personality and Individual Differences. Vol. 49, no6, pp 639-644. https://doi.org/10.1016/j.paid.2010.05.039

Gill, R. and Orgad, S. (2017) "Confidence culture and the remaking of feminism." New Formations. Vol. 91, no91, pp 16-34. https://doi.org/10.3898/NEWF:91.01.2017

Gilligan, C. (1982) In a different voice: Psychological theory and women's development. Cambridge, Mass: Harvard University Press.

Giroux, H. (1985) "Critical pedagogy, cultural politics and the discourse of experience." Journal of Education. Vol. 167, no2, pp 22-41. https://doi.org/10.1177/002205748516700204

Giroux, H. (2007) "Utopian thinking in dangerous times: Critical pedagogy and the project of educated hope." In Cote, M Day, RJF and de Peuter, G (eds.). Utopian Pedagogy: Radical experiments against neoliberal globalization. pp 25-42. Toronto: University of Toronto Press.

Giroux, H. (2021) "Critical pedagogy." In Bauer, U Bittlingmayer, UH and Scherr, A(eds.). Handbuch Bildungs- und Erziehungssoziologie. pp 1-16. Wiesbaden: Springer Fachmedien Wiesbaden.

Glassman, M., Erdem, G. and Bartholomew, M. (2013) "Action research and its history as an adult education movement for social change." Adult Education Quarterly. Vol. 63, no3, pp 272-288. https://doi.org/10.1177/0741713612471418

Grand, S. and Jonas, W. (eds.). (2012) Mapping design research. Basel: Birkhäuser.

Grant, AM., Franklin, J. and Langford, P. (2002) "The self-reflection and insight scale: A new measure of private self-consciousness." Social Behavior and Personality: An International Journal. Vol. 30, no8, pp 821-835. https://doi.org/10.2224/sbp.2002.30.8.821

Gray, C. and Malins, J. (2004) Visualizing research: A guide to the research process in art and design. Burlington: Ashgate Publishing Company.

Grillner, K. (2013) "Design research and critical transformations: Situating thought, projecting action." In Fraser, M. (ed.). Design research in architecture: an overview. n.p. London: Routledge.

Grillner, K. and Stahl, L.-H. (2003) "Developing practice-based research." Nordic Journal of Architectural Research. Vol. 16, no1, pp 15-22.

Grosz, E. (1995) Space, time, and perversion: Essays on the politics of bodies. New York: Routledge.

Grummell,B., Devine,D and Lynch,K. (2009) "The Care-Less Manager: Gender, Care and New Managerialism in Higher Education". Gender and Education (Abingdon) 21 (2): 191–208. https://doi.org/10.1080/09540250802392273.

Guedes, A.D. (1977) "Fragments from an ironic autobiography: inaugural lecture by Amancio D'Alpoim Guedes, Professor and Head of the Department of Architecture, University of the Witwatersrand, Johannesburg." INTERNET. https://go.exlibris.link/vnbHQBSt. Cited 27 February 2024.

Guedes, ADM. (2006) "Lisboscópio: Representação Oficial Portuguesa na 10. a Exposição Internacional de Arquitectura = Bienal de Veneza Official Portuguese Representation in the 10th International Architecture Exhibition - Venice Biennale. Instituto das Artes" INTERNET. https://go.exlibris.link/yjB1bMZm. Cited 27 February 2024.

Guedes, A., Guedes, P. and Berardo MC. (2009) *Pancho Guedes: Vitruvius mozambicanus : 18.05.09-16.08.09 Museu Colecção Berardo*. Lisboa: Museu Colecção Berardo

Guedes, L., Guedes, P. and Raman, PG. (2003) Viva Pancho. Durban: Total CAD Academy.

Guersenzvaig, A and Ventura, J. (2022) "Design practice, professional responsibility, and self-enactment." 13th Design Thinking Research Symposium. pp 104-120.

Guilherme, M., Dietz G. and De Sousa Santos, B. (2015) "Da universidade à pluriversidade" Revista Lusófona de Educação. Vol. 31, pp 201-212.

Habib, A. (2022) "Seeding a new world: Lessons from the FeesMustFall movement for the advancement of social justice." In Glückler, J Meyer, HD and Suarsana, L (eds.). Knowledge and civil society. Knowledge and space. Vol. 17 pp 275-290. Cham: Springer International Publishing.

Hakio, K. and Mattelmäki, T. (2019) "Future skills of design for sustainability: An awareness-based co-creation approach." Sustainability. Vol. 11, no19 pp 5247. https://doi.org/10.3390/su11195247

Hando, A. (2014) "Does cultural self-awareness alter instructional design decisions?" Ed.D. West Virginia University, United States. https://www.proquest.com/docview/1617548807/abstract/496CE9DF47954383PQ/1.

Haraway, D. (1988) "Situated knowledges: The science question in feminism and the privilege of partial perspective." Feminist Studies. Vol. 14, no3, pp 575-599. https://doi.org/10.2307/3178066

Haraway, D. (1997) Modest−Witness@Second−Millennium. FemaleMan−Meets−OncoMouse: Feminism and technoscience. East Sussex, UK: Psychology Press.

Haraway, D. (2013) "Situated knowledges: The science question in eminism and the privilege of partial perspective." In Fraser, M (ed.). Design research in architecture: An overview. Surrey: Ashgate Publishing Company.

Hashem, H., Abbas, YS., Akbar, HA. and Nazgol, B. (2013) "Comparison the concepts of sense of place and attachment to place in architectural studies." Geografia: Malaysia Journal of Society and Space. Vol. 9, no1, pp 107-117.

Hendricks, D., Meyer, M., Deeg, L., Metz, T. and Tursky, R. (2020), "Fostering innovative entrepreneurial design students: Exploring the relationship between innovation characteristics and attitudes towards entrepreneurship in South African design students." Architecture_MPS. Vol. 18, no1. https://doi.org/10.14324/111.444.amps.2020v18i1.005

Herbert, G. and Martienssen, R. (1974) Martienssen and the international style: the modern movement in South African architecture. Cape Town: A.A. Balkema.

Herr, K. and Anderson, GL. (2005) The action research dissertation: A guide for students and faculty. Thousand Oaks, CA: SAGE Publications.

Hill, J. (2013) "Designs on history." Journal of Architectural Education. Vol. 67, no2, 258-263. https://doi.org/10.1080/10464883.2013.817172

Holdo, M. (2023) "Critical reflection: John Dewey's relational view of transformative learning." Journal of Transformative Education. Vol. 21, no1, pp 9-25. https://doi.org/10.1177/15413446221086727

Holgate, P and Jones, P. (2011) "Care of the self: Embedding well-being in architectural education at Northumbria University." Paper presented at Well-being 2011: The First International Conference Exploring the Multi-dimensions of Well-being. Birmingham City University. http://www.biad.bcu.ac.uk/research/wellbeing2011/index.php

hooks, b. (1994) Teaching to transgress: Education as the practice of freedom. New York: Routledge.

hooks, b. (2009) Teaching critical thinking: Practical wisdom. New York: Routledge.

Hughes, S. (2012) "Towards auto/pedagogy: A reflexive auto/biographic case study of professional learning mediated by technology." PhD Thesis. University of Wolverhampton, United Kingdom. http://hdl.handle.net/2436/268058

Imrie, R. and Kullman, K. (2016) "Designing with care and caring with design." In Bates, C Imrie, R and Kullman, K (eds.). Care and design: Bodies, buildings, cities. pp 1-17. Chichester, UK: John Wiley & Sons, Ltd.

Ingold, T. (2013) Ingold – "Thinking through making. Pohjoisen kulttuuri-instituutti – Institute for Northern Culture. INTERNET. https://www.youtube.com/watch?v=Ygne72-4zyo Cited 22 February 2025.

Ingold, T. (2018) Anthropology. Why it matters. Cambridge, UK: Polity Press.

International Union of Architects. (2022) Architecture Guide to the UN 17 Sustainable Development Goals. INTERNET. https://www.uia-architectes.org/en/resource/architecture-guide-to-the-un-17-sustainable-development-goals-english/. Cited 31 October 2024.

Irwin, R. L. (2017) "A/r/Tography: A Metonymic Métissage". In Arts Education and Curriculum Studies. Routledge.

Irwin, R. L. and De Cosson,A. (2004) A/r/Tography: Rendering Self through Arts-Based Living Inquiry. Pacific Educational Press.

Irwin, R. L., Beer,R., Springga,S. , Grauer,K., Xiong.G and Bickel.B. (2006) "The Rhizomatic Relations of A/r/Tography". Studies in Art Education (Reston) 48 (1): 70–88. https://doi.org/10.1080/00393541.2006.11650500.

Jagers, RJ., Rivas-Drake, D. and Borowski, T. (2018) Equity & social and emotional learning: A cultural analysis. Framework Briefs. INTERNET. https://measuringsel.casel.org/wp-content/uploads/2018/11/Frameworks-Equity.pdf. Cited 17 February 2025.

Jagers, RJ., Rivas-Drake, D. and Williams, B. (2019) "Transformative Social and Emotional Learning (SEL): Toward SEL in service of educational equity and excellence." Educational Psychologist. Vol. 54, no3, pp 162-184. https://doi.org/10.1080/00461520.2019.1623032

Jameson, A, Carthy, A, McGuiness, C and McSweeney, F. (2015) "The 21st Century Graduate: Delivering a tailored approach to social and emotional competency training for final year students to enhance graduate attributes and increase employability." International Conference on Engaging Pedagogy, December 2015, Dublin, Ireland.

Janse Van Rensburg, A. (2016) "Enabling transformation: A model for facilitating successful design learning outcomes in first year Bachelor of Architectural Studies." PhD Thesis. University of the Witwatersrand, Johannesburg, South Africa. http://hdl.handle.net/10539/20172

Jansen, J. (2017) As by fire: The end of the South African University. Tafelberg: University of Pretoria.

Jansen, JD. (ed.). (2019) Decolonisation in universities: The politics of knowledge. Johannesburg, South Africa: Wits University Press.

Jansen, JD. and Walters, CA. (2022) The decolonisation of knowledge: Radical ideas and the shaping of institutions in South Africa and beyond. 1st ed. Cambridge, UK: Cambridge University Press.

'John Moffat Building' (1959) SA Architectural Record. pp 16–24.

Johnston, O., Wildy, H. and Shand, J. (2021) "'Believe in me, and I will too': A study of how teachers' expectations instilled confidence in Grade 10 Students." Social Psychology of Education. Vol. 24, no6, pp 1535-1556. https://doi.org/10.1007/s11218-021-09668-1

Jones, B., Coetzee, G., Bailey, T. and Wickham, S. (2008) Factors that facilitate success for disadvantaged Higher Education students. Rural Education Access Programme. INTERNET. https://web.archive.org/web/20180422113123id_/http://www.reap.org.za/pieces/reports/pdf/tracking_reports/2008_June_factors_that_facilitate_success.pdf. Cited 17 February 2025.

Jones, K. (2019) "From critical to transformative pedagogy in architectural education." In Blythe, R and De Walsche, J (eds.). 2019 ACSA Teachers Conference, Practice of teaching - Teaching of practice: The teacher's hunch, pp 124-130. June 28-29, 2019 - Antwerp, Belgium. Illinois Institute of Technology: ACSA Press. https://doi.org/10.35483/ACSA.Teach.2019.21

Jones, SLH., Adams, TE. and Ellis, C. (2016) "Introduction-Coming to know autoethnography as more than a method." In Jones, SLH Adams, TE and Ellis, C (eds.). Handbook of autoethnography. London: Routledge.

Joorst, J.P. (2021) "Why Should an Ethics of Care Matter in Education?" Transformation in Higher Education 6 (October). https://doi.org/10.4102/the.v6i0.127.

Kant, I. (1889) Kant's critical philosophy for English readers. Vol. 1. London, England: Macmillan.

Kern, ML. and Wehmeyer, ML. (eds.). (2021) The Palgrave handbook of positive education. Cham: Springer International Publishing.

Klimoski, R. and Hu, X. (2011) "Improving self-awareness and self-insight." In London, M (ed.). The Oxford handbook of lifelong learning. Oxford: Oxford University Press.

Krasny, E., Fitz, A. and Wien, A. (eds.). (2019) Critical care: Architecture and urbanism for a broken planet. Cambridge, Massachusetts: The MIT Press.

Kurzwelly, J., Rapport, N. and Spiegel, AD. (2020) "Encountering, explaining and refuting essentialism." Anthropology Southern Africa. Vol. 43, no2, pp 65-81. https://doi.org/10.1080/23323256.2020.1780141

Lange, L. (2019) "The institutional curriculum, pedagogy and the decolonisation of the South African university." In Jansen, J (ed.). Decolonisation in universities: The politics of knowledge. pp 79-99. Johannesburg, South Africa: Wits University Press.

Lather, P. (1986) "Issues of validity in openly ideological research: Between a rock and a soft place." Interchange. Vol. 17, no4, pp 63-84. https://doi.org/10.1007/BF01807017

Lather, P. (1991) "Deconstructing/deconstructive inquiry: The politics of knowing and being known." Educational Theory. Vol. 41, no2, pp 153-–173. https://doi.org/10.1111/j.1741-5446.1991.00153.x

Lecanides-Arnott, M. (2014) "Criticism, self-criticism, generative criticism - Developing self-awareness and confidence in students of design." South African Journal of Higher Education. Vol. 28, no3, pp 1085-1106.

Lee, J., Shapiro, VB. and Kim, BKE. (2023) "Universal school-based Social and Emotional Learning (SEL) for diverse student subgroups: Implications for enhancing equity through SEL." Prevention Science. Vol. 24, no5, pp 1011-1022. https://doi.org/10.1007/s11121-023-01552-y

Lee, J., Shapiro, VB., Robitaille, JL. and LeBuffe, P. (2024) "Gender, racial-ethnic, and socioeconomic disparities in the development of social-emotional competence among elementary school students." Journal of School Psychology. Vol. 104, pp 101311. https://doi.org/10.1016/j.jsp.2024.101311

Le Grange, L. (2011) "A pedagogy of hope after Paulo Freire." South African Journal of Higher Education. Vol. 25, no1, pp 183-189.

Lensmire, TJ., McManimon, SK., Tierney, JD., Lee-Nichols, ME., Casey, ZA., Lensmire, A. and Davis, BM. (2013) "McIntosh as synecdoche: How teacher education's focus on white privilege undermines antiracism." Harvard Educational Review. Vol. 83, no3, 410-431.. https://doi.org/10.17763/haer.83.3.35054h14l8230574

Le Roux, H. (2014) "Design for the missing middle: Architecture in a context of inequality." Journal of Architectural Education. Vol. 68, no2, pp 160-161. https://doi.org/10.1080/10464883.2014.937228

Locke, J. (1726) The works. An essay concerning human understanding. 9th ed. London: A. Churchill and Edm. Parker.

Lokko, L. (2017) "A minor majority." Architectural Research Quarterly. Vol. 21, no4, pp 387-392. https://doi.org/10.1017/S1359135518000076

Low, I., Smuts, C. and Architects Support Group for South Africa. (1997) A new school of architecture in South Africa?: A study launched by Architects Support Group for South Africa, ASGSA-UK. Johannesburg, South Africa: Daedalus Press.

Low, SM. and Altman, I. (1992) "Place attachment." In Altman, I and Low, SM (eds.). Place attachment. Human behavior and environment. Vol. 12 pp 1-12. Boston, MA: Springer US.

Lucas, R. (2016) Research methods for architecture. UK: Hachette UK.

Luckan, Y. 2020. "The transformation of architectural pedagogy towards a new model for architectural education at universities of technology in South Africa." PhD Thesis. University of KwaZulu Natal, Durban, South Africa. http://rgdoi.net/10.13140/RG.2.2.30432.84480.

Luckan, Y. and Pillay, N. (2019) "Practice based research in the context of spatial transformation: A South African perspective." In Blythe, R and De Walsche, J (eds.). 2019 ACSA Teachers Conference, Practice of teaching - Teaching of practice: The teacher's hunch. pp 410-414. June 28-29, 2019 - Antwerp, Belgium ACSA Press. https://doi.org/10.35483/ACSA.Teach.2019.66

Maape, S. 2018. "A phenomenological approach - Deep history for architectural students." In Edited Proceedings of the Architectural Education Forum Symposium. Johannesburg: University of the Witwatersrand.

Maape, S. (2024) "Evoking the Spirit of Pancho Guedes and Peter Rich in an Era of Artificial Intelligence". March 19. https://www.gifa.org.za/event-details/evoking-the-spirit-of-pancho-guedes-and-peter-rich-in-an-era-of-artificial-intelligence.

Malik, N. (2016) "Pedagogies applied to develop student self-awareness and written self-evaluations: A costume case study." Art, Design and Communication in Higher Education. Vol. 15, no2, pp 161-174. https://doi.org/10.1386/adch.15.2.161_1

Malins, J. and Gray, C. (1995) Appropriate research methodologies for artists, designers, and craftspersons: Research as a learning process. Malins & Gray. INTERNET. http://carolegray.net/Papers%20PDFs/cc.pdf. Cited 22 June 2024.

Manning, J. (2004) "Racism in Three Dimensions: South African Architecture and the Ideology of White Superiority". Social Identities 10 (4): 527–36. https://doi.org/10.1080/1350463042000258944.

Marcus, CC. (1992) "Environmental memories." In Altman, I and Low, SM (eds.). Place attachment. Human behavior and environment. pp 87-112. Boston, MA: Springer.

Marcus, CC. (1995) House as a mirror of self: Exploring the deeper meaning of home. Berkeley: Conari Press.

Marcus, CC. (2014) "Environmental autobiography." Room One Thousand. Vol. 2, no2, pp 32-42.

Martienssen, R. (1941) Greek cities. Johannesburg: Institutes of South Africa Architects.

Martienssen, R. (1964a) Greek studies. Johannesburg: Transvaal Provincial Institute of South African Architects.

Martienssen, R. (1964b) The idea of space in Greek architecture; with special reference to the Doric temple and its setting. 2nd ed. Johannesburg: Witwatersrand University Press.

Mattern, S. (2018) "Maintenance and care. A working guide to the repair of rust, dust, cracks, and corrupted code in our cities, our homes, and our social relations." Places Journal. November. https://doi.org/10.22269/181120

Mbembe, JA. (2016) "Decolonizing the university: New directions." Arts and Humanities in Higher Education. Vol. 15, no1, pp 29-45. https://doi.org/10.1177/1474022215618513

Mbembe, JA. (2019) "Future knowledges and their implications for the decolonisation project." In Jansen, J (ed.). Decolonisation in universities: The politics of knowledge. pp 239-254. Johannesburg, South Africa: Wits University Press.

Mbembe, A. and Nuttall, S. (2004) "Writing the world from an African metropolis." Public Culture. Vol. 16, no3, pp 347-372. https://doi.org/10.1215/08992363-16-3-347

Mbiti, J.S. (1969) African religions & philosophy. London: Heinemann.

McIntosh, P. (2019) "White privilege: Unpacking the invisible knapsack (1989) 1." In McIntoch, P (ed.). On privilege, fraudulence, and teaching as learning. 1st ed., pp 29-34. New York: Routledge.

McLaren, SV. and Stables, K. (2008) "Exploring key discriminators of progression: Relationships between attitude, meta-cognition and performance of novice designers at a time of transition." Design Studies. Vol. 29, no2, pp 181-201. https://doi.org/10.1016/j.destud.2007.10.001

McNiff, J. and Whitehead, J. (2011) Doing and writing action research. London: Sage.

Merleau-Ponty, M. (2013) Phenomenology of perception. London: Routledge.

Mezirow, J. (1997) "Transformative learning: Theory to practice." New Directions for Adult and Continuing Education. Vol. 1997, no74, pp 5-12. https://doi.org/10.1002/ace.7401

Mignolo, W. (2011) "Epistemic disobedience and the decolonial option: A manifesto." Transmodernity: Journal of Peripheral Cultural Production of the Luso-Hispanic World. Vol. 1, no2. https://doi.org/10.5070/T412011807

Morse, JM., Barrett, M., Mayan, M., Olson, K. and Spiers, J. (2002) "Verification strategies for establishing reliability and validity in qualitative research." International Journal of Qualitative Methods. Vol. 1, no2, pp 13-22. https://doi.org/10.1177/160940690200100202

Mothoagae, O. (2023) In plain sight: 5 decades of Aziz Tayob. Interview. SSL Studio Production. INTERNET. https://www.youtube.com/watch?v=VUpmd8Pn7Os. Cited 22 December 2024.

Moulay, A. and Ujang, N. (2020) "Reconciling architectural education and environmental psychology." The International Journal of Interdisciplinary Educational Studies. Vol. 16, no1, pp 15-26. https://doi.org/10.18848/2327-011X/CGP/v16i01/15-26

Muraina, L., Toshe-Mlambo, Y. and Cingo, S. (2024) "South African Higher Education: Transformation or/and decolonisation?" Scholarship of Teaching and Learning in the South. Vol. 8, no1, pp 183-205. https://doi.org/10.36615/sotls.v8i1.321

Murdock, G. (2010) "Pierre Bourdieu, Distinction: A social citique of the judgement of taste." International Journal of Cultural Policy. Vol. 16, no1, pp 63-65. https://doi.org/10.1080/10286630902952413

Naidoo, R. (2004) "Fields and iinstitutional strategy: Bourdieu on the relationship between Higher Education, inequality and society." British Journal of Sociology of Education. Vol. 25, no4, pp 457-471. https://doi.org/10.1080/0142569042000236952

Ndlovu, M. (2011) "The pedagogy of hope at IMSTUS: Interpretation and manifestation." South African Journal of Higher Education. Vol. 25, no1, pp 41-55.

Newton, P. and Burgess, D. (2008) "Exploring types of educational action research: Implications for research validity." International Journal of Qualitative Methods. Vol. 7, no4, pp 18-30. https://doi.org/10.1177/160940690800700402

Ngubane, NI. and Makua, M. 2021. "Intersection of Ubuntu pedagogy and social justice: Transforming South African higher education." Transformation in Higher Education. Vol. 6, a113. https://doi.org/10.4102/the.v6i0.113

Nilsson, F. and Dunin-Woyseth, H. (2011) "Building a culture of doctoral scholarship in architecture and design. A Belgian-Scandinavian case." Nordic Journal of Architectural Research. Vol. 23, no1, pp 41-56.

Nilsson, F. and Dunin-Woyseth, H. (2014) "Research as a driving force for change: On triadic practice in architecture." Reflections. Vol. 17, pp 15-27.

Noble, J. (2018a) Creative Research in architecture at UFS. INTERNET. https://www.ufs.ac.za/docs/librariesprovider22/architecture-documents/new-content/creative-research-at-ufs.pdf?sfvrsn=194dbb21_0. Cited 17 February 2025.

Noble, J. (2018b) "UFS PhD with design." Presentation at mini-conference presented at the PhD with Design Mini-conference, University of the Free State, August 30.

Noble, JA. (2024) "Practice-based research in architecture at the University of the Free State." Image and Text. Vol. 38. https://doi.org/10.17159/2617-3255/2024/n38a3

Noddings, N. (1986) Caring: A Feminine Approach To Ethics & Moral Education. Univeristy Of California Press.

Noddings, N. (2012) "The Caring Relation in Teaching". Oxford Review of Education 38 (6): 771–81. https://doi.org/10.1080/03054985.2012.745047.

Noero, J. (2006) "Form-making can transform society." Building Design. Vol. 1728, p. 11.

Noero, J. (2011) "Architecture and activism." Lotus International, Vol. 145, pp 78-81.

Noero, J. (2018) "Limits to freedom: Liberating form, programme and ethics." Architectural Design. Vol. 88, no3, pp 24-31. https://doi.org/10.1002/ad.2297

NoorMohammadi, S. (2015) "The role of poetic image in Gaston Bachelard's contribution to architecture: The enquiry into an educational approach in architecture." Environmental Philosophy. Vol. 12, no1, pp 67-85. https://doi.org/10.5840/envirophil201551421

Nordwall, U. and Olofsson, T. (2013) "Architectural caring. Architectural qualities from a residential property perspective." Architectural Engineering and Design Management. Vol. 9, no1, pp 1-20. https://doi.org/10.1080/17452007.2012.664325

Norwood, BE. (2018) Disorienting phenomenology. INTERNET. https://www.academia.edu/36816548/Disorienting_Phenomenology. Cited 17 February 2025.

Oberst, U., Gallifa, J., Farriols, N. and Vilaregut, A. (2009) "Training emotional and social competences in Higher Education: The seminar methodology." Higher Education in Europe. Vol. 34, no3-4, pp 523-533. https://doi.org/10.1080/03797720903392243

Olweny, M., Morkel, J., Delport, H., Whelan, D. and Ndibwami, A. (2021) "Zombies in the studio: Towards nurturing pedagogical approaches for architectural education in sub-Saharan Africa." Charrette. Vol. 7, no2, pp 57-83.

Oro, AV. (2013) "El Bbrrio de são Victor De Álvaro Siza: Entre la teoría y la práctica de las oOperaciones saal/District of são Victor of Álvaro Siza: Between theory and practice of the saal operations." Proyecto, Progreso, Arquitectura Project, Progress, Architecture. no9, pp 96-113.

Pallant, J. (2007) SPSS survival manual: a step by step guide to data analysis using SPSS for Windows (version 15). 3rd ed. New York: Open University Press.

Pallasmaa, J. (1995) "Identity, intimacy and domicile - Notes on the phenomenology of home." In Benjamin, ND (ed.). The home: Words, interpretations, meanings and environments. pp 131-147. Aldershot, UK: Ashgate Publishing.

Pallasmaa, J. (2013) Encounters 1 Architectural essays. 2nd ed. Helsinki, Finland: Rakennustieto Publishing.

Pallasmaa, J. (2016) "Empathy, design and care – Intention, knowledge and intuition: The example of Alvar Aalto." In Bates, C Imrie, R and Kullman K (eds.). Care and design: Bodies, buildings, cities. pp 138-154. Chichester, UK: John Wiley & Sons, Ltd.

Pallasmaa, J. (2017) "Embodied and existential wisdom in architecture: The thinking hand." Body and Society. Vol. 23, no1, pp 96-111. https://doi.org/10.1177/1357034X16681443

Pather, S. and Chetty, R. (2015) "The habitus and social capital of first-year students: A case study." Alternation. Special Edition. no17, pp 54-76.

Payne, JC. (2015) "Investigating the role of cultural capital and organisational habitus in architectural education: A case study approach." International Journal of Art and Design Education. Vol. 34, no1, pp 9-24, https://doi.org/10.1111/jade.12018

Payne, R. (2020) "The shock of the new." International Journal of Art and Design Education. Vol. 39, no4, pp 724-738. https://doi.org/10.1111/jade.12317

Petras, EM. and Porpora, DV. (1993) "Participatory research: Three models and an analysis." American Sociologist. Vol. 24, no1, pp 107-126. https://doi.org/10.1007/BF02691948

Petrescu, D. (2007) Altering practices: Feminist politics and poetics of space. London: Routledge.

Polanyi, M. (1958) Personal knowledge: Towards a post-critical philosophy. Chicago: University of Chicago Press.

Polanyi, M. (1966) The tacit dimension. New York: Doubleday and Company Inc.

Poulsen, L. (2007) Brixton urban renewal project: Brixton… a neighbourhood in transition! Johannesburg: Social Housing Focus Trust.

Poulsen, L. (2002) Thesis programme 2002: guidelines [Course notes]. Johannesburg: University of the Witwatersrand. School of Architecture and Planning.

Rahman, MA. and Fals Borda, O. (1991) Action and knowledge: Breaking the monopoly with participatory action research. New York: Apex Press.

Ramani, S., Könings, K., Mann, KV. and Van Der Vleuten, C. (2017) "Uncovering the unknown: A grounded theory study exploring the impact of self-awareness on the culture of feedback in residency education." Medical Teacher. Vol. 39, no10, pp 1065-1073. https://doi.org/10.1080/0142159X.2017.1353071

Ramose, M.B. (2003) "The philosophy of Ubuntu and Ubuntu as a philosophy." In Coetzee, PH and Roux, PJ (eds.). The African philosophy reader. 2nd ed., pp 270-280. New York: Routledge.

Rawes, P. (2013) "Architectural ecologies of care." In Relational architectural ecologies. Architecture, nature and subjectivity. London: Routledge.

Raymond, CM., Brown, G. and Weber, D. (2010) "The measurement of place attachment: Personal, community, and environmental connections." Journal of Environmental Psychology. Vol. 30, no4, pp 422-434. https://doi.org/10.1016/j.jenvp.2010.08.002

Reed-Danahay, D. (1997) Auto/Ethnography: Rewriting the self and the social. London: Routledge.

Rendell, J. (2012) "Tendencies and trajectories: Feminist approaches in architecture." In Crysler, G Cairns, S and Heynen, H (eds.). The SAGE handbook of architectural theory. pp 85-106. London, United Kingdom: SAGE Publications Ltd.

Rendell, J. (2016) "Critical spatial practice as Parrhesia." MaHKUscript: Journal of Fine Art Research. Vol. 1, no2, pp 16. https://doi.org/10.5334/mjfar.13

Rendell, J. (2018) Only resist: a feminist approach to critical spatial practice. Architectural Review (blog). February 19, 2018. INTERNET. https://www.architectural-review.com/essays/only-resist-a-feminist-approach-to-critical-spatial-practice. Cited 17 February 2025.

Rendell, J. (2020) "From critical to ethical spatial practice." In Bean, J Dickinson, S and Ida, A (eds.). Critical practices in architecture. The unexamined. 1st ed. Newcastle upon Tyne: Cambridge Scholars Publishing.

Rendell, J. (2021) "A way with words: Feminists writing architectural design research." In Fraser, M (ed.). Design research in architecture. 1st ed., pp 117-136. London: Routledge.

Rice, L., Meraz, F., Marco, E. and Drożyński, C. (2021) "Nurturing architecture: Education, research and practice for health and wellbeing." Charrette. Vol. 7, no2, pp 1-9.

Rowe, A. (2020) "Participatory action research and design pedagogy: Perspectives for design education." Art, Design and Communication in Higher Education. Vol. 19, no1, pp 51-64. https://doi.org/10.1386/adch_00013_1

Saidi, FE. (2005) "Developing a curriculum model for architectural education in a culturally changing South Africa". PhD Thesis. University of Pretoria, Pretoria.

Salama, AM. (2021) Transformative pedagogy in architecture and urbanism. London: Routledge.

Sander, P. and de La Fuente, J. (2020) "Undergraduate student gender, personality and academic confidence." International Journal of Environmental Research and Public Health. Vol. 17, no15, 5567. https://doi.org/10.3390/ijerph17155567

Sarvimäki, M. (2017) Case study strategies for architects and designers: integrative data research methods. London: Routledge.

Savic, M. and Kashef, M. (2013) "Learning outcomes in affective domain within contemporary architectural curricula." International Journal of Technology and Design Education. Vol. 23, no4, pp 987-1004. https://doi.org/10.1007/s10798-013-9238-8

Scannell, L. and Gifford, R. (2010) "Defining place attachment: A tripartite organizing framework." Journal of Environmental Psychology. Vol. 30, no1, pp 1-10. https://doi.org/10.1016/j.jenvp.2009.09.006

Schalk, M., Bradley, K. and Gunnarsson G. (2013) "Eco-feminist futures II: Critical spatial practices." In Gromark, S Mack, J van Toorn, R Frichot, H Sandin, G and Schwalm, B (eds.). Rethinking the Social in Architecture. Volume 1 Architecture in Effect New York: Actar.

Schalk, M., Kristiansson, T. and Mazé, R. (eds.) (2017) Feminist futures of spatial practice : Materialisms, activisms, dialogues, pedagogies, projections. Baunach, Germany: AADR/Spurbuchverlag.

Schön, DA. (1984) The reflective practitioner: How professionals think in action. London: Routledge.

Schön, DA. (1985) The design studio: An exploration of its traditions and potentials. London: RIBA Publications for RIBA Building Industry Trust.

Schön, DA. (1987) Educating the reflective practitioner: Toward a new design for teaching and learning in the professions. San Francisco, CA: Jossey-Bass.

Schouwenberg, L. and Kaethler, M. (eds.). (2021) The auto-ethnographic turn in design. Amsterdam: Valiz.

Schultz, K., Wiedemann-Tokarz, H. and Herrmann, EM. (2019) Thinking color in space: Positions, projects, potentials. Basel: Birkhäuser.

Seppälä, T., Sarantou, M. and Miettinen, S. (2021) Arts-based methods for decolonising participatory research. 1st ed. New York: Routledge.

Sevilla-Liu, A. (2021) "Mori Akira's education for self-awareness: Lessons from the Kyoto School for mindful education." Journal of Philosophy of Education. Vol. 55, no1, pp 243-262. https://doi.org/10.1111/1467-9752.12546

Silvia, PJ. and O'Brien, ME. (2004) "Self-awareness and constructive functioning: Revisiting 'the human dilemma'." Journal of Social and Clinical Psychology. Vol. 23. no4, pp 475-489. https://doi.org/10.1521/jscp.23.4.475.40307

Simmons, M. (2023) "Frantz Fanon and Education". In Oxford Research Encyclopedia of Education, by Marlon Simmons. Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.1770.

Singh, J. (2018) Unthinking mastery: Dehumanism and decolonial entanglements. Durham: Duke University Press.

Smith, LT. (2012) Decolonizing methodologies: Research and indigenous peoples. 2nd ed. London: Zed Books.

Sorrell, J. and Noero, J. (2009) Jo Noero: the everyday and the extraordinary : three decades of architecture : Jo Noero Architects 1982-1998 and Noero Wolff Architects 1998-2009. Vlaeberg, South Africa: ADA Pub.

South African Council for Architectural Profession. (2023) SACAP 2022-2023 Annual Report. INTERNET. https://www.sacapsa.com/html/SACAP_Annual_Report_2022_2023/index.html#page=28. Cited 13 February 2025.

Sparkes, AC. (2016) "Autoethnography as a mode of knowing and a way of being." In Jones, SLH Adams, TE and Ellis, C (eds.). Handbook of autoethnography. pp 512-517. London: Routledge

Spiers, J., Morse, JM., Olson, K., Mayan, M. and Barrett, M. (2018) "Reflection/commentary on a past article: 'Verification strategies for establishing reliability and validity in qualitative research'." International Journal of Qualitative Methods. Vol. 17, no1. https://doi.org/10.1177/1609406918788237

Spivak, GC., Adamson, W., Rothfield, P. and Gunew, S. (1990) "The problem of cultural self-representation." In Harasym, S (ed.). The post-colonial critic: Interviews, strategies, dialogues. pp 50-58. New York: Routledge.

Spivak, GC. and Grosz, E. (1990) "Criticism, feminism, and the institution." In Harasym, S (ed.). The post-colonial critic: Interviews, strategies, dialogues. pp 1-16. New York: Routledge.

Springgay, S. (2008) Being with a/r/Tography. Sense Publishers. https://go.exlibris.link/6QpmRwmV.

Statistics South Africa. 2022. (2023) Statistical release. P0301.4. Department of Statistics, South Africa. INTERNET. https://census.statssa.gov.za/assets/documents/2022/P03014_Census_2022_Statistical_Release.pdf.Cited 18 June 2024.

Stead, N., Gusheh, M. and Rodwell, J. (2022) "Well-being in architectural education: Theory-building, reflexive methodology, and the 'hidden curriculum.'" Journal of Architectural Education. Vol. 76, no1, pp 85-97. https://doi.org/10.1080/10464883.2022.2017699

Stedman, RC. (2003) "Is it really just a ocial construction?: The contribution of the physical environment to sense of place." Society and Natural Resources. Vol. 16, no8, pp 671-685. https://doi.org/10.1080/08941920309189

Stengers, I. (2013) "Introductory notes on an ecology of practices." Cultural Studies Review. Vol. 11, no1, pp 183-196. https://doi.org/10.5130/csr.v11i1.3459

Stillman, SB., Stillman, P., Martinez, L., Freedman, J., Jensen, AL. and Leet, C. (2018) "Strengthening social emotional learning with student, teacher, and schoolwide assessments." Journal of Applied Developmental Psychology. Vol. 55, pp 71-92. https://doi.org/10.1016/j.appdev.2017.07.010

Stone-Johnson, B. (2022) "The body matters: Making the body and materials present in post-extractive urban terrains in response to issues of the Anthropocene through speculative and performative practices." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa.

Stratigakos, D. (2012) "Why architects need feminism." Places Journal. September 2012. https://doi.org/10.22269/120912

Sunwoo, I. (2012) "From the "Well-Laid Table" to the "Market Place:" The Architectural Association Unit System." Journal of Architectural Education. Vol. 65, no2, pp 24-41. https://doi.org/10.1111/j.1531-314X.2011.01196.x

Sutherland, S. (1989) Macmillan dictionary of psychology. London: Macmillan.

Sutton, A. (2016) "Measuring the effects of self-awareness: Construction of the self-awareness outcomes questionnaire." Europe's Journal of Psychology. Vol. 12, no4, pp 645-658. https://doi.org/10.5964/ejop.v12i4.1178

Szentesi, A. (2022) "It depends on the lens: Film as experimental teaching in architectural design and design representation." In How does artistic research transform pedagogy and art practice in Africa. Johannesburg, South Africa: Arts Research Africa.

Tan, MKB. (2019) "Art and design education in the ecology of care." International Journal of Art and Design Education. Vol. 38, no4, pp 878-886. https://doi.org/10.1111/jade.12273

Tayob, H. (2024) Going according to plan, The architectural journey of Aziz Tayob. Pretoria, South Africa: Digniti. INTERNET. https://www.polity.org.za/article/going-according-to-plan-the-architectural-journey-of-aziz-tayob-2024-10-24 . Cited 18 February 2025.

Ten Brink, M., Witschge, T., Bredeweg, B. and Schouten, B. (2022) "Designing for self-awareness: Supporting students' reflexive interactions based on photos." In C&C '22: Proceedings of the 14th Conference on creativity and cognition. pp 161-170. Venice Italy: ACM.

The Centre for Conscious Design. (n.d.) About the Centre For Conscious Design. INTERNET https://theccd.org/about-us. Cited 2 December 2022.

Thomas, AT. and Wagner, C. (2016) "Ethnic identity, collective self-esteem and academic self-efficacy among black and white tertiary students." South African Journal of Higher Education. Vol. 27, no4. https://doi.org/10.20853/27-4-280

Thompson, J. (2016) "Becoming an architect: Narratives of architectural education." PhD Thesis. University of Washington, United States. https://go.exlibris.link/m9lnhTc9.

Thompson, J. (2019) Narratives of architectural education: From student to architect. 1st ed. London: Routledge.

Thompson, MJ. (2017) The Palgrave handbook of critical theory. 1st ed. New York: Palgrave Macmillan.

Till, KE. (2008) "Artistic and activist memory-work: Approaching place-based practice." Memory Studies. Vol. 1, no1, pp 99-13. https://doi.org/10.1177/1750698007083893

Tombro, M. (2016) Teaching autoethnography: Personal writing in the classroom. New York: Open SUNY Textbooks, Milne Library.

Travis, J. (2012) 10 principles final BlackSpace design: Hidden in plain view. Issuu.com. INTERNET. https://issuu.com/jacktravisfaia/docs/10principlesofblackdesign. Cited 18 February 2025.

Tronto, JC. (1998) "An ethic of care." Generations: Journal of the American Society on Aging. Vol. 22, no3, pp 15-20. http://www.jstor.org/stable/44875693

Tronto, JC. (2013) Caring democracy: Markets, equality, and justice. New York: NYU Press.

Tronto, JC. and Fisher, B. (1990) "Toward a feminist theory of caring." In Abel, E and Nelson, M (eds.). Circles of care. pp 36-54. Albany, New York: SUNY Press.

Turner, H. (2021) "Effective critique through affective peer engagement." Journal of Interior Design. Vol. 46, no3, pp 29-45. https://doi.org/10.1111/joid.12195

Ukpokodu, ON. (2016) You can't teach us if you don't know us and care about us: Becoming an ubuntu, responsive and responsible urban teacher. Pieterlen, Berne, CHE: Peter Lang International Academic Publishers.

Van der Westhuizen,L. and Hannaway,D. (2024) "Authentic Caring in Online Professional Development for Early Childhood Teachers in South Africa". South African Journal of Childhood Education (Johannesburg) 14 (1): 1–13. https://doi.org/10.4102/sajce.v14i1.1574.

Van Maanen, J. (2011) Tales of the field: On writing ethnography. 2nd ed. Chicago: University of Chicago Press.

Van Schaik, L. (2004) Mastering architecture: Becoming a creative innovator in practice. Chichester: Wiley.

Van Schaik, L. (2008) Spatial intelligence: New futures for architecture. Chichester, England: Hoboken.

Van Schaik, L. (2013) "What if design practice matters? Part 1." In Fraser, M (ed.). Design research in architecture: An overview. pp 53-61. Surrey: Ashgate. Publishing.

Van Schaik, L. (2016) "The design practice research model of ADAPT-r." In Hamman, C (ed.). ADAPT-r exhibition. pp 19-25. London: University of Westminster.

Van Schaik, L. (2019) "Difference rather than shared competence." In Nazareth, I (ed.). The practice of spatial thinking: Differentiation processes. pp 11-21 New York: Actar.

Van Schaik, L. (2020) Building a culture: Reflections on three decades of design practice research at RMIT. Melbourne, Australia: Uro Publications.

Van Schaik, L., Ware, SA., Fudge, C. and London, G. (eds.). (2019) The practice of spatial thinking: Differentiation processes. 2nd ed. New York: Actar.

Vaughan, L. (2014) Unpacking models, approaches and materialisations of the design PhD. Studies in material thinking. Auckland: Auckland University of Technology.

Vaughan, L. (ed.). (2017) Practice-based design research. London: Bloomsbury Publishing Plc.

Vice, S. (2010) "'How do I live in this strange place?'" Journal of Social Philosophy. Vol. 41, no3, pp 323-342. https://doi.org/10.1111/j.1467-9833.2010.01496.x

Washoe County School District. (2018a) Frequently asked questions about the WCSD Social and Emotional Competency Assessment (WCSD SECA). WCSD. INTERNET. https://www.washoeschools.net/cms/lib/NV01912265/Centricity/Domain/231/WCSD_SECA_FAQ_Format_October_2018_FINAL.pdf. Cited 25 March 2025.

Washoe County School District. (2018b) WCSD Social and Emotional Competency Item Bank 2018. WCSD. INTERNET. https://www.washoeschools.net/cms/lib/NV01912265/Centricity/Domain/231/WCSD_SECA_FAQ_Format_October_2018_FINAL.pdf. Cited 25 March 2025.

Webster, H. (2008) "Architectural education after Schön: Cracks, blurs, boundaries and beyond." Journal for Education in the Built Environment. Vol. 3, no2, pp 63-74. https://doi.org/10.11120/jebe.2008.03020063

Webster, H. (2011) Bourdieu for architects. New York: Routledge.

White, LA. (2012) "Teaching autoethnography." All Capstone Projects,18.

Yalçın, MA. and Ulusoy, M. (2015) "Personal and professional attitudes of architecture students." Procedia - Social and Behavioral Sciences. Vol. 174, pp 1820-1828. https://doi.org/10.1016/j.sbspro.2015.01.843

Yee, JSR. (2010) "Methodological innovation in practice-based design doctorates." Journal of Research Practice. Vol. 6, no2, M15. http://jrp.icaap.org/index.php/jrp/article/view/196/193

Zembylas, M. (2025). "Affective Methodologies for a Critical Study of Whiteness: Considerations for White Scholars". Contemporary Educational Psychology, January, 102346. https://doi.org/10.1016/j.cedpsych.2025.102346.

Zerai, A., Mabokela, RO., Carolissen, R., Sader, S., Mthiyane, N. and Skahan, M. (2023) "Feminist decoloniality as care in higher education." Agenda. Vol. 37, no2, pp 1-7. https://doi.org/10.1080/10130950.2023.2255441

APPENDIX A: CURRICULUM 2019 TO 2023

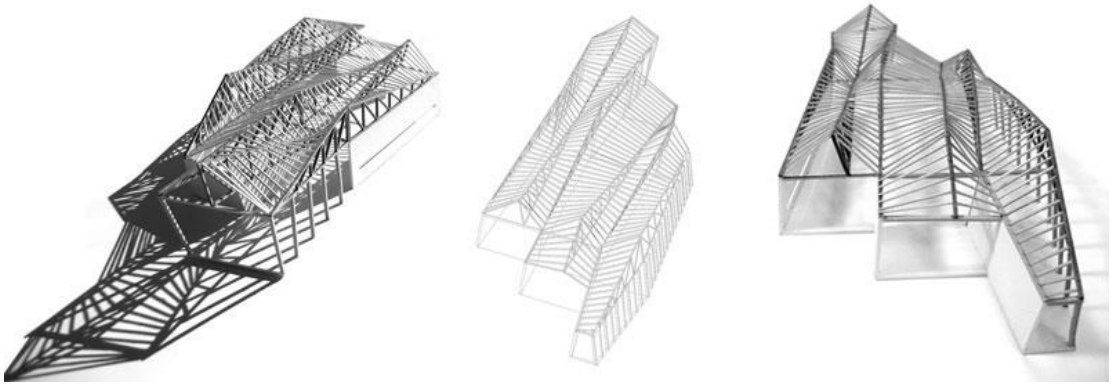
A.1 ARPL3005 Architectural Design and Theory III Course Outlines 2019 to 2024

A.2 Manifesto Project Briefs 2019 to 2023

A.3 Manifesto Revisited Briefs 2019 to 2023

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE & PLANNING

ARPL 3005: Architectural Design and Theory 3
2019



1 STAFF

First Semester
Melinda Silverman melindasilverman@mweb.co.za
Sandra Felix
Tunde Oluwa
Gustavo Triano-Martinez

Second Semester
Melinda Silverman melindasilverman@mweb.co.za
Gerald Chungu
Sandra Felix
Tunde Oluwa
Gustavo Triano-Martinez

2 AIMS

The ARPL3005 Architectural Design and Theory Course aims, in conjunction with the other courses in the study year, to complete the under-graduate architectural training enabling students to work in the highly demanding built environment professions.

During the third year students are required to demonstrate how they can apply the skills - gained during preceding study years - with increasing levels of sophistication and independence. Students are expected to demonstrate competenece in architectural design, theory, functional planning, technical development, architectural materiality, programming, environmental responsiveness, graphic skills, model building and writing. As an end product students should have a comprehensive portfolio of work, prepared within all the internationally accepted norms for such portfolios, which showcases all of the above in an easily understandable and aesthetically beautiful document.

The broader aim of the ARPL3005 Course, via the studio environment and the various tutors, is to equip students with the skills to create an architecture that is an expression of dignified human values and that provides a context for human activity and development. Through the design process and theoretical discourse, students will address the interrelated environmental, behavioral, and cultural issues that underlie the organisation of built form. Students will be required to direct sensitivity, imagination, intellect and increasingly levels of professional judgement to the physical significance of these fundamental issues in designing a coherent environment for people.

The programme, therefore, is based on the following intentions:

- to stimulate artistic sensitivity and creative powers,
- to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems,
- to ensure that the student acquires confidence in their design capabilities,
- to develop the necessary technical skills to realise design decisions and to take a design projects to competent conclusions.

The course will have a pluralistic approach to the teaching of architecture. Students will have opportunities to become acquainted with a wide range of contemporary design approaches and methodologies. The course does not seek to impose any singular design philosophy, but rather encourages each student to develop an individual approach to design, based on clear and well reasoned arguments.

3 LEARNING OUTCOMES

The desired learning outcomes should enable the students to:

- Acquire expansive and well reasoned conceptual design skills.
- Design large scale or complex buildings.
- Demonstrate a consistency of thought across scales. All design studio projects require a 'package of plans' approach, with each larger scale providing the fixes for successively smaller scales.
- Connect scales and integrate the architectural concept with the final detail and choice of materials.
- Develop design methodologies for the resolution of complex and hybrid designs, ranging from small community projects to larger commercial projects with mixed-use requirements.
- Showcase a range of graphic and design skills – hand-drawing, physical modeling, CAD as well as technical documentation - to describe the projects as an integrated whole.
- Understand how building technology, materials and systems are an integral part of the architectural design process.
- Understand the relationship between architectural theory, history and design methodology.
- Demonstrate a broad knowledge of contemporary issues such as energy, the environment and socio-political influences.
- Understand small elements (detail) as part of a larger whole by visualisation.
- Use architectural language as an expression of identity in multi-cultural contexts.

4 TEACHING AND LEARNING METHODS

The paramount task during the ARPL 3005 course is the development of a design methodology which enables the student to deal with and apply the varied interrelationships found in architectural design. Students are expected to achieve a level of confidence to deal with complex challenges across all scales.

4.1 Design studio

The design studio is paramount, emphasising the sometimes competing interrelationships between purpose, design, competition, collaboration, innovation and building technology in an environment that values experimentation.

The design studio is a workshop in which students congregate to present and discuss projects and proposals with fellow students, staff and visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from desk critiques with individual lecturers, to presentations before several tutors, to more formal exams and final reviews before school and guest critics, with the intention of fostering critical thinking, spatial form making skills, and tectonic skills. The design studio must be viewed as the laboratory were the courses in building technology; materials and production; visual representation in various media; history and theory; and urbanism and landscape are fused together to achieve a comprehensive approach to architecture.

In order to engage with a broad spectrum of architectural questions, a variety of environmental and cultural issues endemic to chosen localities a variety of projects will be completed during the course of the year. This process of exploration offers the opportunity to conduct detailed research, develop formal design methodologies, formulate strategies and design appropriate responses to each project.

Each project has its own goals and associated criteria, some of which will involve group and team work. The process will involve site visits, interaction with the community, research into contemporary and historical precedent, critical investigation of intervention opportunities and options and the exploration and development of detailed projects. A breakdown of the various projects and their timeframes is listed in the attached schedule.

Studio contact will rely heavily on student participation. Mondays and Thursdays are intended for intense studio contact, with groups to be arranged and each attended by a designated tutor, sharing information. The tutor will be responsible for his/her group with scheduled, registered sessions, and will allocate **provisional marks**. Tutors will rotate each quarter to allow different exposure to all students.

It is essential that students meet with tutors on a weekly basis. Each tutor will have attendance record of their students. Students who fail to meet with tutors or spend less than 75% of the allocated teaching-time in the studio will receive a '*Refusal of Due Performance.*

4.2 Design Theory

In addition to the projects to be concluded in design studio, a series of lectures and seminars will provide background materail supporting the studio projects. Some of these lectures will be delivered by pracicing architects and will provide students with insights into the various design methodologies that practitioners use in their work. These lectures are intended to form a link between the theories of architecture, and the architectural design exploration process.

The design theory portion of this course will take the form of a discussion forum and will be directly coordinated with the History and Theory Course as well as the Theory of Construction programme. Reviews, studies and analyses of built form will form an important part of this course. Students will engage and present to architects in the profession and evaluate their work. Students will address a series of contemporary examples of projects, buildings, urban designs and their architects, their methodology, material application, environmental response, functionality, topographical setting and meaning**.** The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges, enhance students' research capacities and broaden students'own design references. Students will be required to prepare presentations for discussion around their readings, architectural aspirations and inspirations.

5 STUDENT WORKLOAD

Course	SAQA	Self Study	Lectures	Studio
Design	650hrs	196hrs	104hrs	350hrs

6 SYLLABUS

The syllabus is outlined in the project descriptions below and in the attached schedule. In addition, detailed briefs will be provided at the start of each project.

SEMESTER 1

Project 1 **An Architectural Manifesto: Reflections & Appraisal 2*(10 x 10)**
Weeks 1-2
Project brief 4 February 2019
Hand-in date 18 February 2019

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an expression of the best we want to become, or remembered by. This year the student needs start the journey towards establishing his/her architectural identity/ It requires of students to take a stand and seek the tools to express them in a coherent and legible manner.

A Manifesto: Reflections – 2*(10 x 10) is intended to allow you to start your 3rd year programme by reflecting on the work you have produced over the previous two years, and through this reflection begin to frame an approach to your third year work. In parallel students have to select 10 buildings by well known architects who have completed a substantial amount of work and critically assess their work through the same criteria.

Manifesto 10 x 10 has three main aims:
• To develop critical thinking, and in particular to encourage and develop your ability to self critique; by tracing your own development over the previous two years.
• To define a framework or structure for the evolution of your design approach (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context.
• To begin to equip you with the tools to better articulate your work, to engage in debate, and to defend your own work in a critical forum.

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

The project requires the student to question his /her attitude towards the production of architectural space. The student needs to take a position and be able to debate attitudes in architecture towards ethics, civicness, collectivity, modernity, place-boundness, social consciousness, sustainability, contradictions and continuity. The submission will take the form of a ***poster, poem, prototype and pattern***.

Project 2: **Migrant Threshold (PPC Imaginarium competition)**
Weeks 3-7

Project brief	21 February 2019
Site analysis	28 February 2019
Interim sketch plan	11 March 2019
Hand-in date:	18 March 2019

A manifesto carries little purpose if not expressed in spatial form. The challenge requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment. The student is required to express his/her position in architecture in a physical manifestation.

The project that will be used to test students' own manifestos will be a migrant's threshold, as expressed in the PPC Imaginarium brief. Students whose projects are shortlisted for the competition will be required to refine their work during the autumn break.

Project 3a **Wits School for Digital Arts**
Weeks 8-16

Project brief	1 April 2019
Site Analysis	8 April 2019
Hand-in date (Sketch plans)	25 April 2019
Interim review	13 and 16 May 2019
Hand in date (Design development)	tba (During exams)
Joint review with construction	16 and 17 October 2019

Wits is seeking to consolidate its arts precinct at the corner of Jorissen Street and Jan Smuts Avenue by developing a new building to house a range of digital arts. The siting of the building at the Jorissen Street entry to the university is intended to provide a new gateway to the university and to encourage interaction between the campus and the city. The school is seen as a highly interactive environment with a variety of display spaces, a coffee shop, an auditorium, a range of seminar and lecture venues, research areas, offices, digital laboratories and virtual reality testing rooms. The intention is to showcase the role that Wits is playing in piioneering the digital arts.

As the site is small it will require a multi storey building to accommodate the required brief. Site analysis and planning will occupy most of Quarter 2. In addition, the first two weeks of quarter 3 will be devoted to development of sections and elevations.

Finally, the Wits School for Digital Arts will be the project which students take through into the second semester for the Construction Course and is the basis for the ARPL3000 (Technical Documentation) brief. The initial design, the technical resolution on the building, and the extent to which the initial design was altered during the process of technical resolution will be evaluated at a review towards the end of the third quarter. This review straddles both the design and construction courses.

SEMESTER 02

Project 3b: **Wits School for Digital Arts (3D development)**
Weeks 15-16

Project Brief	15 July 2019
Hand-in date	25 July 2019

Students would have completed an extensive exercise on the Digital Arts School, for the most working in plans, attempting to complete the functional programme. This plan and flow of the building will most likely not be sufficiently developed in spatial/volumetric terms and needs interpretation and spatial articulation in section and sectional elevation. A *cross-section* and elevation is defined as a view of a 3-dimensional object from the position of a plane through the object. Architectural sections and elevations are considered the primary tool to depict construction method and materials and are essential tools for designing space, understanding internal and external relationships, and the spatial impact of light, structure and scale.

Students are required to reassess their Wits School for Digital Arts and develop, interpret, design and construct the design in elevation and section.

Project 4a and b: **Major Design Studio Project: Constructing a civic heart for the city of Johannesburg**
Weeks 17-26

Design brief	29 April 2019
Research brief (4b)	9 May 2019
Research presentations (4b)	1 August 2019 and 5 August 2019
Site analysis and site model	12 August 2019
Sketch plan	26 August 2019
1:20 Section	12 September 2019
Environmental response	23 September 2019
Final design pin-up	10 October 2019

Beyers Naude Square (formerly Library Gardens and prior to that Market Square) has historically functioned as the civic heart of Johannesburg, accommodating a number of significant buildings – the Rissik Street Post Office, the City Hall and the Johannesburg Public Library. This project is intended to enhance the role of the square within the inner by concentrating additional public buildings around the square, including a performing arts space; a museum of the City of Johannesburg; head offices for a political party; and a library for the 21st Century. Each one of these building types will form the basis of an elective, providing students with a choice of building types and sites. Lectures to help students decide on which building type to explore will commence in the second quarter, so that by the time work starts on this project, students will have sufficient background to make informed choices.

Aside from honing students' architectural skills, this project will also focus on urban design, sustainability and representational skills. Sustainabilty experts will provide additional support to the studio, helping students to explicitly address sustainability issues and produce buildings able to achieve a 'green star rating'. Another key outcome will be a large scale urban model – built by all members of the class - providing the urban context into which students will insert models of their own buildings.

Students will also be required to conduct research on their chosen building type and produce a verbal presentation and written essay. The essay will embody the student's understanding of architecture and demonstrate his/her ability to fulfill the academic requirements expected at this exit level. The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges, and enhance students reading and broaden their own design references.

Project 5 **Revisiting the Manifesto**
Weeks 24 – 25

Project brief	26 September 2019
Hand-in date	30 September 2019

Intense engagement with projects during the year will have undoubtedly impacted on students' original attitudes to architecture. Students will be required to reflect on the projects on 2019 and rethink their architectural position. The outcome of this project is a poster analysing the Projects 2,3 and 4 to create a more nuanced and informed architectural manifesto. Most of this work will be done during an en-loge in the design studio.

Project 6 **Design Studio A3 Portfolio and Sketch Design Journals**

Coninuous throughout the year	
Submission	22 October 2019

Students are required to compile all work completed during the 3rd year in a structured and logical A3 document. This document will become the basis of of the students portfolio, with which work interviews can be conducted.
Design journals: Students also have to submit their Journals/sketch books for evaluation. The following has to be clearly reflected in the journal:

- School talk lectures: Reflection and notes on the various School lectures on Monday Mornings.
- Design course lectures: Lectures by staff and visiting lecturers to be recorded, skecthed and reflected.

Failure to attend these lectures and submit a journal will result in Refusal of Due Performance

7 COURSE SCHEDULE

(See separate attachment)

8 SUBMISSIONS

All work that is pinned up as per the course programme must also be submitted on SAKAI for record keeping purposes and for comparison across groups. Failure to submit on SAKAI will result in a mark of 0 for that submission.

9 EVALUATION AND WEIGHTING

Final marks per project will be correlated in a presentation session with all staff present. Individual critique sessions will take place after group discussions, to allow for maximum productivity during studio or working hours.

Studio critique sessions, peer evaluation and self-evaluation, will provide ample opportunity for rework and fine-tuning of projects within the allocated time.

The year work counts for 50% with projects weighted as per the course programme. A provisional year mark will be calculated from this breakdown. Any additional work done to projects after evaluation during the year cannot count towards the year mark for design, but have a substantial influence upon the final examination, as a complete portfolio.

The final exam which covers the entire body of work produced during the course of the year, and which is externally examined, counts 50%. External examiners are normally members of the architectural profession or other academic institutions.

(*NOTE: This document must be read in conjunction with the SoAP Coursework Assessment Principles, available at https://www.dropbox.com/s/xo9pfhgvyhjfzq9/SOAP%20coursework%20assessment%20principles%20%20Final%2026%20March%202015.docx?dl=0)

9.1 Architectural Design Oral Examination

During the examination the external examiners will assess the complete portfolio of all the work submitted during the course of the year. The final portfolio exam constitutes 50% of the course mark. Different external examiners will be used for the written documents.

9.2 Assessment Criteria

- Demonstrate expansive and appropriate conceptual design skills
- Design development of large scale or complex work
- Reflect a consistency of thought across various scale levels.
- Demonstrate the ability to connect scales and integrating concept with the final detail and choice of materials will be an important yardstick.
- Functional planning and integration with services and structure.
- Applied design methodologies for resolution of complex and hybrid designs.
- Graphic presentation skills; by hand, physical modeling, computer aided drawings as well as technical documentation to describe the projects as an integrated whole.
- Demonstrate an understanding how building technology, materials and systems are an integral part of the architectural design process.
- The relationship between architectural theory and history and design methodology
- A broad knowledge of contemporary issues such as energy and the environment.
- Understand small elements (detail) as part of a larger whole by visualization.
- Demonstrate how architectural language can be used as an expression of identity in a multi-cultural context.

9.3 Materials

Students studying Architectural Design are expected to supply their own drawing equipment and materials. Students are expected to purchase and read prescribed books.

A **sketchbook/s** of your choice must be used to document the design process. The journal is to be used to document all reading, lectures, seminars, design studio sketch design work throughout, and will be marked as a separate project.

10 RECOMMENDED READING

1: Alexander, C. et al .1977. *A Pattern Language*, Oxford University Press, New York
2: Baker, G.H. 1989. *Design Strategies in Architecture: an approach to analysis.* New York: Van Nostrand Reinhold.
3: Brawne, M. 1992. *From idea to building: issues in architecture.* Oxford: Butterworth-Heinemann.
4: Ching, F. 1979. *Architecture: form, space and order.* New York: Van Nostrand Reinhold.
5: Clark, R.H. 1996. *Precedents in Architecture.* New York: Van Nostrand Reinhold.
6: de Botton, A. 2006. *The architecture of Happiness.* New York: Pantheon Books
7: Fawcett, A.P. 1998. *Architecture: design notebook.* Oxford: Architectural Press.
8: Franck, K.A., 1994. *Ordering Space: Types in architecture and design.* New York: Van Nostrand Reinhold.
9: Frederick, M. 2007. *101 Things I learned in Architecture School.* Cambridge: The MIT Press.
10: Hearn, F., 2003. *Ideas that shaped buildings.* Cambridge: The MIT Press.
11: Herzberger, H. 1993. *Lessons for students in architecture.* Rotterdam: Uitgeverij 010.
12: Herzberger, H. 2000. *Lessons for students in architecture 2.* Rotterdam: Uitgeverij 010.
13:Thiis-Evensen, T. 1987. *Archetypes in architecture.* Oslo: Norwegian University Press.
14: Tzonis, A & Lefevre, L. 2003. *Critical Regionalism*, Prestel, Munich
15: Hagan, S. 2001. *Taking Shape*, Oxford: Architectural Press.
16: Koolhaas, R. & Mau, B. 1995. *S.M.L.X.,* New York: Monacelli Press.
17: Mackay-Lyons, 2008. *Ghost: Building an Architectural Vision*. New York: Princeton Architectural Press.
18: von Meiss, P. 1997. *Elements of Architecture: From Form to Place.* New York: E & FN Spon.
19. Unwin, S. 1999. *Analysing Architecture*, London, Routledge
20. Unwin, S. 2000. *An Architecture notebook*, London, Routledge
21. Norberg-Schulz, C. *Architecture: Presence, Language and Place*. Skira, Milan, 2000

11 DUE PERFORMANCE

Student attendance at studio design sessions, critique sessions, seminars and tests is at all times compulsory. Due Performance (DP) is monitored via attendance registers and the submission of work. Due Perfomance may be refused to students where attendance record is below the requirements or after the failure to submit projects as per course outline.

Refusal of Due Performance means the student will not be granted an end of year oral examination, which results in failure of the year's Architectural Design Course!!! Students who fail to **achieve a 50% year mark** will not be granted a final end of year oral examination.

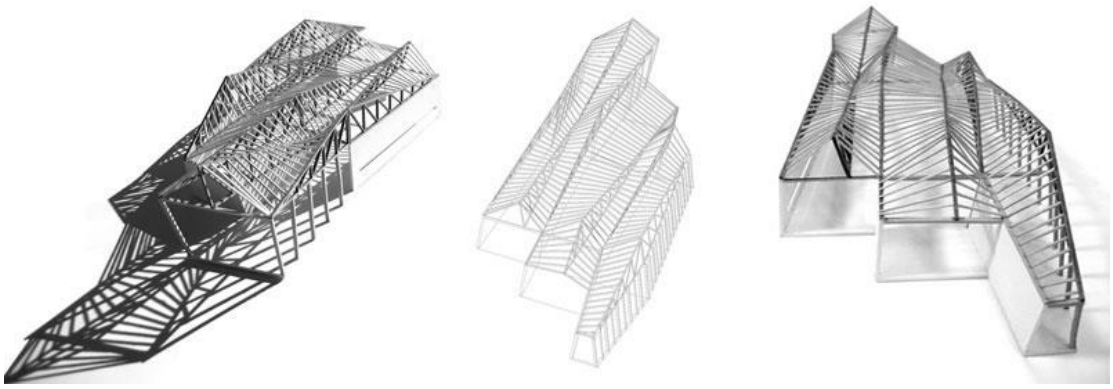
12 PLAGIARISM

Plagiarism will not be tolerated, although peer learning is encouraged! Plagiarised submissions will not be evaluated and with thus receive 0 – zero!

In terms of Architectural Design this means that an obvious copy of a published project, or a previous project within the School of Architecture (even the student's own work),, may be scrutinised in terms of plagiarism. Clearly, influences by peer and published work will occur, but in the case of clearly copied design work, the relevant tutor will raise his/her concern. The project will then be assessed by the year lecturer, and if need be, the Director of BAS program. This may result in the student being reported to the University Authorities, and if found guilty, the student will be expelled from the University. Please refer to school POLICY ON PLAGIARISM, COPYRIGHT & REFERENCING.

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE & PLANNING

ARPL3005 ARCHITECTURAL DESIGN AND THEORY 3 **2020**



1 STAFF

Melinda Silverman melinda.silverman@wits.ac.za
Sandra Felix sandra.felix@wits.ac.za
Tunde Oluwa
Gustavo Triano-Martinez
Gerald Chungu

2 AIMS

The ARPL3005 Architectural Design and Theory Course aims, in conjunction with the other courses in the study year, to complete the under-graduate architectural training enabling students to work in the highly demanding built environment professions.

During the third year students are required to demonstrate how they can apply skills, gained during preceding study years, with increasing levels of sophistication and independence. Students are expected to demonstrate competenece in architectural design, theory, functional planning, technical development, architectural materiality, programming, environmental responsiveness, graphic skills, model building and writing. As an end-product students should have a comprehensive portfolio of work showcasing all of the above in an easily understandable and aesthetically beautiful document.

The broader aim of ARPL3005, via the studio environment and the various tutors, is to equip students with the skills to create an architecture that is an expression of dignified human values and that provides a context for human activity and development. Through the design process and theoretical discourse, students will address the interrelated environmental, behavioral, and cultural issues that underlie the organisation of built form. Students will be required to direct sensitivity, imagination, intellect and increasingly levels of professional judgement to the physical significance of these fundamental issues in designing a coherent environment for people.

The programme, therefore, is based on the following intentions:

- to stimulate artistic sensitivity and creative powers,
- to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems,
- to ensure that the student acquires confidence in their design capabilities,
- to develop the necessary technical skills to realise design decisions and to take a design projects to competent conclusions.

The course will have a pluralistic approach to the teaching of architecture. Students will have opportunities to become acquainted with a wide range of contemporary design approaches and methodologies. The course does not seek to impose any singular design philosophy, but rather encourages each student to develop an individual approach to design, based on clear and well-reasoned arguments.

3 LEARNING OUTCOMES

The desired learning outcomes build on the outcomes aquired in first and second year design courses. Outcomes for ARPL3005 are as follows:

	First year design	Second year design	**Architectural Design and Theory 3 ARPL3005**
Process	adequately interpret a design brief and perform design exploration through a set of given techniques	interrogate a design brief as a means to inform design, and apply relevant exploratory design techniques	logically expand a design brief with appropriate performative and ethical design objectives, and identify and apply an appropriate design method
Context	display an awareness of a project's physical, social and cultural environmental influences; successfully deal with basic topographical issues	perform relevant urban analyses to generate urban design informants; integrate building with landscape, and competently engage with challenging topography.	adeptly balance both complementary and competing contextual design influences; demonstrate a knowledge around the role of public space in urban environments
Environment	demonstrate an awareness of basic passive environmental design informants and site considerations	apply passive environmental design principles, perform basic analyses of a building's performance, and respond appropriately to ecological, cultural, and socio-economic systems in the built environment	integrate passive and active environmental design systems and utilise specific sustainable design goals as design informants, including ecological, cultural and socio-economic considerations
Conceptual Rigour	formulate design concepts and demonstrate an exploration of their application to physical spaces	propose, explore, and logically refine conceptual design intent(s) throughout a design project	develop and apply a well-reasoned, creative design intent across scales
Spatial Quality	follow an exploratory process using form and volume as spacemaking techniques, demosntrate an understanding of positive and negative spaces, and consider the human perception of spatial volume(s)	demonstrate an integration of user needs and holistic aesthetic and experiential intent through the development and refinement of architectural detailing	competently manage volumetric complexity in buildings to generate a specific user experience
Functionality	develop functional planning of public and private spaces for a simple programme	create functional spatial relationships in small-scale, mixed-use, and multi-unit housing buildings	create appropriately scaled spaces and functional plan conditions in moderately complex buildings with multi-use or hybrid programming
Realisation	convey an inquisitiveness around architectural elements, and apply them as plausible components of a spatial design.	refine initial design intent through the application and appropriate composition of basic technical, material and metaphysical aspects of architecture	demonstrate a consistency of thought across scales, integrating conceptual design influences, technical considerations and building systems into a rigorous and cohesive design
Representation	present a design project using fundamental architectural conventions	use a range of two- and three-dimensional representation techniques, diagram design decisions and building functionality, and construct a narrative presentation both verbally and through visual representation	showcase exporatory and descriptive architectural representation for buildings of moderate complexity
Work Ethic	demonstrate an intellectual curiosity, a willingness to engage in collaborative teamwork, and individually perform directed design tasks	work both independently and collectively towards a common purpose	demonstrate broad professionalism in all aspects of design production, and in participation in all aspects of the course
Achievement	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment

4 TEACHING AND LEARNING METHODS

The paramount task during the ARPL 3005 course is the development of a design methodology which enables the student to deal with and apply the varied interrelationships found in architectural design. Students are expected to achieve a level of confidence to deal with complex challenges across all scales.

4.1 Design Studio

The design studio is paramount, emphasising the sometimes competing interrelationships between purpose, design, competition, collaboration, innovation and building technology in an environment that values experimentation.

The design studio is a workshop in which students congregate to present and discuss projects and proposals with fellow students, staff and visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from desk critiques with individual lecturers, to presentations before several tutors, to more formal exams and final reviews before school and guest critics, with the intention of fostering critical thinking, spatial form-making skills, and tectonic skills. The design studio must be viewed as the laboratory were the courses in building technology; materials and production; visual representation in various media; history and theory; and urbanism and landscape are fused together to achieve a comprehensive approach to architecture.

In order to engage with a broad spectrum of architectural questions, a variety of environmental and cultural issues endemic to chosen localities a variety of projects will be completed during the course of the year. This process of exploration offers the opportunity to conduct detailed research, develop formal design methodologies, formulate strategies and design appropriate responses to each project.

Each project has its own goals and associated criteria, some of which will involve group and team work. The process will involve site visits, interaction with the community, research into contemporary and historical precedent, critical investigation of intervention opportunities and options and the exploration and development of detailed projects. A breakdown of the various projects and their timeframes is listed in the attached schedule and mark-allocation table.

Studio contact will rely heavily on student participation. Mondays and Thursdays are intended for intense studio contact, with groups to be arranged and each attended by a designated tutor, sharing information. The tutor will be responsible for his/her group with scheduled, registered sessions. Tutors will rotate each quarter to allow different exposure to all students. In addition to regular sessions with tutors, students will be expected to see specialist consultants who will advise on each project as follows:

- Project 2: Two sessions (minimum) with specialist consultant
- Project 3: Two sessions (minimum) with specialist consultant
- Project 4: Four sessions (minimum) with specialist consultant

It is essential that students meet with tutors on a weekly basis, and with specialist consultants on a fortnightly basis. Each tutor/specialist consultant will have attendance record of their students. Students who fail to meet with tutors/consultants or spend less than 75% of the allocated teaching-time in the studio will receive a '*Refusal of Due Performance.*

Crits are most effective when you bring hard-copies of your latest work (on bumph, on A4 or A3 photocopies) so that your tutor can engage intensively with your design.

4.2 Design Theory

In addition to the projects to be concluded in design studio, a series of lectures and seminars will provide background material supporting the studio projects. Some of these lectures will be delivered by pracicing architects and will provide students with insights into the various design methodologies that practitioners use in their work. These lectures are intended to form a link between the theories of architecture and the architectural design exploration process.

The design theory portion of this course will take the form of a discussion forum and will be directly coordinated with the History and Theory Course as well as the Theory of Construction programme. Reviews, studies and analyses of built form will form an important part of this course. Students will address a series of contemporary examples of projects, buildings, urban designs and their architects, their methodology, material application, environmental response, functionality, topographical setting and meaning**.** The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges. This component of the course is also intended to enhance students' research capacities and broaden students'own design references. Students will be required to prepare presentations for discussion around their readings, architectural aspirations and inspirations.

4.3 Materials

Students studying Architectural Design are expected to supply their own drawing equipment and materials. Students are expected to purchase and read prescribed books. The university will provide a sketchbook at the beginning of the year which should be used to document the design process. It is advisable to bring your sketchbook to all presentations and to the exam to provide evidence of your design thinking throughout the course of each project.

5 STUDENT WORKLOAD

Course	SAQA	Self Study	Lectures	Studio
ARPL3005	650hrs	196hrs	104hrs	350hrs

6 SYLLABUS

The syllabus is outlined in the project descriptions below and is to be read in conjuction with the COURSE SCHEDULE and table outlining THE ALLOCATION OF MARKS. In addition, detailed briefs will be provided at the start of each project.

SEMESTER 1

Project 1 **An Architectural Manifesto: Reflections and appraisal**
Weeks 1

Project brief	3 February 2020
Hand-in date	10 February 2020

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an expression of the best we want to become, or remembered by. This year the student needs start the journey towards establishing his/her architectural identity. Students are expected to take a stand and express themselves in a coherent and legible manner.

A Manifesto: Reflections is intended to allow you to start your 3rd year programme by reflecting on the work you have produced over the previous two years, and through this reflection begin to frame an approach to your third year work. Manifesto has three main aims:

- To develop critical thinking, and in particular to encourage and develop your ability to self critique; by tracing your own development over the previous two years.
- To define a framework or structure for the evolution of your design approach (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context.
- To begin to equip you with the tools to better articulate your work, to engage in debate, and to defend your own work in a critical forum.

Project 2 **A Student Commons for Braamfontein**
Weeks 2 onwards, culminating in a combined design construction review on 9&10 September

Project brief	10 February 2020
Site analysis	20 February 2020
Concept and massing	5 March 2020
Seminar	9 March 2020
Interim sketch plan	19 March 2020
Detail section	30 March 2020
Final design presentation	1 and 2 April 2020 (in collaboration wth Construction)
Construction continues through quarters 2 and 3	
Impact of construction on design	7 September 2020
Mock exam (with construction)	9 September and 10 September

Students are required to envisage how Braamfontein might perform better as a student neighbourhood, through the design of a Student Commons.

The Commons is seen as a highly interactive environment with a variety of display spaces, an auditorium, a range of seminar and lecture venues, research areas and computer labs. It will also provide for students' everyday needs and include amenities such as a student health cente, a laundromat, and a variety of spaces for relaxation and socialising. Most significantly, within the dense and built-up context of Braamfontein, the site will provide much needed public open space.

In addition, the Commons will be the project which students use as a case study for Small Office Practice (ARPL3002), and will take through into Construction (ARPL3031) in the second and third quarters.The initial design, the technical resolution on the building, and the extent to which the initial design was altered during the process of technical resolution will be evaluated at a review at the start of the fourth quarter. This review straddles both the design and construction courses. Sustainabilty experts will provide additional support to the studio, helping students to explicitly address sustainability issues.

Students who excel at the interim sketch plan pin-up on 19 March, will have the option of entering the Cemteq competition. This will require significant work during the mid-term break to meet the competition submission deadline on 27 March 2020.

Project 3 **An environmental research centre**
Weeks 9-14

Project brief	6 April 2020
Site Analysis	16 April 2020
Concept	23 April 2020
Final submission	14 May 2020

This project envisages a new environmental research centre on the site of the old Johannesburg gasworks. The project is intended to connect Wits and UJ and provide a platform for collaboration. It is intended to probe the relationship between architecture and nature as well as remediate a severely degraded site. Siting, design and the sensitive use of materials should give expression to important principles of sustainability which will be addressed in the lectures accompanying the project.

SEMESTER 02

Project 4 **Major Design Studio Project: Constructing a civic heart for the city of Johannesburg**
Weeks 17-26

Design brief	4 May 2020
Precedent studies	20, 23 and 27 July 2020
Seminar	29 July 2020

Site analysis	3 August 2020
Urban model	6 August 2020
Massing concept	13 August 2020
Interim presentation	27 August 2020
Penultimate presentation	21 September 2020
Final presenation	14 and 15 October 2020 (with costruction)

Beyers Naude Square (formerly Library Gardens and prior to that Market Square) has historically functioned as the civic heart of Johannesburg, accommodating a number of significant buildings – the Rissik Street Post Office, the City Hall and the Johannesburg Public Library. This project is intended to enhance the role of this part the inner city by concentrating additional public buildings in the area. The building will accommodate a hybrid programme that will support civic engagement and learning about Johannesburg for all its residents. The building will have a museum component, showcasing interstinng aspects of the city's past and present; an educational aspect accommodating an auditorium for city-related films, theatrical performances and the sharing of oral narratives; and an archival component housing important city documents that might be of use to urban scholars. The building will also house the necessary administrative component that a building of this nature requires.

Aside from honing students' architectural skills, this project will also focus on urban design, sustainability and representational skills. Sustainabilty experts will provide additional support to the studio, helping students to explicitly address sustainability issues and produce buildings able to achieve a 'green star rating'. Another key outcome will be a large scale urban model – built by all members of the class - providing the urban context into which students will insert models of their own buildings. Students will be required to produce one detailed construction section (as part of ARPL3031) to demonstrate design rigour at all scales.

Students will also be required to conduct research on their chosen building type and produce a verbal presentation and an illustrated written summary of the buildings that they've studied. Both the presentations and illustrated summaries are to serve as a collective resource for the class.

Project 5	**Revisiting the Manifesto**	
	Weeks 21 – 26	
	Project brief	24 August 2020
	Hand-in date	5 October 2020

Intense engagement with projects during the year will have undoubtedly impacted on students' original attitudes to architecture. Students will be required to reflect on the projects on 2020 and rethink their architectural position. The outcome of this project is an illustrated essay which explores the influence of architectural precedent on the design of the major building. This should inform a more nuanced and informed architectural manifesto.

The essay will embody the student's understanding of architecture and demonstrate his/her ability to fulfill the academic requirements expected at this exit level. The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges, and enhance students reading and broaden their own design references.

Exhibition	**Trade show for prospective employers**	
	Preparation	21 October 2020
	Exhibition opening	22 October 2020

Towards the end of the year students will have the opportunity to showcase their work at an exhibition to which practitioners will be invited. This is intended to help students engage with potential job-providers for the year out.

Tests

There will be one test per quarter during lecture slots to ascertain student engagement with the material delivered in the lecture series.

7 COURSE SCHEDULE AND MARK ALLOCATION

See separate attachments. This course outline is to be read in conjunction with the course schedule and mark allocation. The course schedule has been carefully constructed to ensure an appropriate sequence of inputs and submissions, and submission dates for ARPL3005 have been coordinated with submission dates for other courses. Any deviations from the schedule will have a knock-on effect on ARPL3005 and on other courses and will not be considered unless there are exeptional circumstances.

8 SUBMISSIONS

All work that is pinned up as per the course programme must also be submitted on SAKAI for record keeping purposes and for comparison across groups. Failure to submit on SAKAI will result in a mark of 0 for that submission.

9 EVALUATION AND WEIGHTING

The year work counts for 70% with projects weighted as per the course programme. A provisional year mark will be calculated from this breakdown. Any additional work done to projects after evaluation during the year cannot count towards the year mark for design, but have a substantial influence upon the final examination, as a complete portfolio.

There will be two exams, one in June and one in November. The June exam counts 10% and the November exam counts 30%. Both exams, which take the form of an integratated portfolio oral presentation will be externally examined. Examiners will have the right to fail a student who has not

adequately met all the prescribed outcomes of the course. Failure to meet one or more outcomes can resut in failure of the course. Projects 1, 2 and 3 will be examined in the June exam. During the November exam the examiners will assess the complete portfolio of all the work submitted during the course of the year.

It is a requirement of the course that students must achieve more than 50% of the year mark in order to be afforded entry to the exams. In order to pass the course it is necessary to pass BOTH the year mark and the integrated oral exams.

(*NOTE: This document must be read in conjunction with the SoAP Coursework Assessment Principles, available at https://www.dropbox.com/s/xo9pfhgvyhjfzq9/SOAP%20coursework%20assessment%20principles%20%20Final%2026%20March%202015.docx?dl=0)

Students will be assesed on the basis of the learning outcomes outlined above in Section 3 of this document.

10 RECOMMENDED READING

1: Alexander, C. et al .1977. *A Pattern Language*, Oxford University Press, New York
2: Baker, G.H. 1989. *Design Strategies in Architecture: an approach to analysis.* New York: Van Nostrand Reinhold.
3: Brawne, M. 1992. *From idea to building: issues in architecture.* Oxford: Butterworth-Heinemann.
4: Ching, F. 1979. *Architecture: form, space and order.* New York: Van Nostrand Reinhold.
5: Clark, R.H. 1996. *Precedents in Architecture.* New York: Van Nostrand Reinhold.
6: de Botton, A. 2006. *The architecture of Happiness.* New York: Pantheon Books
7: Fawcett, A.P. 1998. *Architecture: design notebook.* Oxford: Architectural Press.
8: Franck, K.A., 1994. *Ordering Space: Types in architecture and design.* New York: Van Nostrand Reinhold.
9: Frederick, M. 2007. *101 Things I learned in Architecture School.* Cambridge: The MIT Press.
10: Hearn, F., 2003. *Ideas that shaped buildings.* Cambridge: The MIT Press.
11: Herzberger, H. 1993. *Lessons for students in architecture.* Rotterdam: Uitgeverij 010.
12: Herzberger, H. 2000. *Lessons for students in architecture 2.* Rotterdam: Uitgeverij 010.
13:Thiis-Evensen, T. 1987. *Archetypes in architecture.* Oslo: Norwegian University Press.
14: Tzonis, A & Lefevre, L. 2003. *Critical Regionalism*, Prestel, Munich
15: Hagan, S. 2001. *Taking Shape*, Oxford: Architectural Press.
16: Koolhaas, R. & Mau, B. 1995. *S.M.L.X.,* New York: Monacelli Press.
17: Mackay-Lyons, 2008. *Ghost: Building an Architectural Vision*. New York: Princeton Architectural Press.
18: von Meiss, P. 1997. *Elements of Architecture: From Form to Place.* New York: E & FN Spon.
19. Unwin, S. 1999. *Analysing Architecture*, London, Routledge
20. Unwin, S. 2000. *An Architecture notebook*, London, Routledge
21. Norberg-Schulz, C. *Architecture: Presence, Language and Place*. Skira, Milan, 2000

11 DUE PERFORMANCE

Student attendance at lectures, site visits, excursions, studio design sessions, expert consultant sessions, crit sessions, seminars and tests is compulsory. Due Performance (DP) is monitored via attendance registers and the submission of work. Due Perfomance may be refused to students whose attendance record is below the requirements or after failure to submit projects as per the course outline.

Refusal of Due Performance means that the student will not be granted an end of year oral examination, which results in failure of the year's Architectural Design Course. Students who fail to **achieve a 50% year mark** will not be granted a final end of year oral examination.

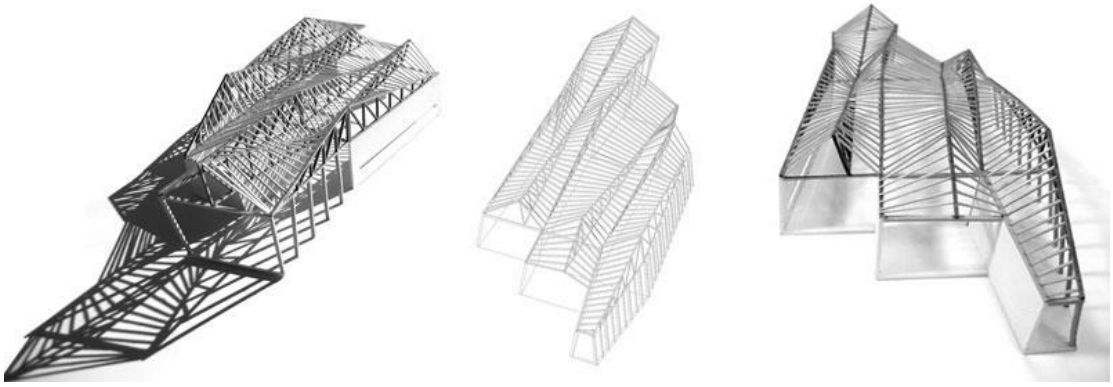
12 PLAGIARISM

Plagiarism will not be tolerated, although peer learning is encouraged! Plagiarised submissions will not be evaluated and with thus receive 0 – zero!

In terms of Architectural Design this means that an obvious copy of a published project, or a previous project within the School of Architecture (even the student's own work),, may be scrutinised in terms of plagiarism. Clearly, influences by peer and published work will occur, but in the case of clearly copied design work, the relevant tutor will raise his/her concern. The project will then be assessed by the year lecturer, and if need be, the Director of BAS program. This may result in the student being reported to the University Authorities, and if found guilty, the student will be expelled from the University. Please refer to school POLICY ON PLAGIARISM, COPYRIGHT & REFERENCING.

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE & PLANNING

ARPL3005 ARCHITECTURAL DESIGN AND THEORY 3 **2021**



1 STAFF

Melinda Silverman	Melinda.Silverman@wits.ac.za
Sandra Felix	Sandra.Felix@wits.ac.za
Tunde Oluwa	
Gerald Chungu	Gerald.Chungu@wits.ac.za

2 AIMS

The ARPL3005 Architectural Design and Theory Course aims, in conjunction with the other courses in the study year, to complete the under-graduate architectural training enabling students to work in the highly demanding built environment professions.

During the third year students are required to demonstrate how they can apply skills, gained during preceding study years, with increasing levels of sophistication and independence. Students are expected to demonstrate competenece in architectural design, theory, functional planning, technical development, architectural materiality, programming, environmental responsiveness, graphic skills, model building and writing. As an end-product students should have a comprehensive portfolio of work showcasing all of the above in an easily understandable and aesthetically beautiful document.

The broader aim of ARPL3005, via the studio environment and the various tutors, is to equip students with the skills to create an architecture that is an expression of dignified human values and that provides a context for human activity and development. Through the design process and theoretical discourse, students will address the interrelated environmental, behavioral, and cultural issues that underlie the organisation of built form. Students will be required to direct sensitivity, imagination, intellect and increasingly levels of professional judgement to the physical significance of these fundamental issues in designing a coherent environment for people.

The programme, therefore, is based on the following intentions:

- to stimulate artistic sensitivity and creative powers,

- to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems,
- to ensure that the student acquires confidence in their design capabilities,
- to develop the necessary technical skills to realise design decisions and to take a design projects to competent conclusions.

The course will have a pluralistic approach to the teaching of architecture. Students will have opportunities to become acquainted with a wide range of contemporary design approaches and methodologies. The course does not seek to impose any singular design philosophy, but rather encourages each student to develop an individual approach to design, based on clear and well-reasoned arguments.

3 LEARNING OUTCOMES

The desired learning outcomes build on the outcomes aquired in first and second year design courses. Outcomes for ARPL3005 are as follows:

	First year design	Second year design	**Architectural Design and Theory 3 ARPL3005**
Process	adequately interpret a design brief and perform design exploration through a set of given techniques	interrogate a design brief as a means to inform design, and apply relevant exploratory design techniques	logically expand a design brief with appropriate performative and ethical design objectives, and identify and apply an appropriate design method
Context	display an awareness of a project's physical, social and cultural environmental influences; successfully deal with basic topographical issues	perform relevant urban analyses to generate urban design informants; integrate building with landscape, and competently engage with challenging topography.	adeptly balance both complementary and competing contextual design influences; demonstrate a knowledge around the role of public space in urban environments
Environment	demonstrate an awareness of basic passive environmental design informants and site considerations	apply passive environmental design principles, perform basic analyses of a building's performance, and respond appropriately to ecological, cultural, and socio-economic systems in the built environment	integrate passive and active environmental design systems and utilise specific sustainable design goals as design informants, including ecological, cultural and socio-economic considerations
Conceptual Rigour	formulate design concepts and demonstrate an exploration of their application to physical spaces	propose, explore, and logically refine conceptual design intent(s) throughout a design project	develop and apply a well-reasoned, creative design intent across scales
Spatial Quality	follow an exploratory process using form and volume as spacemaking techniques, demosntrate an understanding of positive and negative spaces, and consider the human perception of spatial volume(s)	demonstrate an integration of user needs and holistic aesthetic and experiential intent through the development and refinement of architectural detailing	competently manage volumetric complexity in buildings to generate a specific user experience
Functionality	develop functional planning of public and private spaces for a simple programme	create functional spatial relationships in small-scale, mixed-use, and multi-unit housing buildings	create appropriately scaled spaces and functional plan conditions in moderately complex buildings with multi-use or hybrid programming
Realisation	convey an inquisitiveness around architectural elements, and apply them as plausible components of a spatial design.	refine initial design intent through the application and appropriate composition of basic technical, material and metaphysical aspects of architecture	demonstrate a consistency of thought across scales, integrating conceptual design influences, technical considerations and building systems into a rigorous and cohesive design
Representation	present a design project using fundamental architectural conventions	use a range of two- and three-dimensional representation techniques, diagram design decisions and building functionality, and construct a narrative presentation both verbally and through visual representation	showcase exporatory and descriptive architectural representation for buildings of moderate complexity
Work Ethic	demonstrate an intellectual curiosity, a willingness to engage in collaborative teamwork, and individually perform directed design tasks	work both independently and collectively towards a common purpose	demonstrate broad professionalism in all aspects of design production, and in participation in all aspects of the course
Achievement	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment

4 TEACHING AND LEARNING METHODS

The paramount task during the ARPL 3005 course is the development of a design methodology which enables the student to deal with and apply the varied interrelationships found in architectural design. Students are expected to achieve a level of confidence to deal with complex challenges across all scales.

4.1 Design Studio

The design studio is paramount, emphasising the sometimes competing interrelationships between purpose, design, competition, collaboration, innovation and building technology in an environment that values experimentation.

The design studio - even online - is a workshop in which students congregate to present and discuss projects and proposals with fellow students, staff and visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from critiques with individual lecturers, to presentations before several tutors, to more formal exams and final reviews before school and guest critics, with the intention of fostering critical thinking, spatial form-making skills, and tectonic skills. The design studio must be viewed as the laboratory were the courses in building technology; materials and production; visual representation in various media; history and theory; and urbanism and landscape are fused together to achieve a comprehensive approach to architecture.

In order to engage with a broad spectrum of architectural questions, a variety of environmental and cultural issues endemic to chosen localities a variety of projects will be completed during the course of the year. This process of exploration offers the opportunity to conduct detailed research, develop formal design methodologies, formulate strategies and design appropriate responses to each project.

Each project has its own goals and associated criteria, some of which will involve group and team work. The process will involve site visits, interaction with the community, research into contemporary and historical precedent, critical investigation of intervention opportunities and options and the exploration and development of detailed projects. A breakdown of the various projects and their timeframes is listed in the attached schedule and mark-allocation table.

Studio contact will rely heavily on student participation. Mondays and Thursdays are intended for intense studio contact, with groups to be arranged and each attended by a designated tutor, sharing information. The tutor will be responsible for his/her group with scheduled, registered sessions. Tutors will rotate each quarter to allow different exposure to all students.

It is essential that students meet with tutors on a weekly basis. Each tutor will have attendance record of their students. Students who fail to meet with tutors or spend less than 75% of the allocated teaching-time in the studio will receive a '*Refusal of Due Performance.*

Crits are most effective when you share your latest drawings so that your tutor can engage intensively with your design.

4.2 Design Theory

In addition to the projects to be concluded in design studio, a series of lectures and seminars will provide background material supporting the studio projects. Some of these lectures will be delivered by practicing architects and will provide students with insights into the various design methodologies that practitioners use in their work. These lectures are intended to form a link between the theories of architecture and the architectural design exploration process.

The design theory portion of this course will take the form of a discussion forum and will be directly coordinated with the History and Theory Course as well as the Theory of Construction programme. Reviews, studies and analyses of built form will form an important part of this course. Students will address a series of contemporary examples of projects, buildings, urban designs and their architects, their methodology, material application, environmental response, functionality, topographical setting and meaning**.** The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges. This component of the course is also intended to enhance students' research capacities and broaden students'own design references. Students will be required to prepare presentations for discussion around their readings, architectural aspirations and inspirations.

4.3 Materials

Students studying Architectural Design are expected to supply their own drawing equipment and materials. Students are expected to purchase and read prescribed books. The university will provide a sketchbook at the beginning of the year which should be used to document the design process. It is advisable to bring your sketchbook to all presentations and to the exam to provide evidence of your design thinking throughout the course of each project.

5 STUDENT WORKLOAD

Course	SAQA	Self Study	Lectures	Studio
ARPL3005	650hrs	196hrs	104hrs	350hrs

6 SYLLABUS

The syllabus is outlined in the project descriptions below and is to be read in conjuction with the COURSE SCHEDULE and table outlining THE ALLOCATION OF MARKS. In addition, detailed briefs will be provided at the start of each project.

SEMESTER 1
PROJECT 1: Women's House
PROJECT 2: Braamfontein

SEMESTER 2
PROJECT 3: Complex Public Building
PROJECT 4: Manifesto

(See the following pages for further information)

7 SUBMISSIONS

All work must be submitted on ULWAZI as per the course schedule. Failure to submit on ULWAZI will result in a mark of 0 for that submission.

8 EVALUATION AND WEIGHTING

The year work counts for 70% with projects weighted as per the course programme. A provisional year mark will be calculated from this breakdown. Any additional work done to projects after evaluation during the year cannot count towards the year mark for design, but have a substantial influence upon the final examination, as a complete portfolio.

There will be two exams, one in June and one in November. The June exam counts 10% and the November exam counts 20%. Both exams, which take the form of an integratated portfolio oral presentation will be externally examined. Examiners will have the right to fail a student who has not adequately met all the prescribed outcomes of the course. Failure to meet one or more outcomes can resut in failure of the course. Projects 1 and 2 will be examined in the June exam. During the November exam the examiners will assess the complete portfolio of all the work submitted during the course of the year.

It is a requirement of the course that students must achieve more than 50% of the year mark in order to be afforded entry to the exams. In order to pass the course it is necessary to pass BOTH the year mark and the integrated oral exams.

(*NOTE: This document must be read in conjunction with the SoAP Coursework Assessment Principles, available at https://www.dropbox.com/s/xo9pfhgvyhjfzq9/SOAP%20coursework%20assessment%20principles%20%20Final%2026%20March%202015.docx?dl=0)

Students will be assesed on the basis of the learning outcomes outlined above in Section 3 of this document.

10 RECOMMENDED READING

Alexander, C. et al .1977. *A Pattern Language*, Oxford University Press, New York
Baker, G.H. 1989. *Design Strategies in Architecture: an approach to analysis.* New York: Van Nostrand Reinhold.
Brawne, M. 1992. *From idea to building: issues in architecture.* Oxford: Butterworth-Heinemann.
Ching, F. 1979. *Architecture: form, space and order.* New York: Van Nostrand Reinhold.
Clark, R.H. 1996. *Precedents in Architecture.* New York: Van Nostrand Reinhold.
de Botton, A. 2006. *The Architecture of Happiness.* New York: Pantheon Books
Fawcett, A.P. 1998. *Architecture: design notebook.* Oxford: Architectural Press.
Franck, K.A., 1994. *Ordering Space: Types in architecture and design.* New York: Van Nostrand Reinhold.
Frederick, M. 2007. *101 Things I learned in Architecture School.* Cambridge: The MIT Press.
Hearn, F., 2003. *Ideas that shaped buildings.* Cambridge: The MIT Press.
Herzberger, H. 1993. *Lessons for students in architecture.* Rotterdam: Uitgeverij 010.
Herzberger, H. 2000. *Lessons for students in architecture 2.* Rotterdam: Uitgeverij 010.
Thiis-Evensen, T. 1987. *Archetypes in architecture.* Oslo: Norwegian University Press.
Tzonis, A & Lefevre, L. 2003. *Critical Regionalism*, Prestel, Munich
Hagan, S. 2001. *Taking Shape*, Oxford: Architectural Press.
Koolhaas, R. & Mau, B. 1995. *S.M.L.X.,* New York: Monacelli Press.
Mackay-Lyons, 2008. *Ghost: Building an Architectural Vision*. New York: Princeton Architectural Press.
von Meiss, P. 1997. *Elements of Architecture: From Form to Place.* New York: E & FN Spon.

Unwin, S. 1999. *Analysing Architecture*, London, Routledge
Unwin, S. 2000. *An Architecture notebook*, London, Routledge
Norberg-Schulz, C. *Architecture: Presence, Language and Place*. Skira, Milan, 2000

11 DUE PERFORMANCE

Student attendance at lectures, site visits, excursions, studio design sessions, expert consultant sessions, crit sessions, seminars and tests is compulsory. Due Performance (DP) is monitored via attendance registers and the submission of work. Due Perfomance may be refused to students whose attendance record is below the requirements or after failure to submit projects as per the course outline.

Refusal of Due Performance means that the student will not be granted an end of year oral examination, which results in failure of the year's Architectural Design Course. Students who fail to achieve a 50% year mark will not be granted a final end of year oral examination.

12 PLAGIARISM

Plagiarism will not be tolerated, although peer learning is encouraged! Plagiarised submissions will not be evaluated and with thus receive 0 – zero!

In terms of Architectural Design this means that an obvious copy of a published project, or a previous project within the School of Architecture (even the student's own work),, may be scrutinised in terms of plagiarism. Clearly, influences by peer and published work will occur, but in the case of clearly copied design work, the relevant tutor will raise his/her concern. The project will then be assessed by the year lecturer, and if need be, the Director of BAS program. This may result in the student being reported to the University Authorities, and if found guilty, the student will be expelled from the University. Please refer to school POLICY ON PLAGIARISM, COPYRIGHT & REFERENCING.

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE & PLANNING

ARPL3005/ ARPL3005A *ARCHITECTURAL DESIGN AND THEORY 3* ***2022***

1 *STAFF*

Melinda Silverman Melinda.Silverman@wits.ac.za
Sandra Felix Sandra.Felix@wits.ac.za
Patricia Theron Patricia.Theron@wits.ac.za
Tutor - TBC

2 *AIMS*

The ARPL3005 Architectural Design and Theory Course aims, in conjunction with the other courses in the study year, to complete the under-graduate architectural training enabling students to work in the highly demanding built environment professions.

During the third year students are required to demonstrate how they can apply skills, gained during preceding study years, with increasing levels of sophistication and independence. Students are expected to demonstrate competence in architectural design, theory, functional planning, technical development, architectural materiality, programming, environmental responsiveness, graphic skills, model building and writing. As an end-product students should have a comprehensive portfolio of work showcasing all of the above in an easily understandable and aesthetically beautiful document.

The broader aim of ARPL3005, via the studio environment and the various tutors, is to equip students with the skills to create an architecture that is an expression of dignified human values and that provides a context for human activity and development. Through the design process and theoretical discourse, students will address the interrelated environmental, behavioural, and cultural issues that underlie the organisation of built form. Students will be required to direct sensitivity, imagination, intellect and increasingly levels of professional judgement to the physical significance of these fundamental issues in designing a coherent environment for people.

The programme, therefore, is based on the following intentions:

- to stimulate artistic sensitivity and creative powers,
- to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems,
- to ensure that the student acquires confidence in their design capabilities,
- to develop the necessary technical skills to realise design decisions and to take a design project to competent conclusions.

The course will have a pluralistic approach to the teaching of architecture. Students will have opportunities to become acquainted with a wide range of contemporary design approaches and methodologies. The course does not seek to impose any singular design philosophy, but rather encourages each student to develop an individual approach to design, based on clear and well-reasoned arguments.

3 *LEARNING OUTCOMES*

The desired learning outcomes build on the outcomes acquired in first and second year design courses. Outcomes for ARPL3005 are as follows:

	First year design	Second year design	**Architectural Design and Theory 3 ARPL3005**
Process	adequately interpret a design brief and perform design exploration through a set of given techniques	interrogate a design brief as a means to inform design, and apply relevant exploratory design techniques	logically expand a design brief with appropriate performative and ethical design objectives, and identify and apply an appropriate design method
Context	display an awareness of a project's physical, social and cultural environmentalinfluences; successfully deal with basic topographical issues	perform relevant urban analyses to generate urban design informants; integrate building with landscape, and competently engage with challenging topography.	adeptly balance both complementary and competing contextual design influences; demonstrate a knowledge around the role of public space in urban environments
Environment	demonstrate an awareness of basic passive environmental design informants and site considerations	apply passive environmental design principles, perform basic analyses of a building's performance, and respond appropriately to ecological, cultural, and socio-economic systems in the built environment	integrate passive and active environmental design systems and utilise specific sustainable design goals as design informants, including ecological, cultural and socio-economic considerations
Conceptual Rigour	formulate design concepts and demonstrate an exploration of their application to physical spaces	propose, explore, and logically refine conceptual design intent(s) throughout a design project	develop and apply a well-reasoned, creative design intent across scales
Spatial Quality	follow an exploratory process using form and volume as spacemaking techniques, demosntrate an understanding of positive and negative spaces, and consider the human perception of spatial volume(s)	demonstrate an integration of user needsand holistic aesthetic and experiential intent through the development and refinement of architectural detailing	competently manage volumetric complexity in buildings to generate a specific user experience
Functionality	develop functional planning of public and private spaces for a simple programme	create functional spatial relationships in small-scale, mixed-use, and multi-unit housing buildings	create appropriately scaled spaces and functional plan conditions in moderately complex buildings with multi-use or hybrid programming
Realisation	convey an inquisitiveness around architectural elements, and apply them as plausible components of a spatial design.	refine initial design intent through the application and appropriate composition of basic technical, material and metaphysical aspects of architecture	demonstrate a consistency of thought across scales, integrating conceptual design influences, technical considerations and building systems into a rigorous and cohesive design
Representation	present a design project using fundamental architectural conventions	use a range of two- and three-dimensional representation techniques, diagram design decisions and building functionality, and construct a narrative presentation both verbally and through visual representation	showcase exporatory and descriptive architectural representation for buildings of moderate complexity
Work Ethic	demonstrate an intellectual curiosity, a willingness to engage in collaborative teamwork, and individually perform directed design tasks	work both independently and collectively towards a common purpose	demonstrate broad professionalism in all aspects of design production, and in participation in all aspects of the course
Achievement	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment

4 *TEACHING AND LEARNING METHODS*

The paramount task during the ARPL 3005 course is the development of a design methodology which enables the student to deal with and apply the varied interrelationships found in architectural design. Students are expected to achieve a level of confidence to deal with complex challenges across all scales.

4.1 Design Studio

The design studio is paramount, emphasising the sometimes competing interrelationships between purpose, design, competition, collaboration, innovation and building technology in an environment that values experimentation.

The design studio - even online - is a workshop in which students congregate to present and discuss projects and proposals with fellow students, staff and visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from critiques with individual lecturers, to presentations before several tutors, to more formal exams and final reviews before school and guest critics, with the intention of fostering critical thinking, spatial form-making skills, and tectonic skills. The design studio must be viewed as the laboratory were the courses in building technology; materials and production; visual representation in various media; history and theory; and urbanism and landscape are fused together to achieve a comprehensive approach to architecture.

In order to engage with a broad spectrum of architectural questions, a variety of environmental and cultural issues endemic to chosen localities a variety of projects will be completed during the course of the year. This process of exploration offers the opportunity to conduct detailed research, develop formal design methodologies, formulate strategies and design appropriate responses to each project.

Each project has its own goals and associated criteria, some of which will involve group and team work. The process will involve site visits, interaction with the community, research into contemporary and historical precedent, critical investigation of intervention opportunities and options and the exploration and development of detailed projects. A breakdown of the various projects and their timeframes is listed in the attached schedule and mark-allocation table.

Studio contact will rely heavily on student participation. Mondays and Thursdays are intended for intense studio contact, with groups to be arranged and each attended by a designated tutor, sharing information. The tutor will be responsible for his/her group with scheduled, registered sessions. Tutors will rotate each quarter to allow different exposure to all students.

It is essential that students meet with tutors on a weekly basis. Each tutor will have attendance record of their students. Students who fail to meet with tutors or spend less than 75% of the allocated teaching-time in the studio will receive a '*Refusal of Due Performance.*

Crits are most effective when you share your latest drawings so that your tutor can engage intensively with your design.

4.2 Design Theory

In addition to the projects to be concluded in design studio, a series of lectures and seminars will provide background material supporting the studio projects. Some of these lectures will be delivered by practicing architects and will provide students with insights into the various design methodologies that practitioners use in their work. These lectures are intended to form a link between the theories of architecture and the architectural design exploration process.

The design theory portion of this course will take the form of a discussion forum and will be directly coordinated with the History and Theory Course as well as the Theory of Construction programme. Reviews, studies and analyses of built form will form an important part of this course. Students will address a series of contemporary examples of projects, buildings, urban designs and their architects, their methodology, material application, environmental response, functionality, topographical setting and meaning**.** The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges. This component of the course is also intended to enhance students' research capacities and broaden students'own design references. Students will be required to prepare presentations for discussion around their readings, architectural aspirations and inspirations.

4.3 Materials

Students studying Architectural Design are expected to supply their own drawing equipment and materials. Students are expected to purchase and read prescribed books. The university will provide a sketchbook at

the beginning of the year which should be used to document the design process. It is advisable to bring your sketchbook to all presentations and to the exam to provide evidence of your design thinking throughout the course of each project.

5 *STUDENT WORKLOAD*

Course	SAQA	Self Study	Lectures	Studio
ARPL3005	650hrs	196hrs	104hrs	350hrs

6 *SYLLABUS*

The syllabus is outlined in the project descriptions below and is to be read in conjuction with the COURSE SCHEDULE and table outlining THE ALLOCATION OF MARKS. In addition, detailed briefs will be provided at the start of each project.

PROJECT 1: Manifesto
PROJECT 2: Wits Student Commons
PROJECT 3: South African Parliament – Student Competition
PROJECT 4: Embassy
PROJECT 5: Manifesto Essay

7 *SUBMISSIONS*

All work must be submitted on ULWAZI and MIRO as per the course schedule. Failure to submit on ULWAZI nor MIRO will resultin a mark of 0 for that submission. All submissions, late or otherwise will be governed by the SOAP Assessment policy

8 *EVALUATION AND WEIGHTING*

The year work counts for 70% with projects weighted as per the course programme. A provisional year mark will be calculated from this breakdown. Any additional work done to projects after evaluation during the year cannot count towards the year mark for design, but have a substantial influence upon the final examination, as a complete portfolio.

There will be two exams, one in June and one in November. The June exam counts 10% and the November exam counts 20%. Both exams, which take the form of an integrated portfolio oral presentation will be externally examined. Examiners will have the right to fail a student who has not adequately met all the prescribed outcomes of the course. Failure to meet one or more outcomes can result in failure of the course. Projects 1 and 2 will be examined in the June exam. During the November exam the examiners will assess the complete portfolio of all the work submitted during the course of the year.

It is a requirement of the course that students must achieve more than 50% of the year mark in order to be afforded entry to the exams. In order to pass the course, it is necessary to pass BOTH the year mark and the integrated oral exams.

*NOTE: This document must be read in conjunction with the SoAP Coursework Assessment Principles, available at https://www.dropbox.com/s/xo9pfhgvyhjfzq9/SOAP%20coursework%20assessment%20principles%20%20Final%2026%20March%202015.docx?dl=0)

Students will be assessed on the basis of the learning outcomes outlined above in Section 3 .

9 *RECOMMENDED READING*

Alexander, C. et al .1977. *A Pattern Language*, Oxford University Press, New York
Baker, G.H. 1989. *Design Strategies in Architecture: an approach to analysis.* New York: Van Nostrand Reinhold.
Brawne, M. 1992. *From idea to building: issues in architecture.* Oxford: Butterworth-Heinemann.
Ching, F. 1979. *Architecture: form, space and order.* New York: Van Nostrand Reinhold.
Clark, R.H. 1996. *Precedents in Architecture.* New York: Van Nostrand Reinhold.
de Botton, A. 2006. *The Architecture of Happiness.* New York: Pantheon Books
Fawcett, A.P. 1998. *Architecture: design notebook.* Oxford: Architectural Press.
Franck, K.A., 1994. *Ordering Space: Types in architecture and design.* New York: Van Nostrand Reinhold.
Frederick, M. 2007. *101 Things I learned in Architecture School.* Cambridge: The MIT Press.
Hearn, F., 2003. *Ideas that shaped buildings.* Cambridge: The MIT Press.
Herzberger, H. 1993. *Lessons for students in architecture.* Rotterdam: Uitgeverij 010.
Herzberger, H. 2000. *Lessons for students in architecture 2.* Rotterdam: Uitgeverij 010.
Thiis-Evensen, T. 1987. *Archetypes in architecture.* Oslo: Norwegian University Press.
Tzonis, A & Lefevre, L. 2003. *Critical Regionalism*, Prestel, Munich
Hagan, S. 2001. *Taking Shape*, Oxford: Architectural Press.
Koolhaas, R. & Mau, B. 1995. *S.M.L.X.,* New York: Monacelli Press.
Mackay-Lyons, 2008. *Ghost: Building an Architectural Vision*. New York: Princeton Architectural Press.
von Meiss, P. 1997. *Elements of Architecture: From Form to Place.* New York: E & FN Spon.
Unwin, S. 1999. *Analysing Architecture*, London, Routledge
Unwin, S. 2000. *An Architecture notebook*, London, Routledge
Norberg-Schulz, C. *Architecture: Presence, Language and Place*. Skira, Milan, 2000

10 *DUE PERFORMANCE*

Student attendance at lectures, site visits, excursions, studio design sessions, expert consultant sessions, crit sessions, seminars and tests is compulsory. Due Performance (DP) is monitored via attendance registers and the submission of work. Due Performance may be refused to students whose attendance record is below the requirements or after failure to submit projects as per the course outline.

Refusal of Due Performance means that the student will not be granted an end of year oral examination, which results in failure of the year's Architectural Design Course. Students who fail to achieve a 50% year mark will not be granted a final end of year oral examination.

11 *PLAGIARISM*

Plagiarism will not be tolerated, although peer learning is encouraged! Plagiarised submissions will not be evaluated and with thus receive 0 – zero!

In terms of Architectural Design this means that an obvious copy of a published project, or a previous project within the School of Architecture (even the student's own work), may be scrutinised in terms of plagiarism. Clearly, influences by peer and published work will occur, but in the case of clearly copied design work, the relevant tutor will raise his/her concern. The project will then be assessed by the year lecturer, and if need be, the Director of BAS program. This may result in the student being reported to the University Authorities, and if found guilty, the student will be expelled from the University. Please refer to school POLICY ON PLAGIARISM, COPYRIGHT & REFERENCING.

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE & PLANNING

ARPL3005/ ARPL3005A *ARCHITECTURAL DESIGN AND THEORY 3* ***2023***

1 *STAFF*

Sandra Felix	Sandra.Felix@wits.ac.za
Kevin Goncalves	Kevin.Goncalves@wits.ac.za
Deborah Kirkman	Deborah.Kirkman@wits.ac.za
Avish Mistry	Avish.Mistry@wits.ac.za

2 *AIMS*

The ARPL3005 Architectural Design and Theory Course aims, in conjunction with the other courses in the study year, to complete the under-graduate architectural training enabling students to work in the highly demanding built environment professions.

During the third year students are required to demonstrate how they can apply skills, gained during preceding study years, with increasing levels of sophistication and independence. Students are expected to demonstrate competence in architectural design, theory, functional planning, technical development, architectural materiality, programming, environmental responsiveness, graphic skills, model building and writing. As an end-product students should have a comprehensive portfolio of work showcasing all of the above in an easily understandable and aesthetically beautiful document.

The broader aim of ARPL3005, via the studio environment and the various tutors, is to equip students with the skills to create an architecture that is an expression of dignified human values and that provides a context for human activity and development. Through the design process and theoretical discourse, students will address the interrelated environmental, behavioural, and cultural issues that underlie the organisation of built form. Students will be required to direct sensitivity, imagination, intellect and increasingly levels of professional judgement to the physical significance of these fundamental issues in designing a coherent environment for people.

The programme, therefore, is based on the following intentions:

- to stimulate artistic sensitivity and creative powers,
- to strengthen intellectual growth and the capacity to develop creative and responsible solutions to unique and changing problems,
- to ensure that the student acquires confidence in their design capabilities,
- to develop the necessary technical skills to realise design decisions and to take a design project to competent conclusions.

The course will have a pluralistic approach to the teaching of architecture. Students will have opportunities to become acquainted with a wide range of contemporary design approaches and methodologies. The course does not seek to impose any singular design philosophy, but rather encourages each student to

3 *LEARNING OUTCOMES*

develop an individual approach to design, based on clear and well-reasoned arguments.

The desired learning outcomes build on the outcomes acquired in first and second year design courses. Outcomes for ARPL3005 are as follows:

	First year design	Second year design	**Architectural Design and Theory 3 ARPL3005**
Process	adequately ***interpre***t a design brief and perform design exploration through a set of given techniques	***interrogate*** a design brief as a means to inform design, and apply relevant exploratory design techniques	logically ***expand*** a design brief with appropriate performative and ethical design objectives, and identify and apply an appropriate design method
Context	display an awareness of a project's physical, social and cultural environmentalinfluences; successfully deal with basic topographical issues	perform relevant urban analyses to generate urban design informants; integrate building with landscape, and competently engage with challenging topography.	adeptly balance both complementary and competing contextual design influences; demonstrate a knowledge around the role of public space in urban environments
Environment	demonstrate an awareness of basic passive environmental design informants and site considerations	apply passive environmental design principles, perform basic analyses of a building's performance, and respond appropriately to ecological, cultural, and socio-economic systems in the built environment	integrate passive and active environmental design systems and utilise specific sustainable design goals as design informants, including ecological, cultural and socio-economic considerations
Conceptual Rigour	formulate design concepts and demonstrate an exploration of their application to physical spaces	propose, explore, and logically refine conceptual design intent(s) throughout a design project	develop and apply a well-reasoned, creative design intent across scales
Spatial Quality	follow an exploratory process using form and volume as spacemaking techniques, demosntrate an understanding of positive and negative spaces, and consider the human perception of spatial volume(s)	demonstrate an integration of user needsand holistic aesthetic and experiential intent through the development and refinement of architectural detailing	competently manage volumetric complexity in buildings to generate a specific user experience
Functionality	develop functional planning of public and private spaces for a simple programme	create functional spatial relationships in small-scale, mixed-use, and multi-unit housing buildings	create appropriately scaled spaces and functional plan conditions in moderately complex buildings with multi-use or hybrid programming
Realisation	convey an inquisitiveness around architectural elements, and apply them as plausible components of a spatial design.	refine initial design intent through the application and appropriate composition of basic technical, material and metaphysical aspects of architecture	demonstrate a consistency of thought across scales, integrating conceptual design influences, technical considerations and building systems into a rigorous and cohesive design
Representation	present a design project using fundamental architectural conventions	use a range of two- and three-dimensional representation techniques, diagram design decisions and building functionality, and construct a narrative presentation both verbally and through visual representation	showcase exporatory and descriptive architectural representation for buildings of moderate complexity
Work Ethic	demonstrate an intellectual curiosity, a willingness to engage in collaborative teamwork, and individually perform directed design tasks	work both independently and collectively towards a common purpose	demonstrate broad professionalism in all aspects of design production, and in participation in all aspects of the course
Achievement	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment	demonstrate a range of skills appropriate to the level of study through an integrated portfolio assessment

4 *TEACHING AND LEARNING METHODS*

The paramount task during the ARPL 3005 course is the development of a design methodology which enables the student to deal with and apply the varied interrelationships found in architectural design. Students are expected to achieve a level of confidence to deal with complex challenges across all scales.

4.1 Design Studio

The design studio is paramount, emphasising the sometimes competing interrelationships between purpose, design, competition, collaboration, innovation and building technology in an environment that

values experimentation.

The design studio - even online - is a workshop in which students congregate to present and discuss projects and proposals with fellow students, staff and visiting critics, professionals, and the public. The design studio combines individual and group instruction, varying from critiques with individual lecturers, to presentations before several tutors, to more formal exams and final reviews before school and guest critics, with the intention of fostering critical thinking, spatial form-making skills, and tectonic skills. The design studio must be viewed as the laboratory were the courses in building technology; materials and production; visual representation in various media; history and theory; and urbanism and landscape are fused together to achieve a comprehensive approach to architecture.

In order to engage with a broad spectrum of architectural questions, a variety of environmental and cultural issues endemic to chosen localities a variety of projects will be completed during the course of the year. This process of exploration offers the opportunity to conduct detailed research, develop formal design methodologies, formulate strategies and design appropriate responses to each project.

Each project has its own goals and associated criteria, some of which will involve group and team work. The process will involve site visits, interaction with the community, research into contemporary and historical precedent, critical investigation of intervention opportunities and options and the exploration and development of detailed projects. A breakdown of the various projects and their timeframes is listed in the attached schedule and mark-allocation table.

Studio contact will rely heavily on student participation. Mondays and Thursdays are intended for intense studio contact, with groups to be arranged and each attended by a designated tutor, sharing information. The tutor will be responsible for his/her group with scheduled, registered sessions. Tutors will rotate each quarter to allow different exposure to all students.

It is essential that students meet with tutors on a weekly basis. Each tutor will have attendance record of their students. Students who fail to meet with tutors or spend less than 75% of the allocated teaching-time in the studio will receive a '*Refusal of Due Performance.*

Crits are most effective when you share your latest drawings so that your tutor can engage intensively with your design.

4.2 Design Theory

In addition to the projects to be concluded in design studio, a series of lectures and seminars will provide background material supporting the studio projects. Some of these lectures will be delivered by practicing architects and will provide students with insights into the various design methodologies that practitioners use in their work. These lectures are intended to form a link between the theories of architecture and the architectural design exploration process.

The design theory portion of this course will take the form of a discussion forum and will be directly coordinated with the History and Theory Course as well as the Theory of Construction programme. Reviews, studies and analyses of built form will form an important part of this course. Students will address a series of contemporary examples of projects, buildings, urban designs and their architects, their methodology, material application, environmental response, functionality, topographical setting and meaning**.** The aim of this portion of the course is to enhance students' understanding of how architects in the past and present have approached a variety of spatial challenges. This component of the course is also intended to enhance students' research capacities and broaden students'own design references. Students will be required to prepare presentations for discussion around their readings, architectural aspirations and inspirations.

4.3 Materials
Students studying Architectural Design are expected to supply their own drawing equipment and materials. Students are expected read prescribed books. The university will provide a sketchbook at the beginning of the year which should be used to document the design process. It is advisable to bring your sketchbook to all presentations and to the exam to provide evidence of your design thinking throughout the course of each project.

5 *STUDENT WORKLOAD*

Course	SAQA	Self Study	Lectures	Studio
ARPL3005	650hrs	196hrs	104hrs	350hrs

6 *SYLLABUS*

The syllabus is outlined in the project descriptions below and is to be read in conjuction with the COURSE SCHEDULE and table outlining THE ALLOCATION OF MARKS. In addition, detailed briefs will be provided at the start of each project.

PROJECT 1: Manifesto
PROJECT 2: Student Competition
PROJECT 3: Matrix re-imagined
PROJECT 4: African Student Commons
PROJECT 5: Manifesto Essay

7 *SUBMISSIONS*

All work must be submitted on ULWAZI and MIRO as per the course schedule. Failure to submit on ULWAZI nor MIRO will resultin a mark of 0 for that submission. All submissions, late or otherwise will be governed by the SOAP Assessment policy

8 *EVALUATION AND WEIGHTING*

The year work counts for 70% with projects weighted as per the course programme. A provisional year mark will be calculated from this breakdown. Any additional work done to projects after evaluation during the year cannot count towards the year mark for design, but have a substantial influence upon the final examination, as a complete portfolio.

There will be two exams, one in June and one in November. The June exam counts 10% and the November exam counts 20%. Both exams, which take the form of an integrated portfolio oral presentation will be externally examined. Examiners will have the right to fail a student who has not adequately met all the prescribed outcomes of the course. Failure to meet one or more outcomes can result in failure of the course. Projects 1 and 2, and 3 will be examined in the June exam. During the November exam the examiners will assess the complete portfolio of all the work submitted during the course of the year.

It is a requirement of the course that students must achieve more than 50% of the year mark in order to be afforded entry to the exams. In order to pass the course, it is necessary to pass BOTH the year mark and the integrated oral exams.
*NOTE: This document must be read in conjunction with the SoAP Coursework Assessment Principles, available at https://ulwazi.wits.ac.za/courses/20267/pages/academic-resources

Students will be assessed on the basis of the learning outcomes outlined above in Section 3 .

9 *RECOMMENDED READING*

Every project will have a specific reading list – which will be issued with the project brief. The book list below is recommended for an in-depth background.

Alexander, C. et al .1977. *A Pattern Language*, Oxford University Press, New York
Baker, G.H. 1989. *Design Strategies in Architecture: an approach to analysis.* New York: Van Nostrand Reinhold.
Brawne, M. 1992. *From idea to building: issues in architecture.* Oxford: Butterworth-Heinemann.
Ching, F. 1979. *Architecture: form, space and order.* New York: Van Nostrand Reinhold.
Clark, R.H. 1996. *Precedents in Architecture.* New York: Van Nostrand Reinhold.
de Botton, A. 2006. *The Architecture of Happiness.* New York: Pantheon Books
Fawcett, A.P. 1998. *Architecture: design notebook.* Oxford: Architectural Press.
Franck, K.A., 1994. *Ordering Space: Types in architecture and design.* New York: Van Nostrand Reinhold.
Frederick, M. 2007. *101 Things I learned in Architecture School.* Cambridge: The MIT Press.
Hearn, F., 2003. *Ideas that shaped buildings.* Cambridge: The MIT Press.
Herzberger, H. 1993. *Lessons for students in architecture.* Rotterdam: Uitgeverij 010.
Herzberger, H. 2000. *Lessons for students in architecture 2.* Rotterdam: Uitgeverij 010.
Thiis-Evensen, T. 1987. *Archetypes in architecture.* Oslo: Norwegian University Press.
Tzonis, A & Lefevre, L. 2003. *Critical Regionalism*, Prestel, Munich
Hagan, S. 2001. *Taking Shape*, Oxford: Architectural Press.
Koolhaas, R. & Mau, B. 1995. *S.M.L.X.,* New York: Monacelli Press.
Mackay-Lyons, 2008. *Ghost: Building an Architectural Vision*. New York: Princeton Architectural Press.
von Meiss, P. 1997. *Elements of Architecture: From Form to Place.* New York: E & FN Spon.
Unwin, S. 1999. *Analysing Architecture*, London, Routledge
Unwin, S. 2000. *An Architecture notebook*, London, Routledge
Norberg-Schulz, C. *Architecture: Presence, Language and Place*. Skira, Milan, 2000

10 *DUE PERFORMANCE*

Student attendance at lectures, site visits, excursions, studio design sessions, expert consultant sessions, crit sessions, seminars and tests is compulsory. Due Performance (DP) is monitored via attendance registers and the submission of work. Due Performance may be refused to students whose attendance record is below the requirements or after failure to submit projects as per the course outline.
Refusal of Due Performance means that the student will not be granted an end of year oral examination, which results in failure of the year's Architectural Design Course. Students who fail to achieve a 50% year mark will not be granted a final end of year oral examination.

11 *PLAGIARISM*

Plagiarism will not be tolerated, although peer learning is encouraged! Plagiarised submissions will not be evaluated and with thus receive 0 – zero!
In terms of Architectural Design this means that an obvious copy of a published project, or a previous project within the School of Architecture (even the student's own work), may be scrutinised in terms of plagiarism. Clearly, influences by peer and published work will occur, but in the case of clearly copieddesign work, the relevant tutor will raise his/her concern. The project will then be assessed by the year lecturer, and if need be, the Director of BAS program. This may result in the student being reported to the University Authorities, and if found guilty, the student will be expelled from the University. Please refer to school POLICY ON PLAGIARISM, COPYRIGHT & REFERENCING. https://ulwazi.wits.ac.za/courses/20267/pages/academic-resources

SCHOOL OF ARCHITECTURE & PLANNING

UNIVERSITY OF THE WITWATERSRAND

COURSE CODE: ARPL 3005
COURSE NAME: Architectural Design and Theory 3 4 February 2019

Project 01: An Architectural Manifesto: Reflections – 2*(10 x 10)

'*Architecture is not really important, that what is important is to change this unjust world; so let us use architecture as one of our tools, since it is in actions, intentions and inventions where the differences that qualify us are found*'
Oscar Niemeyer

1.0 MANIFESTO

The word manifesto or manifest has its origin in the dawn of modernity, and comes from the Italian *manifestare*, 'to make public' and from '*manifestus* ' *obvious*'.

The setting of a manifesto falls within the modern because it denotes and underscores our renunciation of the recent past, our favouring of a new beginning, a re-interpretation of historical perceptions, a process of 'rationalization', something processional, especially expressed through tensions and dynamics. We thus teach and take a stand from a particular kind of time consciousness, which defines the present, in its relation to our past, which must be continuously recreated. In our current cultural condition the seemingly absolute necessity of innovation becomes a primary fact of life, work and thought.

Positioning one-self, taking a stand, setting a manifesto is inherently **utopian**. It is to name the ideal within our ability, the attempt to leap from the despondence of present conditions with the promise of a better tomorrow, they are both real and ideal, naïve and visionary, public yet deeply personal.

1.1 INTENT PART ONE: REFLECTION 2*(10 X 10) – POSTER 01

"*Diagram is one of the most used words in contemporary architecture and urban design. It's almost a common understanding of using diagrams to explain the design concept. However, it is more than simply showing the audience to help them understand the idea. Diagramming is an element of design in itself. "*
Pyo Mi-young, 2011, Architectural Diagrams: Construction and Design Manual

A Manifesto: Reflections – 10 x 10 is intended to allow you to start your 3rd year programme by reflecting on the work you have produced over the previous 2 years, and through this reflection begin to frame an approach to your 3rd year work.

Manifesto 10 x 10 has three main aims:

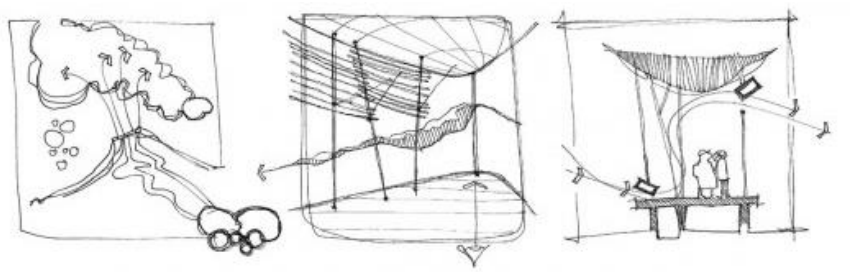
- To develop **critical thinking**, and in particular to encourage and develop your ability to self critique; by tracing your own development over the previous two years
- To define a **framework** or structure for the evolution of your **design approach** (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context
- To begin to equip you with the tools to better **articulate** your work, to engage in debate, and to defend your own work in a critical forum.

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

Reflective practice model in one where there are different types of reflection at play in designing:

- **Reflecting on** your body of work is a type of retrospective reflection- which you have begun to do in the 10x10 Project 1 exercise
- **Reflecting in** the act of making/ designing- where designing and reflecting are simultaneous
- **Reflecting for** next works – happens in the act of designing current works

Social reflection where learning takes place in non-hierachical, multiple iterations and exchanges between the body and the world and happens by language and social means.



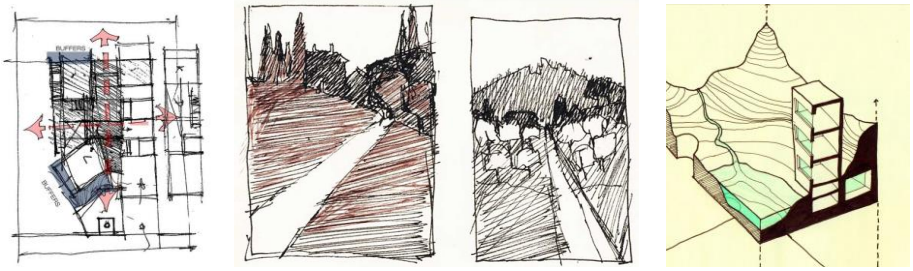
Diagrams of the Orokonui Ecosanctuary
Visitor Centre in New Zealand by Architectural Ecology

1.1 The Poster

No new design work is required for this project. Instead, the requirement is to develop a poster, that thoughtfully examines the principles behind your own work, and distils a thoughtful and considered position, which is to be articulated as a concise and meaningful written statement, THE MANIFESTO .

The poster should be A1 format. It will include a series of thumbnail drawings as well as a written piece. The thumbnail drawings will examine 10 of your projects from the 1st and 2nd year programmes, distilling the essence of these projects into a series of diagrams. For each project you will do 10 diagrams – making 100 diagrams in all: 10 x 10. Each diagram should fit in a space of 5cm x 5cm, so your poster will consist of a grid of 10 rows x 10 columns of diagrams, with 5mm spacing between them. Please allow an equal margin on the two sides, and 25mm margin at the top of the poster.

The diagrams should be hand drawn, using pen, pencil, charcoal, or any medium you believe to be most appropriate.
It is important that through these diagrams you **develop a graphic language that illustrates the core ideas** encapsulated within your design proposals, in a way that they can be easily understood by others, and enhance your own understanding of your work.



Diagrams range from clear which reflect systemic, schematic and logical thinking to foggy which reflect instinct and ambiguity.



A handmade diagram is like a pre-text, it is somehting that exists before language.

The diagrams will be in plan form, sections, elevations and massing sketches. For each project the
10 diagrams should cover (from left to right):

1. Project name & programme (a diagram in words)
2. Site – indicating any salient features, such as boundaries, slope, context, access etc as relevant
3. Geometry – the underpinning geometrical organisational systems
4. Structure – indicating type of structural system, e.g columns, load bearing walls, etc
5. Enclosure – openness versus transparency, heaviness v. lightness
6. Circulation – entry, routes, and movement systems (including vertical circulation where relevant)
7. Massing – your design distilled into its basic forms (a 3D axo or other representation will be needed here)
8. Facade – the principal organisation of the primary elevation (in 2D elevation or 3D axo or other)
9. Spatial relationships 1 – the relationship between primary and secondary spaces, served versus servant spaces (in plan)
10. Spatial relationships 2 – the relationship between solid and void, minor and major spaces (in 2D section or 3D axo or other)

The diagrams should be organised sequentially with the earliest project at the top of the grid, and the latest at the bottom of the grid. All diagrams should be roughly to the same scale across the row (i.e. for any one project), though scale may vary from top to bottom to suit the scale/size of different projects. Please also remember the architectural convention of always having north at the top of the page – you may vary from this if it makes graphic sense, but please be consistent in your variation and indicate north on your site diagram.

1.2 INTENT PART TWO: DESIGN METHODOLOGY ANALYSIS – POSTER 02

The act of designing in architecture is a complex process. Many designers, when probed for reasons to explain their actions, are either unable to answer questions, or provide explanations that are not true descriptions of their actions. Frequently the designer will answer that his or her reason for making a particular design decision is based on 'feeling' or 'intuition.' Under this model the design process assumes a 'mystical' aura. Architectural designers can create, yet are unable to say how they do so. Often that which can be explicitly discussed by the designer is the least significant part of his or her design process.

All architects are working with knowledge that is largely tacit. The **second 'Intent'** is to de-mystify the process of architectural design. This will be achieved by using the same principles applied to investigate the students own past work, to study and **invesitgate contemporary architects**. The students have to choose any 10 projects from acclaimed architects and complete a diagramatic analysis following the same headings as listed above. The list of buildings cover typolgies relevant for future studio projects. Students can pick from a number of buildings from the list below. Students may also select other buildings by the listed architects.

Daniel Liebeskind	Jewish Museum, Berlin,
	Grand Canal Theatre, Dublin
	Imperial War Museum North in England.
Tadao Ando	Church of the Light, Osaka
	Modern Art Museum of Fort Worth
	Armani World Headquarters, Milan, Italy
	Vitra Seminar House, Weil am Rhein, Germany
Norman Foster	30 St Mary Axe, London,
	Willis Faber and Dumas Headquarters, Ipswich
	IBM Pilot Head Office
Renzo Piano	Centre Georges Pompidou,Paris,
	Kimbell Art Museum Expansion
Álvaro Siza	Nadir Afonso Foundation, Portugal
	Theatre in Llinars del Vallé, Spain
	Architecture Faculty, University of Porto
Ben van Berkel	Theatre Agora
	Mercedes-Benz Musuem
Moshe Safdie	Yad Vashem Holocaust Museum, Jerusalem
	Khalsa Heritage Memorial Complex, Anandpur Sahib, India,
Van Gameren	The Royal Netherlands Embassy in Addis Ababa Ethiopia
Rem Koolhaas	Seattle Central Library
	Netherlands Embassy Berlin
	Cornell University, Milstein Hall
Zaha Hadid	Cincinnati's Rosenthal Center for Contemporary Art.
	Vitra fire station
	IBA Housing, Berlin Stresemannstraße
	Riverside Museum, Glasgow
Josh Prince-Ramus	Vakko Headquarters and Power Media Center, Istanbul
	The Museum of the 20th Century, Berlin
	AT&T Performing Arts Centre, Dallas
Design Workshop	Constitutional Court
	Bay of Plenty Upgrade
Alvar Aalto	Cultural Center Wolfsburg
	University of Jyväskylä
	Paimio Sanatorium. Paimio, Finland
	Saynatsalo Town Hall, Finland
Jean Nouvel	Museo Nacional Centro de Arte Reina Sofía, Madrid
	Opéra Nouvel, Lyon
	Arab World Institute, Paris
C. de Portzamparc	Cidade Das Artes, Rio de Janeiro
Robert Venturi & Denise Scott Brown	
	Sainsbury Wing of the National Gallery, London
	Wu Hall, Princeton University
Francis Kéré	School Library Gando
Morphosis	Emerson College Los Angeles
	Madrid Housing
	Bill and Melinda Gates Hall – Cornell University
Herzog & de Meuron	Perez Art Museum
	Museum der Kulturen, Basel
	Caixa Forum
Richard Rogers	London School of Economics
	Bodegas Protos Winery, Spain
Mokena Makeka	Khayelitsha Community Centre

Peter Zumthor	Saint Benedict Chapel
	Kolumba Museum, Cologne
	Vals Thermal Baths
Geofrey Bawa	Lunuganga
	Sunethra Bandaranaike House
Rafael Moneo	National Museum of Roman Art, Merida Spain
	Columbia University Northwest Corner Building
	Murcia Town Hall on the Cardenal
	Davis Museum and Cultural Center at Wellesley College
Rafael Viñoly	Carrasco International Airport, Montevideo



Herzog & de Meuron Caixa Forum, Madrid



Francis Kere, Work in Gondo, Burkino Faso

1.3 EXPRESSING YOUR MANIFESTO

The first part of the project requires the student to question his /her attitude towards the production of architectural space. The student needs to take a position and be able to debate attitudes in architecture towards **ethics, civicness, collectivity, modernity, place-boundness, social consciousness, sustainability, contradictions and continuity**.

In the space remaining below the 10 x 10 diagrams, you will include a concise written statement, setting out your architectural intentions in 250 - 350 words in full coherent sentences. The statement should draw on your critique of your previous years work, set out in the diagrams above, and may reference this directly or indirectly. It should also establish the directions you intend to follow in the 3rd year, whether this a continuity or a new direction – or perhaps a mix of both

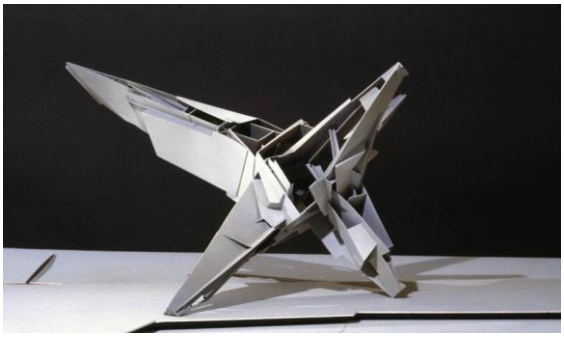
The declaration should crystallize what architecture means to the student and how the student hopes to express themselves going into the future. The position will need to be articulated as a **written statement**, which should be concise and meaningful.

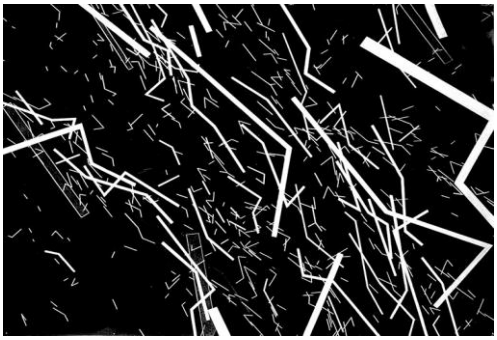
This project requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment.

What was the key idea that you explored in each project? Group your projects in terms of essence. What is the dominant theme that runs through all your projects? What do you instinctively relook at no matter what the design brief?

Students to investigate the manifestos of architects past and present, with an emphasis on those that emphasized and glorified themes associated with contemporary concepts of nature, technology, sustainability and societal change. Examples of architects and artists include:

- Antonio Sant'Elia,
- Filippo Marinetti, Giacomo Balla and Umberto Boccioni: Futurism and the Futurist Manifesto
- Adolf Loos: "ornament as crime,"
- Bruno Taut: Alpine Architecture
- Archigram, The Plug-in-City, The Walking City and the Instant City
- Corbusier: "eyes that do not see." The Contemporary City
- Naum Gabo and Russian Constructivism
- Eric Mendelsohn: Dynamic Functionalism
- The Green Architecture Movement
- Lebbeus Woods
- Peter Zumthor





Architecture and war are not incompatible. Architecture is war. War is architecture. I am at war with my time, with history, with all authority that resides in fixed and frightened forms. I am one of millions who do not fit in, who have no home, no family, no doctrine, no firm place to call my own, no known beginning or end, no "sacred and primordial site." I declare war on all icons and finalities, on all histories that would chain me with my own falseness, my own pitiful fears. I know only moments, and lifetimes that are as moments, and forms that appear with infinite strength, then "melt into air." I am an architect, a constructor of worlds, a sensualist who worships the flesh, the melody, a silhouette against the darkening sky. I cannot know your name. Nor you can know mine. Tomorrow, we begin together the construction of a city.
Woods, Lebbeus (2002). War and Architecture. New York: Princeton Architectural Press. p. 1

1.3 SUBMISSION

Project 01 - Architectural Reflections and Manifesto 2*(10 x 10) – 2x A1 Vertical Poster and a written statement
Project Hand-in date – 18 February 2019 @ 11:30 in John Moffat Foyer
PDF or JPG to be submitted to SAKAI as well

SCHOOL OF ARCHITECTURE & PLANNING

UNIVERSITY OF THE WITWATERSRAND

COURSE CODE: ARPL 3005
COURSE NAME: Architectural Design and Theory 3 3 February 2020

Project 01: An Architectural Manifesto: Reflections

'*Architecture is not really important, that what is important is to change this unjust world; so let us use architecture as one of our tools, since it is in actions, intentions and inventions where the differences that qualify us are found*'
Oscar Niemeyer

MANIFESTO

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an expression of the best we want to become, or remembered by.

This year the student needs start the journey towards establishing his/her architectural identity/ It requires of students to take a stand and seek the tools to express them in a coherent and legible manner.

The word manifesto or manifest has its origin in the dawn of modernity, and comes from the Italian *manifestare*, 'to make public' and from '*manifestus* ' *obvious*'.

The setting of a manifesto falls within the modern because it denotes and underscores our renunciation of the recent past, our favouring of a new beginning, a re-interpretation of historical perceptions, a process of 'rationalization', something processional, especially expressed through tensions and dynamics. We thus teach and take a stand from a particular kind of time consciousness, which defines the present, in its relation to our past, which must be continuously recreated. In our current cultural condition the seemingly absolute necessity of innovation becomes a primary fact of life, work and thought.

Positioning one-self, taking a stand, setting a manifesto is inherently **utopian**. It is to name the ideal within our ability, the attempt to leap from the despondence of present conditions with the promise of a better tomorrow, they are both real and ideal, naïve and visionary, public yet deeply personal.

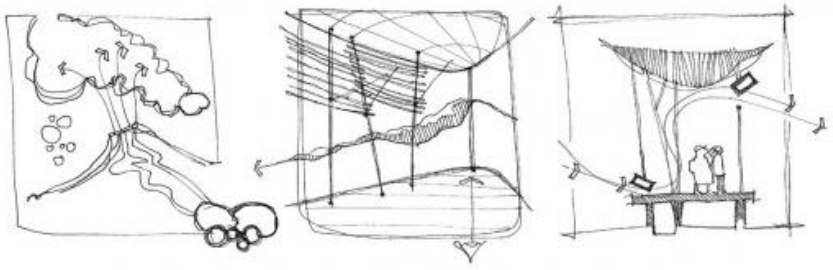
Manifesto: Reflections has three main aims:

- To develop **critical thinking**, and in particular to encourage and develop your ability to **self critique**; by tracing and reflecting on your own development over the previous two years
- To define a **framework** or structure for the evolution of your **design approach** (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context
- To begin to equip you with the tools to better **articulate** your work, to engage in debate, and to defend your own work in a critical forum

Intent Part 1: MANIFESTO: REFLECTIONS ON OWN WORK 5 x 6

"*Diagram is one of the most used words in contemporary architecture and urban design. It's almost a common understanding of using diagrams to explain the design concept. However, it is more than simply showing the audience to help them understand the idea. Diagramming is an element of design in itself. "*
Pyo Mi-young, 2011, Architectural Diagrams: Construction and Design Manual

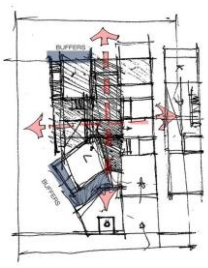
A Manifesto: Reflections On Own Work - is intended to allow you to start your 3rd year programme by reflecting on the work you have produced over the previous years, and through this reflection begin to frame an approach to your 3rd year work.

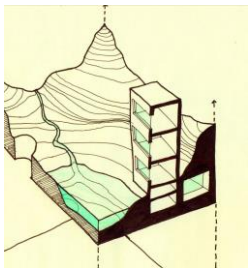


Diagrams of the Orokonui Ecosanctuary
Visitor Centre in New Zealand by Architectural Ecology

The thumbnail drawings will examine 5 of your projects from the 1st and 2nd year programmes, distilling the essence of these projects into a series of diagrams. For each project you will do 6 diagrams – making 30 diagrams in all: 5 x 6. Each diagram should fit aproximately in a space of 5cm x 5cm or a post it note.

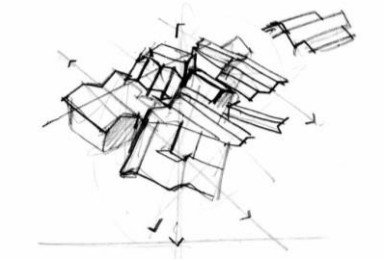
The diagrams should be **hand drawn**, using pen, pencil, charcoal, or any medium you believe to be most appropriate.
It is important that through these diagrams you **develop a graphic language that illustrates the core ideas** encapsulated within your design proposals, in a way that they can be easily understood by others, and enhance your own understanding of your work.





Diagrams range from clear which reflect systemic, schematic and logical thinking to foggy which reflect instinct and ambiguity.





A handmade diagram is like a pre-text, it is somehting that exists before language.

The diagrams will be in plan form, sections, elevations, perspectives and massing sketches. For each project the 6 diagrams should cover:

1. Project name & programme (a diagram in words and text) COMPULSORY

And your choice of 5 of the following, making sure to include section, plan and three- dimensional sketches for each project:

2. Site – indicating any salient features, such as boundaries, slope, context, access etc as relevant
3. Geometry – the underpinning geometrical organisational systems
4. Structure – indicating type of structural system, e.g columns, load bearing walls, etc
5. Enclosure – openness versus transparency, heaviness v. lightness
6. Circulation – entry, routes, and movement systems (including vertical circulation where relevant)
7. Massing – your design distilled into its basic forms (a 3D axo or other representation will be needed here)
8. Facade – the principal organisation of the primary elevation (in 2D elevation or 3D axo or other)
9. Spatial relationships 1 – the relationship between primary and secondary spaces, served versus servant spaces (in plan)
10. Spatial relationships 2 – the relationship between solid and void, minor and major spaces (in 2D section or 3D axo or other)

Please remember the architectural convention of always having north at the top of the page – you may vary from this if it makes graphic sense, but please be consistent in your variation and indicate north on your site diagram.

Intent Part 2: MANIFESTO: REFLECTIONS ON OTHER ARCHITECTS' WORK 5 x 6

The act of designing in architecture is a complex process. Many designers, when probed for reasons to explain their actions, are either unable to answer questions, or provide explanations that are not true descriptions of their actions. Frequently the designer will answer that his or her reason for making a particular design decision is based on 'feeling' or 'intuition.' Under this model the design process assumes a 'mystical' aura. Architectural designers can create, yet are unable to say how they do so. Often that which can be explicitly discussed by the designer is the least significant part of his or her design process.

All architects are working with knowledge that is largely tacit. The **second 'Intent'** is to de-mystify the process of architectural design. This will be achieved by using the same principles applied to investigate the students own past work, to study and **investigate contemporary architects**. The students have to choose any 5 projects from acclaimed and published architects, that have influenced the students' work in the last few years, or to whose work you are drawn.

Once again 6x diagrams/drawings need to be produced for each project chosen – following the same list of categories as per Intent Part 1. In all 5 x 6 = 30 diagrams/drawings will be produced of approximate 5x 5cm size or a post it note.

Intent Part 3: WAYS OF SEEING & EXPRESSING YOUR MANIFESTO

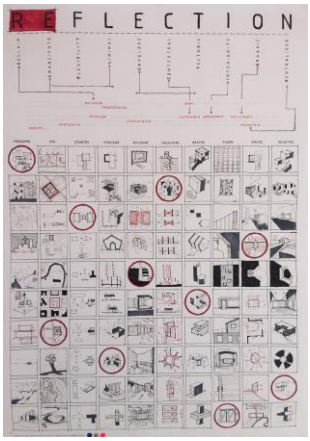
This project requires the student to question his /her attitude towards the production of architectural space. The student needs to take a position and be able to debate attitudes in architecture towards **ethics, civicness, collectivity, modernity, place-boundness, social consciousness, sustainability, contradictions and continuity**.

The last part of the Manifesto : Reflections project, each student will **arrange or organise** their 60x sketches (30 of own work and 30 of other architects work) into an A1 poster that reflects the connections between projects and the design ethos that they have drawn out of reflecting on their work. In reflection and organising your ways of seeing each student must answer the following questions:

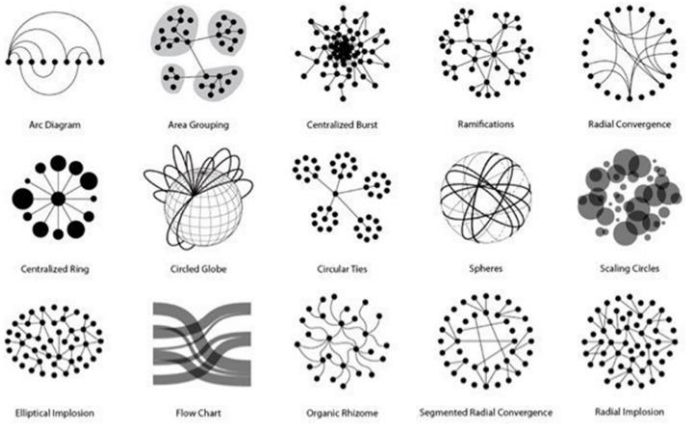
1. **What was the key idea that you explored in each project?**
2. **What is the dominant theme/ themes that run through all your projects?**
3. **What do you instinctively relook at no matter what the design brief?**

Discuss the answers to the above questions with one other student within your allocated tutor group. Each student should seek to see in the other students work these themes, both in the porjects as well as in the design of the poster, and draw out any unseen/ undiscussed themes in each others work.

Organisation, or mapping patterns of information can be done in a number of ways, and each student's mapping should reflect the design methodology or process identified:



Articulated grid



Manuel Lima – Visual complexity, Mapping Patterns of Information

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

This reflective practice model is one where there are different types of reflection at play:

- **Reflecting on** your body of work is a type of retrospective reflection- which you have begun to do in the Intent Part 1 and Part 2 exercise
- **Reflecting in** the act of making/ designing- where designing and reflecting are simultaneous- Intent Part 3 exercise
- **Reflecting for** next works – Intent Part 3 – discussing and writing your manifesto
- **Social reflection** where learning takes place in non-hierarchical, multiple iterations and exchanges between the body and the world and happens by language and social means. Has your partner student seen something in your work that you did not see? Has discussing your manifesto made it clearer to you?

As part of your submitted poster, as well as the arrangement of 60 sketches as outlined above, you will include a concise written statement, setting out your architectural intentions in 250 - 350 words in full coherent sentences. The statement should draw on your critique of your previous years work, as well as the discussion of this work with a partner, and may reference this directly or indirectly. It should also establish the directions you intend to follow in the 3rd year, whether this a continuity or a new direction – or perhaps a mix of both

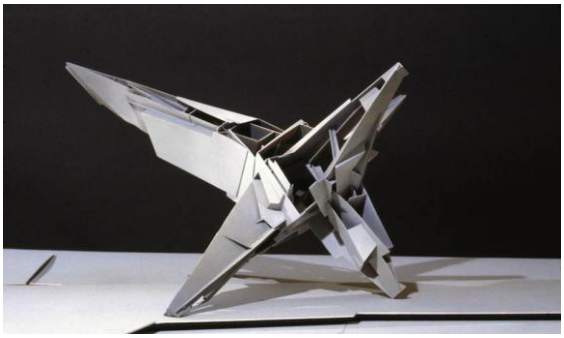
The declaration should crystallize what architecture means to the student and how the student hopes to express themselves going into the future. The position will needs to be articulated as a **written statement**, which should be concise and meaningful.

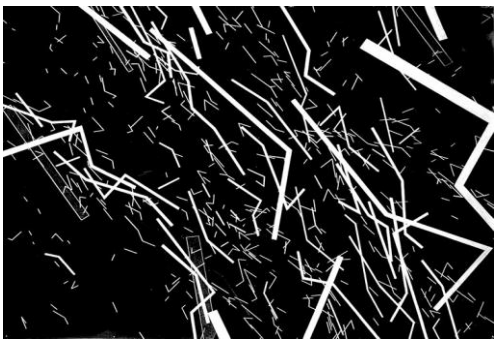
This project requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment.

Students are to investigate the manifestos of architects past and present, with an emphasis on those that emphasized and glorified themes associated with contemporary concepts of nature, technology, sustainability and societal change. Examples of architects and artists include:

- Antonio Sant'Elia,
- Filippo Marinetti, Giacomo Balla and Umberto Boccioni: Futurism and the Futurist Manifesto
- Adolf Loos: "ornament as crime,"
- Bruno Taut: Alpine Architecture
- Archigram, The Plug-in-City, The Walking City and the Instant City
- Corbusier: "eyes that do not see." The Contemporary City
- Naum Gabo and Russian Constructivism
- Eric Mendelsohn: Dynamic Functionalism
- The Green Architecture Movement
- Lebbeus Woods
- Peter Zumthor

The poster should be A1 format. It will include a series of thumbnail drawings as well as a written piece. No new design work is required for this project. Instead, the requirement is to develop a poster, that thoughtfully examines the principles behind your own work, , and distils a thoughtful and considered position, which is to be articulated as a concise and meaningful drawn and written statement.





Architecture and war are not incompatible. Architecture is war. War is architecture. I am at war with my time, with history, with all authority that resides in fixed and frightened forms. I am one of millions who do not fit in, who have no home, no family, no doctrine, no firm place to call my own, no known beginning or end, no "sacred and primordial site." I declare war on all icons and finalities, on all histories that would chain me with my own falseness, my own pitiful fears. I know only moments, and lifetimes that are as moments, and forms that appear with infinite strength, then "melt into air." I am an architect, a constructor of worlds, a sensualist who worships the flesh, the melody, a silhouette against the darkening sky. I cannot know your name. Nor you can know mine. Tomorrow, we begin together the construction of a city.
Woods, Lebbeus (2002). War and Architecture. New York: Princeton Architectural Press. p. 1

READING

Alastair, D. Manifesto: Towards a New Humanism in Architecture,
Conrads, U. Programmes and Manifestos on 20th Century Architecture.
Norberg-Schulz, C. Architecture: Presence, Language and Place. Skira, Milan, 2000
Venturi, R, Complexity and Contradiction in Architecture, 1966

SUBMISSION & WORKSCHEDULE

3 February 2020 – Studio
-**Own precedents** - sketching your own precedent projects – 5 x 6 drawings = 30 drawings
-**Other architects precedents** – sketching other architects projects that influenced your work OR to which you are drawn– 5 x 6 drawings = 30 drawings

10 February 2020 – En-Loge in Bubbles & Studio **PIN-UP & Submission on SAKAI**
-**Ways of Seeing and Reflecting** – arrange or organise your 60 drawings in the organisational structure of your choice and discuss with your partner. Reflect on your own design methodology and conclude with a written statement to be pinned up as part of your poster

SCHOOL OF ARCHITECTURE & PLANNING

UNIVERSITY OF THE WITWATERSRAND

COURSE CODE: ARPL 3005A
COURSE NAME: Architectural Design and Theory 3 11 October 2021

Project 01: An Architectural Manifesto: Reflections

'*Architecture is not really important, that what is important is to change this unjust world; so let us use architecture as one of our tools, since it is in actions, intentions and inventions where the differences that qualify us are found*'
Oscar Niemeyer

MANIFESTO

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an expression of the best we want to become, or remembered by.

This year the student needs start the journey towards establishing his/her architectural identity.It requires of students to take a stand and seek the tools to express them in a coherent and legible manner.

The word manifesto or manifest has its origin in the dawn of modernity, and comes from the Italian *manifestare*, 'to make public' and from '*manifestus* ' *obvious*'.

The setting of a manifesto falls within the modern because it denotes and underscores our renunciation of the recent past, our favouring of a new beginning, a re-interpretation of historical perceptions, a process of 'rationalization', something processional, especially expressed through tensions and dynamics. We thus teach and take a stand from a particular kind of time consciousness, which defines the present, in its relation to our past, which must be continuously recreated. In our current cultural condition the seemingly absolute necessity of innovation becomes a primary fact of life, work and thought.

Positioning one-self, taking a stand, setting a manifesto is inherently **utopian**. It is to name the ideal within our ability, the attempt to leap from the despondence of present conditions with the promise of a better tomorrow, they are both real and ideal, naïve and visionary, public yet deeply personal.

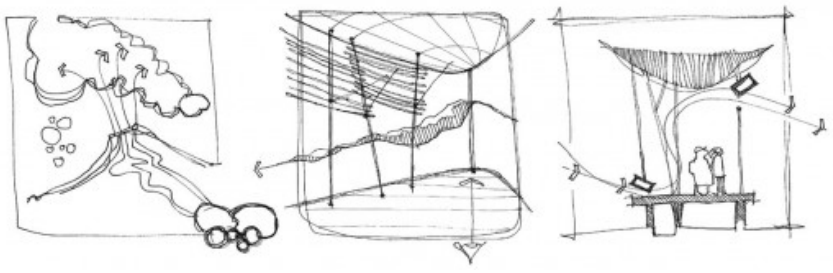
Manifesto: Reflections has three main aims:

- To develop **critical thinking**, and in particular to encourage and develop your ability to **self critique**; by tracing and reflecting on your own development over the previous two and a half years
- To define a **framework** or structure for the evolution of your **design approach** (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context
- To begin to equip you with the tools to better **articulate** your work, to engage in debate, and to defend your own work in a critical forum

Intent Part 1: REFLECTIVE DRAWING OF OWN WORK 5 x 6

"*Diagram is one of the most used words in contemporary architecture and urban design. It's almost a common understanding of using diagrams to explain the design concept. However, it is more than simply showing the audience to help them understand the idea. Diagramming is an element of design in itself. "*
Pyo Mi-young, 2011, Architectural Diagrams: Construction and Design Manual

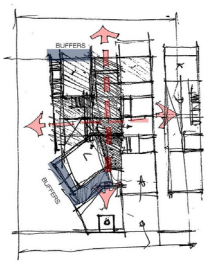
A Manifesto: Reflections On Own Work - is intended to allow you to start the process of compiling a portfolio by reflecting on the work you have produced over the previous years.

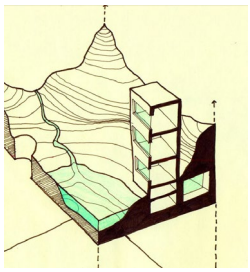


Diagrams of the Orokonui Ecosanctuary
Visitor Centre in New Zealand by Architectural Ecology

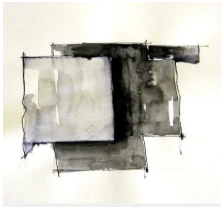
Through thumbnail drawings you will examine 5 of your projects from the last few years, distilling the essence of these projects into a series of diagrams. For each project you will do 6 diagrams – making 30 diagrams in all: 5 x 6. Each diagram should fit aproximately in a space of 5cm x 5cm or a post it note.

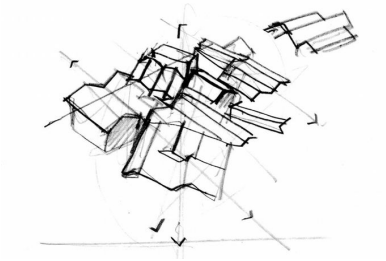
The diagrams should be **hand drawn**, using pen, pencil, charcoal, or any medium you believe to be most appropriate.
It is important that through these diagrams you **develop a graphic language that illustrates the core ideas** encapsulated within your design proposals, in a way that they can be easily understood by others, and enhance your own understanding of your work.





Diagrams range from clear which reflect systemic, schematic and logical thinking to foggy which reflect instinct and ambiguity.





A handmade diagram is like a pre-text, it is somehting that exists before language.

The diagrams will be in plan form, sections, elevations, perspectives and massing sketches. For each project the 6 diagrams should cover:

1. Project name & programme (a diagram in words and text) COMPULSORY

And your choice of 5 of the following, making sure to include section, plan and three- dimensional sketches for each project:

2. Site – indicating any salient features, such as boundaries, slope, urban or natural context, access etc as relevant
3. Geometry – the underpinning geometrical organisational systems
4. Structure – indicating type of structural system, e.g columns, load bearing walls, etc
5. Enclosure – openness versus transparency, heaviness v. lightness
6. Circulation – entry, routes, and movement systems (including vertical circulation where relevant)
7. Massing – your design distilled into its basic forms (a 3D axo or other representation will be needed here)
8. Facade – the principal organisation of the primary elevation (in 2D elevation or 3D axo or other)
9. Spatial relationships – the relationship between primary and secondary spaces, served versus servant spaces (in plan); the relationship between solid and void, minor and major spaces (in 2D section or 3D axo or other)

Please remember the architectural convention of always having north at the top of the page – you may vary from this if it makes graphic sense, but please be consistent in your variation and indicate north on your site diagram.

Intent Part 2: REFLECTIVE DRAWING OF OTHER ARCHITECTS' WORK 5 x 6

The act of designing in architecture is a complex process. Many designers, when probed for reasons to explain their actions, are either unable to answer questions, or provide explanations that are not true descriptions of their actions. Frequently the designer will answer that his or her reason for making a particular design decision is based on 'feeling' or 'intuition.' Under this model the design process assumes a 'mystical' aura. Architectural designers can create, yet are unable to say how they do so. Often that which can be explicitly discussed by the designer is the least significant part of his or her design process.

All architects are working with knowledge that is largely tacit. The **second 'Intent'** is to de-mystify the process of architectural design. This will be achieved by using the same principles applied to investigate the students own past work, to study and **investigate contemporary architects**. The students have to choose any 5 projects from acclaimed and published architects, that **have influenced the students' work in the last few years, or to whose work you are drawn.**

Once again 6x diagrams/drawings need to be produced for each project chosen – following the same list of categories as per Intent Part 1. In all 5 x 6 = 30 diagrams/drawings will be produced of approximate 5x 5cm size or a post it note.

Intent Part 3: OWN NARRATIVE - WAYS OF SEEING, CONTEXT & EXPRESSING YOUR MANIFESTO

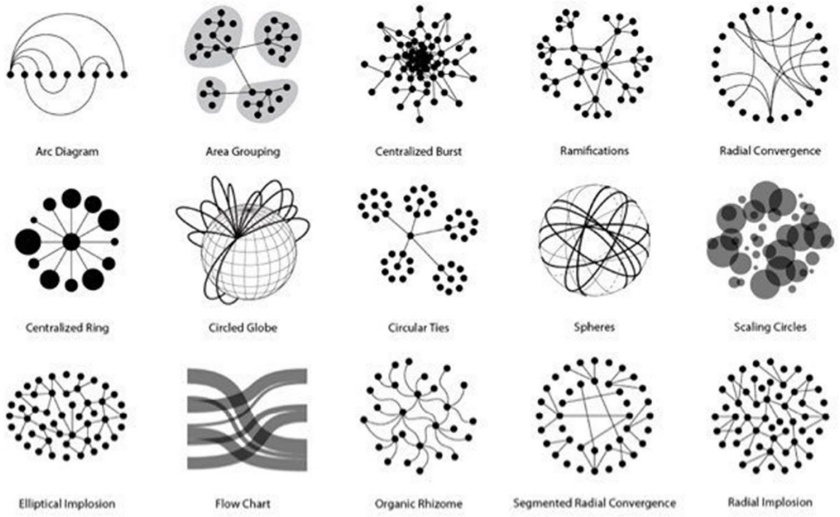
This project requires the student to question his /her attitude towards the production of architectural space. The student needs to take a position and be able to debate attitudes in architecture towards **ethics, civicness, collectivity, modernity, place-boundness, social consciousness, sustainability, contradictions and continuity**.

The last part of the Manifesto : Reflections project, each student will **arrange or organise** their 60x sketches (30 of own work and 30 of other architects work) into an A1 poster that reflects the connections between projects and the design ethos that they have drawn out of reflecting on their work. In reflection and organising your ways of seeing each student must answer the following questions:

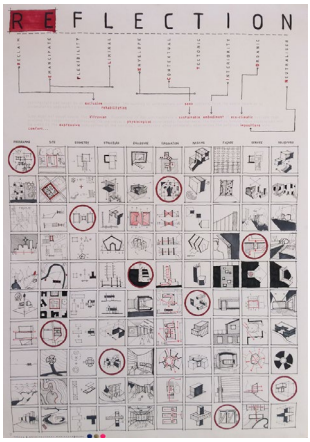
1. **What was the key idea that you explored in each project?**
2. **What is the dominant theme/ themes that run through all your projects?**
3. **What do you instinctively relook at no matter what the design brief?**

Discuss the answers to the above questions with one other student within your allocated tutor group. Each student should seek to see in the other students work these themes, both in the porjects as well as in the design of the poster, and draw out any unseen/ undiscussed themes in each others work.

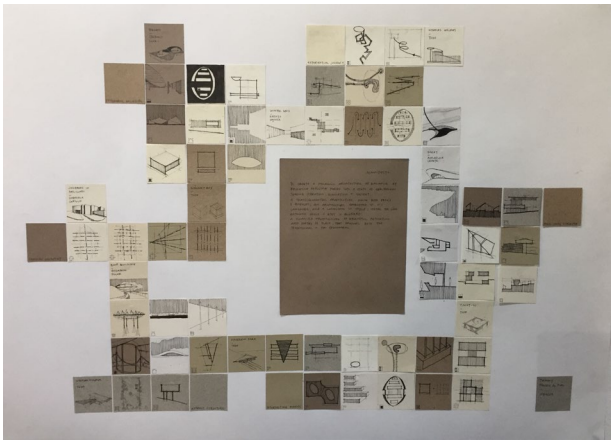
Organisation, or mapping patterns of information can be done in a number of ways, and each student's mapping should reflect the design methodology or process identified:



Manuel Lima – Visual complexity, Mapping Patterns of Information



Articulated grid –



Narrative grid –

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

This reflective practice model is one where there are different types of reflection at play:

- **Reflecting on** your body of work is a type of retrospective reflection- which you have begun to do in the Intent Part 1 and Part 2 exercise
- **Reflecting in** the act of making/ designing- where designing and reflecting are simultaneous- Intent Part 3 exercise
- **Reflecting for** next works – Intent Part 3 – discussing and writing your manifesto
- **Social reflection** where learning takes place in non-hierarchical, multiple iterations and exchanges between the body and the world and happens by language and social means. Has your partner student seen something in your work that you did not see? Has discussing your manifesto made it clearer to you?

As part of your submitted poster, as well as the arrangement of 60 sketches as outlined above, you will include a concise written statement, setting out your architectural intentions in 250 - 350 words in full coherent sentences. The statement should draw on your critique of your previous years work, as well as the discussion of this work with a partner, and may reference this directly or indirectly.

The declaration should crystallize what architecture means to the student and how the student hopes to express themselves going into the future. The position will needs to be articulated as a **written statement**, which should be concise and meaningful.

This project requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment.

The poster should be A1 format. It will include a series of thumbnail drawings as well as a written piece. No new design work is required for this project. Instead, the requirement is to develop a poster, that thoughtfully examines the principles behind your own work, , and distils a thoughtful and considered position, which is to be articulated as a concise and meaningful drawn and written statement.

READING

Donald Schon : Reflective Practitioner,
Laurie Santos –The science of wellbeing – online course on Coursera

SUBMISSION & WORKSCHEDULE

11 October 2021

-9h00 – Project 4 Brief Lecture- Sandra Felix
-**11h00-17h00** - En-loge studio – MIRO & Ulwazi BBB– pin-up small sketches as you proceed in Miro –link to Miro board https://miro.com/app/board/o9J_lrF-NIQ=/?invite_link_id=509979046220
-**12h00 and 15h00**- PIN-UP mini-discussions– with a live feed on Ulwazi BBB throughout the studio day.
-**Part 1 - Reflective drawing of own work/precedents** - sketching your own precedent projects – 5 x 6 drawings = 30 drawings
-**Part 2 – Reflective drawing of other architects' work/ precedents** – sketching other architects projects that influenced your work OR to which you are drawn– 5 x 6 drawings = 30 drawings

14 October 2021

-**9h00** – Lecture Discussion on Third Year Exhibition Prep - Patrica Theron; Brigitta Stone-Johnson
-**10h00-17h00** - En-loge studio – MIRO – pin-up small sketches as you proceed
–**12h00 and 15h00**- PIN-UP mini-discussions– with a live feed on Ulwazi BBB throughout the studio day.
-**Part 1 - Reflective drawing of own work/precedents** - sketching your own precedent projects – 5 x 6 drawings = 30 drawings
-**Part 2 – Reflective drawing of other architects' work/ precedents** – sketching other architects projects that influenced your work OR to which you are drawn– 5 x 6 drawings = 30 drawings
-**Part 3 – Own narrative, ways of seeing, context and expressing your manifesto** – arrange or organise your 60 drawings in the organisational structure of your choice and discuss with your partner. Reflect on your own design methodology and conclude with a written statement to be pinned up as part of your poster

8 November 2021 –Studio – Narrative and Manifesto discussion
-**Part 3 – Own narrative, ways of seeing, context and expressing your manifesto** – arrange or organise your 60 drawings in the organisational structure of your choice and discuss with your partner. Reflect on your own design methodology and conclude with a written statement to be pinned up as part of your poster.

9 November 2021 – 10am Submission
-A1 Poster of Narrative – 10x 6 reflective drawings and manifesto
-Word document of Manifesto
-Portfolio for Exhibition – as per template

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE & PLANNING

COURSE CODE: ARPL 3005/A
COURSE NAME: Architectural Design and Theory 3 28 Februrary 2022

Project 01: An Architectural Manifesto: Reflections

'*Architecture is not really important, that what is important is to change this unjust world; so let us use architecture as one of our tools, since it is in actions, intentions and inventions where the differences that qualify us are found*'
Oscar Niemeyer

MANIFESTO

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an accumulation of all our spatial memories and a venturous projection of an ideal future.

This year students need to start the journey towards establishing their architectural identity.It requires of students to take a stand and seek the tools to express them in a coherent and legible manner.

The word manifesto or manifest has its origin in the dawn of modernity, and comes from the Italian *manifestare*, 'to make public' and from '*manifestus* ' *obvious*'.

The setting of a manifesto falls within the modern because it denotes and underscores our renunciation of the recent past, our favouring of a new beginning, a re-interpretation of historical perceptions, a process of 'rationalization', something processional, especially expressed through tensions and dynamics. We thus take a stand from a particular kind of time consciousness, which **defines the present, in its relation to our past**, which must be continuously recreated. In our current cultural condition the seemingly absolute necessity of innovation becomes a primary fact of life, work and thought.

Positioning one-self, taking a stand, setting a manifesto is inherently **utopian**. It is to name the ideal within our ability, the attempt to leap from the despondence of present conditions with the promise of a better tomorrow, they are both real and ideal, naïve and visionary, public yet deeply personal.

Manifesto: Reflections has three main aims:

- To develop **critical thinking**, and in particular to encourage and develop your ability to **self critique**; by tracing and reflecting on your own development over the previous two or more years.
- To define a **framework** or structure for the evolution of your **design approach** (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context
- To begin to equip you with the tools to better **articulate** your work, to engage in debate, and to defend your own work in a critical forum

Part 1: DRAWING ONE OF YOUR EARLIEST/ MOST NOTABLE SPATIAL MEMORIES

Each of us is an accumulation of spatial memories, both good and bad. Each of you is learning to be a spatial designer, and you need to understand where your perception of space comes from, accumulated layer upon layer from spaces you have lived in, experienced or studied, analysed.

Sit quietly, close your eyes, and reach into your past. What is an early spatial memory that haunts you? A space to which you are personally connected? A home, a hearth, a window, sitting on a doorstep….. the smell of your grandmothers house…. the feeling of grass, or cold tiles, or soft carpet under your feet… a soaring roof… or a space that sheltered you, ensconsed you like a womb.

Step into that memory. What feelings does it evoke, good or bad? Exeprience that space in your memory, re-live it…

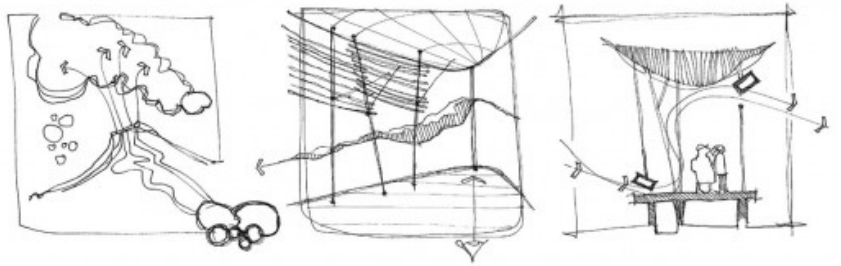
Now open your eyes and draw that spatial memory, evoke it through drawing, try to make your drawing feel the same way that spatial memory feels to you.

"*Thus we cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalized on the mode of our inner space.* "
Gaston Bachelard. The Poetics of Space. 1958, p12

Part 2: REFLECTIVE DRAWING OF OWN WORK 5 x 6

> "*Diagram is one of the most used words in contemporary architecture and urban design. It's almost a common understanding of using diagrams to explain the design concept. However, it is more than simply showing the audience to help them understand the idea. Diagramming is an element of design in itself.* "
>
> *Pyo Mi-young, 2011, Architectural Diagrams: Construction and Design Manual*

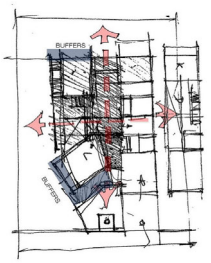
A Manifesto: Reflections On Own Work - is intended to allow you to start the process of compiling a portfolio by reflecting on the work you have produced over the previous years.

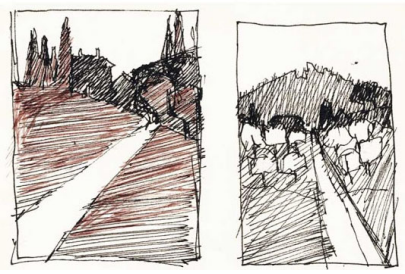
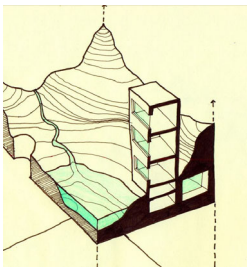


Diagrams of the Orokonui Ecosanctuary
Visitor Centre in New Zealand by Architectural Ecology

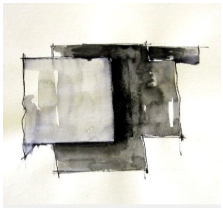
Through thumbnail drawings you will examine 5 of your projects from the last few years, distilling the essence of these projects into a series of diagrams. For each project you will do 6 diagrams – making 30 diagrams in all: 5 x 6. Each diagram should fit aproximately in a space of 5cm x 5cm or a post it note.

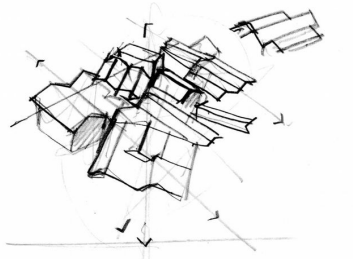
The diagrams should be **hand drawn in your sketchbook**, using pen, pencil, charcoal, or any medium you believe to be most appropriate. It is important that through these diagrams you **develop a graphic language that illustrates the core ideas** encapsulated within your design proposals, in a way that they can be easily understood by others, and enhance your own understanding of your work.



Diagrams range from **clear** which reflect systemic, schematic and logical thinking to **foggy** which reflect instinct and ambiguity.





A handmade diagram is like a pre-text, it is somehting that exists before language.

The diagrams will be in plan form, sections, elevations, perspectives and massing sketches. For each project the 6 diagrams should cover:

1. Project name & programme (a diagram in words and text) COMPULSORY

And **your choice of 5** of the following, making sure to include section, plan and three- dimensional sketches for each project:

2. Site – indicating any salient features, such as boundaries, slope, urban or natural context, access etc as relevant
3. Geometry – the underpinning geometrical organisational systems
4. Structure – indicating type of structural system, e.g columns, load bearing walls, etc
5. Enclosure – openness versus transparency, heaviness v. lightness
6. Circulation – entry, routes, and movement systems (including vertical circulation where relevant)
7. Massing – your design distilled into its basic forms (a 3D axo or other representation will be needed here)
8. Facade – the principal organisation of the primary elevation (in 2D elevation or 3D axo or other)
9. Spatial relationships – the relationship between primary and secondary spaces, served versus servant spaces (in plan); the relationship between solid and void, minor and major spaces (in 2D section or 3D axo or other)

Please remember the architectural convention of always having north at the top of the page – you may vary from this if it makes graphic sense, but please be consistent in your variation and indicate north on your site diagram.

Part 3: REFLECTIVE DRAWING OF OTHER ARCHITECTS' WORK 5 x 6

The act of designing in architecture is a complex process. Many designers, when probed for reasons to explain their actions, are either unable to answer questions, or provide explanations that are not true descriptions of their actions. Frequently the designer will answer that his or her reason for making a particular design decision is based on 'feeling' or 'intuition.' Under this model the design process assumes a 'mystical' aura. Architectural designers can create, yet are unable to say how they do so. Often that which can be explicitly discussed by the designer is the least significant part of his or her design process.

All architects are working with knowledge that is largely tacit. The **part 3 'Intent'** is to de-mystify the process of architectural design. This will be achieved by using the same principles applied to investigate the students own past work, to study and **investigate contemporary architects**. The students have to choose any 5 projects from acclaimed and published architects, that **have influenced the students' work in the last few years, or to whose work you are drawn.**

Students must choose at least 2x Wits Alumni architects' projects within the choice of 5x projects.

Once again 6x diagrams/drawings need to be produced for each project chosen – following the same list of categories as per Part 2. In all 5 x 6 = 30 diagrams/drawings will be produced of approximate 5x 5cm size or a post it note.

Part 4: UNARTICULATED GRID OF RAW DATA PRODUCED IN PARTS 1 TO 3



Form an unarticulated grid on Miro of 10 x 6 , and place all the 60x drawings (30 of own work and 30 of other architects work) produced in Part 2 and Part 3 in this unarticulated grid.

This is the first time you will see all the raw data together. Look carefully and reflect on the connections between projects.

At the same time reflect on the spatial memory you drew in Part 1 – do you see any of the thought/ expereince/ feelings of that memory in these drawings?

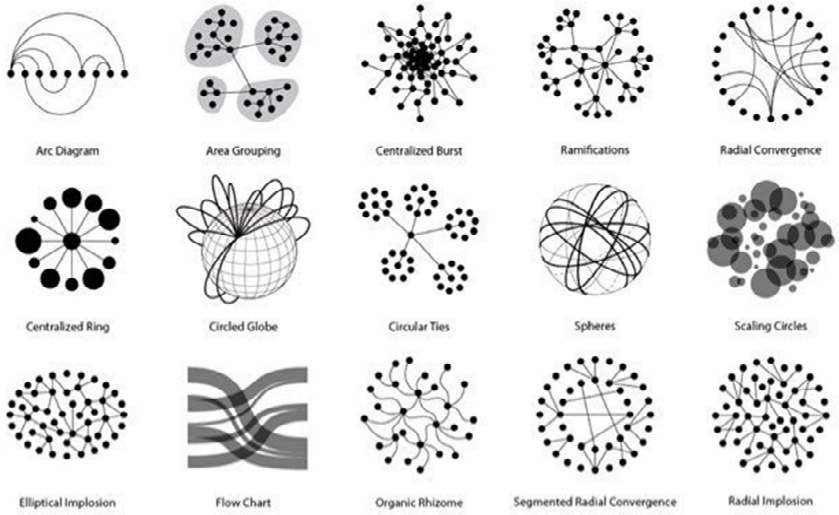
Part 5: OWN NARRATIVE - WAYS OF SEEING, CONTEXT & EXPRESSING YOUR MANIFESTO

The last part of the Manifesto : Reflections project, each student will **arrange or organise** their 60x sketches (30 of own work and 30 of other architects work) into an A1 poster that reflects the connections between projects and the design ethos that they have drawn out of reflecting on their work. In reflection and organising your ways of seeing each student must answer the following questions:

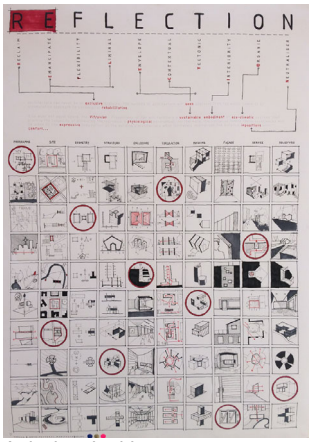
1. **What was the key idea that you explored in each project?**
2. **What is the dominant theme/ themes that run through all your projects?**
3. **What do you instinctively relook at no matter what the design brief?**
4. **How does this relate to your personal spatial memory?**
5. **Have you found an institutional influence in your work? Does your work express similar fascinations as the work of other Wits Alumni?**

Discuss the answers to the above questions with one other student within your allocated tutor group. Each student should seek to see in the other students work these themes, both in the porjects as well as in the design of the poster, and draw out any unseen/ undiscussed themes in each others work.

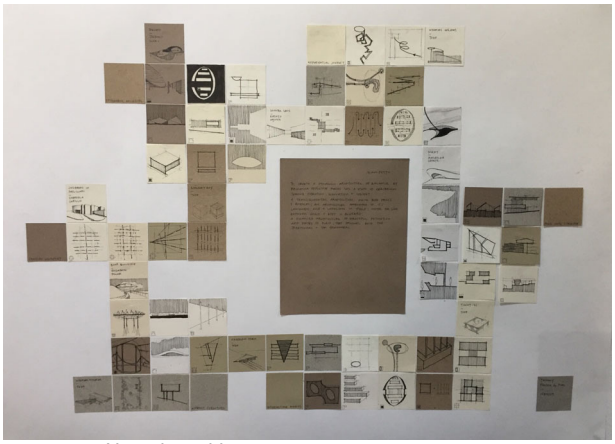
Organisation, or mapping patterns of information can be done in a number of ways, and each student's mapping should reflect the design methodology or process identified:



Manuel Lima – Visual complexity, Mapping Patterns of Information



Articulated grid –



Narrative grid –

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

This reflective practice model is one where there are different types of reflection at play:

- **Reflecting on** your body of work is a type of retrospective reflection- which you have begun to do in the Intent Part 1 and Part 2 exercise
- **Reflecting in** the act of making/ designing- where designing and reflecting are simultaneous- Intent Part 3 exercise
- **Reflecting for** next works – Intent Part 3 – discussing and writing your manifesto
- **Social reflection** where learning takes place in non-hierarchical, multiple iterations and exchanges between the body and the world and happens by language and social means. Has your partner student seen something in your work that you did not see? Has discussing your manifesto made it clearer to you?

As part of your submitted poster, as well as the arrangement of 60 sketches as outlined above, you will include a concise written statement, setting out your architectural intentions in 250 - 350 words in full coherent sentences. The statement should draw on your critique of your previous years work, your personal spatial memory, the institutional influence as well as the discussion of this work with a partner, and may reference this directly or indirectly.

The declaration should crystallize what architecture means to the student and how the student hopes to express themselves going into the future. The position will needs to be articulated as a **written statement**, which should be concise and meaningful. This project requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment.

The poster should be A1 format. It will include a series of thumbnail drawings as well as a written piece. No new design work is required for this project. Instead, the requirement is to develop a poster, that thoughtfully examines the principles behind your own work, , and distils a thoughtful and considered position, which is to be articulated as a concise and meaningful drawn and written statement.

READINGS

Donald Schon : Reflective Practitioner,
Laurie Santos :The science of wellbeing – online course on Coursera
Gaston Bachelard: The poetics of space

SUBMISSION & WORKSCHEDULE

28 February 2022

-10h00–ONLINE on Ulwazi – Project 1 Brief Lecture- Sandra Felix

-**13h00-17h00** -**ON CAMPUS** - En-loge studio - Part 1; 2 & 3 – bring some reference material of your chosen projects– meet outside John Moffat

-Part 2: Reflective drawing of own work/precedents - sketching your own precedent projects – 5 x 6 drawings = 30 drawings –

-Part 3: Reflective drawing of other architects' work/ precedents – sketching other architects projects that influenced your work OR to which you are drawn– 5 x 6 drawings = 30 drawings

3 March 2022

-**9h00** – **ONLINE on Ulwazi** – Project 1 Lecture – Sandra Felix

-**10h00-17h00** - En-loge studio – MIRO – pin-up small sketches as you proceed MIRO & Ulwazi BBB– pin-up small sketches as you proceed in Miro –link to Miro board

–**12h00 and 15h00**- PIN-UP mini-discussions– with a live feed on Ulwazi BBB throughout the studio day.

-Part 4: Unarticulated grid of raw data produced in parts 1 to 3

-Part 5: Own narrative, ways of seeing, context and expressing your manifesto – arrange or organise your 60 drawings in the organisational structure of your choice and discuss with your partner. Reflect on your own design methodology and conclude with a written statement to be pinned up as part of your poster

7 March 2022– Narrative and Manifesto submission and presentation - **ONLINE on Ulwazi and Miro**
Submission: A1 Poster of Narrative – 10x 6 reflective drawings and written manifesto

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE & PLANNING

COURSE CODE: ARPL 3005/A
COURSE NAME: Architectural Design and Theory 3 23 February 2023

Project 01: An Architectural Manifesto: Reflections

'Architecture is not really important, that what is important is to change this unjust world; so let us use architecture as one of our tools, since it is in actions, intentions and inventions where the differences that qualify us are found'
Oscar Niemeyer

MANIFESTO

Architecture is more than a representation of function, or a need for shelter. It is the manifestation of the aspirations of the self, the community, and our surrounding context in the broadest sense. It is a representation of our self image in space, an accumulation of all our spatial memories and a venturous projection of an ideal future.

This year students need to start the **journey towards establishing their architectural identity**.It requires of students to take a stand and seek the tools to express them in a coherent and legible manner.

The word manifesto or manifest has its origin in the dawn of modernity, and comes from the Italian *manifestare*, 'to make public' and from **'*manifestus* ' *obvious*'**.

The setting of a manifesto falls within the modern because it denotes and underscores our renunciation of the recent past, our favouring of a new beginning, a re-interpretation of historical perceptions, a process of 'rationalization', something processional, especially expressed through tensions and dynamics. We thus take a stand from a particular kind of time consciousness, which **defines the present, in its relation to our past**, which must be continuously recreated. In our current cultural condition the seemingly absolute necessity of innovation becomes a primary fact of life, work and thought.

Positioning one-self, taking a stand, setting a manifesto is inherently **utopian**. It is to name the ideal within our ability, the attempt to leap from the despondence of present conditions with the promise of a better tomorrow, they are both real and ideal, naïve and visionary, public yet deeply personal.

Manifesto: Reflections has three main aims:

- To develop **critical thinking**, and in particular to encourage and develop your ability to **self critique**; by tracing and reflecting on your own development over the previous two or more years.
- To define a **framework** or structure for the evolution of your **design approach** (the essence of a design methodology); through developing a theoretical under-pinning to your work and expanding your understanding of your own work and its context
- To begin to equip you with the tools to better **articulate** your work, to engage in debate, and to defend your own work in a critical forum

Part 1: DRAWING ONE OF YOUR EARLIEST/ MOST NOTABLE SPATIAL MEMORIES

Each of us is an accumulation of spatial memories, both good and bad. Each of you is learning to be a spatial designer, and you need to understand where your perception of space comes from, accumulated layer upon layer from spaces you have lived in, experienced or studied, analysed.

Sit quietly, close your eyes, and reach into your past. What is an early spatial memory that haunts you? A space to which you are personally connected? A home, a hearth, a window, sitting on a doorstep….. the smell of your grandmothers house…. the feeling of grass, or cold tiles, or soft carpet under your feet… a soaring roof… or a space that sheltered you, ensconsed you like a womb.

Step into that memory. What feelings does it evoke, good or bad? Exeprience that space in your memory, re-live it…

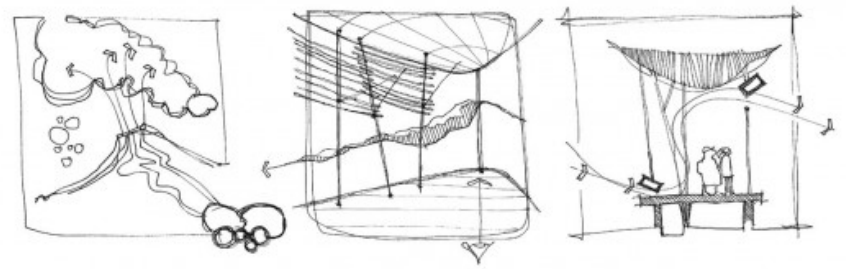
Now open your eyes and draw that spatial memory, evoke it through drawing, try to make your drawing feel the same way that spatial memory feels to you.

"*Thus we cover the universe with drawings we have lived. These drawings need not be exact. They need only to be tonalized on the mode of our inner space.*"
Gaston Bachelard. The Poetics of Space. 1958, p12

Part 2: REFLECTIVE DRAWING OF OWN WORK 5 x 6

> "*Diagram is one of the most used words in contemporary architecture and urban design. It's almost a common understanding of using diagrams to explain the design concept. However, it is more than simply showing the audience to help them understand the idea. Diagramming is an element of design in itself.* "
>
> *Pyo Mi-young, 2011, Architectural Diagrams: Construction and Design Manual*

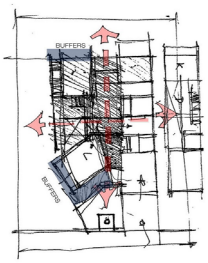
A Manifesto: Reflections On Own Work - is intended to allow you to start the process of compiling a portfolio by reflecting on the work you have produced over the previous years.

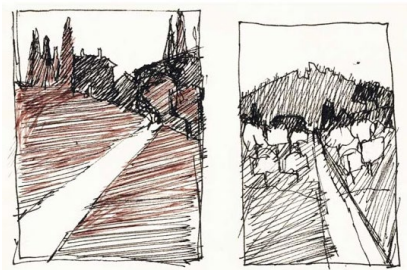
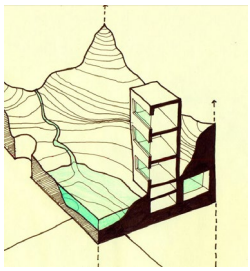


Diagrams of the Orokonui Ecosanctuary
Visitor Centre in New Zealand by Architectural Ecology

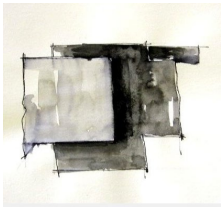
Through thumbnail drawings you will examine 5 of your projects from the last few years, distilling the essence of these projects into a series of diagrams. For each project you will do 6 diagrams – making 30 diagrams in all: 5 x 6. Each diagram should fit aproximately in a space of 5cm x 5cm or a post it note.

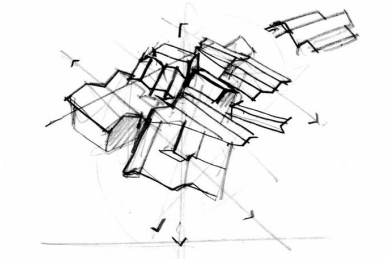
The diagrams should be **hand drawn in your sketchbook**, using pen, pencil, charcoal, or any medium you believe to be most appropriate. It is important that through these diagrams you **develop a graphic language that illustrates the core ideas** encapsulated within your design proposals, in a way that they can be easily understood by others, and enhance your own understanding of your work.



Diagrams range from **clear** which reflect systemic, schematic and logical thinking to **foggy** which reflect instinct and ambiguity.





A handmade diagram is like a pre-text, it is somehting that exists before language.

The diagrams will be in plan form, sections, elevations, perspectives and massing sketches. **For each project the 6 diagrams should cover:**

1. Project name & programme (a diagram in words and text) COMPULSORY

And **your choice of 5** of the following, making sure to include section, plan and three- dimensional sketches for each project:

2. Site – indicating any salient features, such as boundaries, slope, urban or natural context, access etc as relevant
3. Geometry – the underpinning geometrical organisational systems
4. Structure – indicating type of structural system, e.g columns, load bearing walls, etc
5. Enclosure – openness versus transparency, heaviness v. lightness
6. Circulation – entry, routes, and movement systems (including vertical circulation where relevant)
7. Massing – your design distilled into its basic forms (a 3D axo or other representation will be needed here)
8. Facade – the principal organisation of the primary elevation (in 2D elevation or 3D axo or other)
9. Spatial relationships – the relationship between primary and secondary spaces, served versus servant spaces (in plan); the relationship between solid and void, minor and major spaces (in 2D section or 3D axo or other)

Please remember the architectural convention of always having north at the top of the page – you may vary from this if it makes graphic sense, but please be consistent in your variation and indicate north on your site diagram.

Part 3: REFLECTIVE DRAWING OF OTHER ARCHITECTS' WORK 5 x 6

The act of designing in architecture is a complex process. Many designers, when probed for reasons to explain their actions, are either unable to answer questions, or provide explanations that are not true descriptions of their actions. Frequently the designer will answer that his or her reason for making a particular design decision is based on 'feeling' or 'intuition.' Under this model the design process assumes a 'mystical' aura. Architectural designers can create, yet are unable to say how they do so. Often that which can be explicitly discussed by the designer is the least significant part of his or her design process.

All architects are working with knowledge that is largely tacit. The **part 3 'Intent'** is to de-mystify the process of architectural design. This will be achieved by using the same principles applied to investigate the students own past work, to study and **investigate contemporary architects**. The students have to choose any 5 projects from acclaimed and published architects, that **have influenced the students' work in the last few years, or to whose work you are drawn.**

Students must choose at least 2x Wits Alumni architects' projects within the choice of 5x projects.

Once again 6x diagrams/drawings need to be produced for each project chosen – following the same list of categories as per Part 2. In all 5 x 6 = 30 diagrams/drawings will be produced of approximate 5x 5cm size or a post it note.

Part 4: UNARTICULATED GRID OF RAW DATA PRODUCED IN PARTS 1 TO 3



Form an unarticulated grid on Miro of 10 x 6 , and place all the 60x drawings (30 of own work and 30 of other architects work) produced in Part 2 and Part 3 in this unarticulated grid.

This is the first time you will see all the raw data together. Look carefully and reflect on the connections between projects.

At the same time reflect on the spatial memory you drew in Part 1 – do you see any of the thought/ expereince/ feelings of that memory in these drawings?

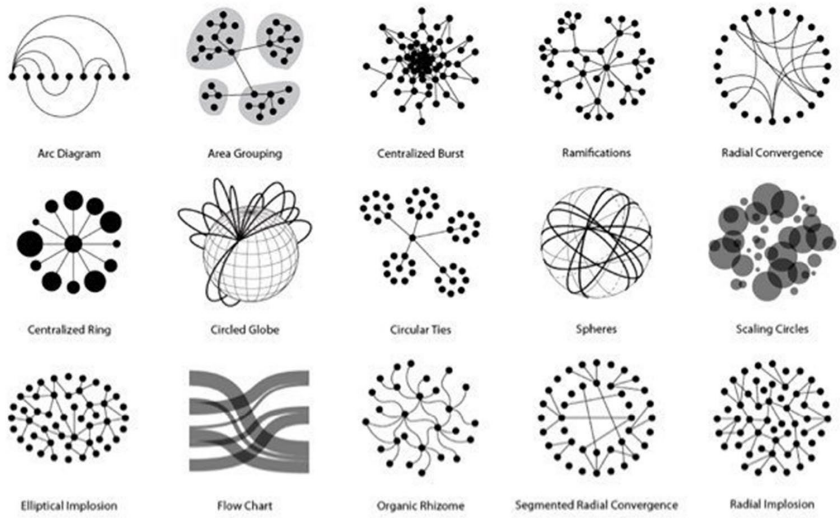
Part 5: OWN NARRATIVE - WAYS OF SEEING, CONTEXT & EXPRESSING YOUR MANIFESTO

The last part of the Manifesto : Reflections project, each student will **arrange or organise** their 60x sketches (30 of own work and 30 of other architects work) into an A1 poster that reflects the connections between projects and the design ethos that they have drawn out of reflecting on their work. In reflection and organising your ways of seeing each student must answer the following questions:

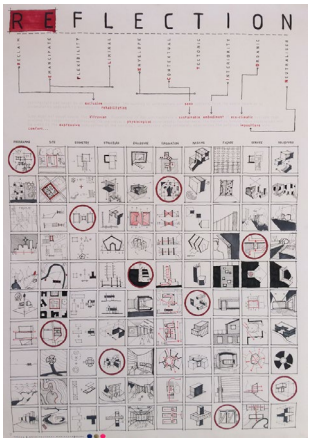
1. **What was the key idea that you explored in each project?**
2. **What is the dominant theme/ themes that run through all your projects?**
3. **What do you instinctively relook at no matter what the design brief?**
4. **How does this relate to your personal spatial memory?**
5. **Have you found an institutional influence in your work? Does your work express similar fascinations as the work of other Wits Alumni?**

Discuss the answers to the above questions with one other student within your allocated tutor group. Each student should seek to see in the other students work these themes, both in the porjects as well as in the design of the poster, and draw out any unseen/ undiscussed themes in each others work.

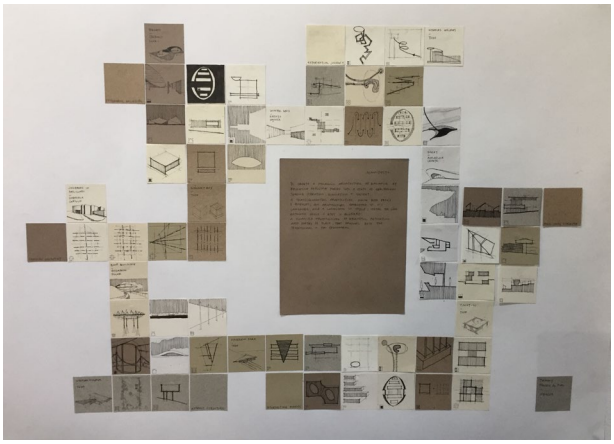
Organisation, or mapping patterns of information can be done in a number of ways, and each student's mapping should reflect the design methodology or process identified:



Manuel Lima – Visual complexity, Mapping Patterns of Information



Articulated grid



Narrative grid

Through this process, you will need to defend and clarify your beliefs and attitudes toward the production of architectural space; its purpose, language and the limits and possibilities of design. Later in the year you will examine how your thinking may have shifted, been reinforced or simply refined and enriched.

This reflective practice model is one where there are different types of reflection at play:

- **Reflecting on** your body of work is a type of retrospective reflection- which you have begun to do in the Intent Part 1 and Part 2 exercise
- **Reflecting in** the act of making/ designing- where designing and reflecting are simultaneous- Intent Part 3 exercise
- **Reflecting for** next works – Intent Part 3 – discussing and writing your manifesto
- **Social reflection** where learning takes place in non-hierarchical, multiple iterations and exchanges between the body and the world and happens by language and social means. Has your partner student seen something in your work that you did not see? Has discussing your manifesto made it clearer to you?

As part of your submitted poster, as well as the arrangement of 60 sketches as outlined above, you will include a concise written statement, setting out your architectural intentions in 250 - 350 words in full coherent sentences. The statement should draw on your critique of your previous years work, your personal spatial memory, the institutional influence as well as the discussion of this work with a partner, and may reference this directly or indirectly.

The declaration should crystallize what architecture means to the student and how the student hopes to express themselves going into the future. The position will needs to be articulated as a **written statement**, which should be concise and meaningful. This project requires the student to question his or her attitude towards the production of architectural space. It demands their understanding of the future of architecture, taking a stand or occupying a position towards the built environment.

The poster should be A1 format. It will include a series of thumbnail drawings as well as a written piece. No new design work is required for this project. Instead, the requirement is to develop a poster, that thoughtfully examines the principles behind your own work, , and distils a thoughtful and considered position, which is to be articulated as a concise and meaningful drawn and written statement.

READINGS

Donald Schon : Reflective Practitioner
Laurie Santos :The science of wellbeing – online course on Coursera
Gaston Bachelard: The poetics of space

SUBMISSION & WORKSCHEDULE

23 February 2023

-10h00 – Project 1 Brief Lecture- Sandra Felix
-**11h30-17h00** - En-loge studio - Part 1; 2 & 3 –meet at amphitheatre – bring your sketchbook and pens/ pencils

-Part 1: Drawing one of your earliest/ most notable spatial memories – draw in your sketchbook

-Part 2: Reflective drawing of own work/precedents - sketching your own precedent projects from memory – 5 x 6 drawings = 30 drawings

-Part 3: Reflective drawing of other architects' work/ precedents – sketching other architects' projects that influenced your work OR to which you are drawn– 5 x 6 drawings = 30 drawings

27 February 2023

-**10h00** – Project 1 Lecture – Sandra Felix
-**11h30-17h00** - En-loge studio– pin-up small sketches as you proceed in foyer John Moffat
-**15h00**- PIN-UP mini-discussion

-Part 4: Unarticulated grid of raw data produced in parts 1 to 3

-Part 5: Own narrative, ways of seeing, context and expressing your manifesto – arrange or organise your 60 drawings in the organisational structure of your choice and discuss with your partner. Reflect on your own design methodology and conclude with a written statement to be pinned up as part of your poster

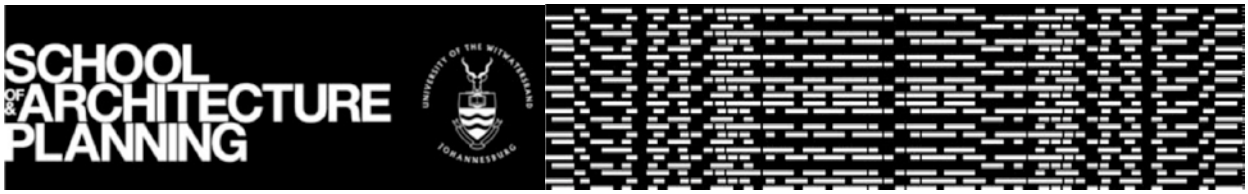
2 March 2023

–11h00 -**FINAL SUBMISSION PIN-UP**– John Moffat foyer

Narrative and Manifesto submission and presentation – each student has 3 minutes to answer the following:

1. What is my manifesto? What am I interested in as a designer?
2. Where does that fascination/ interest come from?
3. Which projects of mine and of other architects is that fascination explored in?

Submission: A1 Poster of Narrative – 10x 6 reflective drawings and written manifesto



UNIVERSITY OF THE WITWATERSRAND

COURSE CODE: ARPL 3005- 2019 COURSE NAME: Architectural Design and Theory 3

DESIGN STUDIO PROJECT 05: MANIFESTO REVISITED

1.0 Introduction

At the beginning of the year, you were asked to write an architectural manifesto. Since then you have worked hard on three complex buildings and been exposed to a number of exemplary architectural precedents. You have also engaged with a number of manifestoes in your history course.

2.0 The task

You are now being asked to refine/revise/rewrite your manifesto in the light of what you've learnt during the year with reference to five important architectural principles:

- Legibility
- Contextual sensitivity
- Sustainability
- Accessibility
- The poetics of space.

Illustrate each principle with reference to both an inspiring precedent and one of the buildings you've designed in the course of the year.

The output is a 1500 word essay with 10 analytical diagrams woven into the text. The essay should conclude with a revised manifesto, foregrounding architectural principles that are important to you, and demonstrating your attitude to design.

3.0 Submission

Projects are to be submitted as PDFs on Sakai by 10h00 on Thursday 3 October 2019. Turnitin reports need to be included.

4.0 Learning outcomes

On completion of this project students will demonstrate that they are capable of

- Reflecting critically on their own work, and on the work of another architect
- Demonstrating an understanding of key architectural concepts including legibility, contextual sensitivity, sustainability, accessibility, and space-making
- Building a coherent written argument, supported by appropriate analytical diagrams
- Fulfilling all the requirements of academic writing including correct referencing, correct spelling and correct grammar.

Reading list

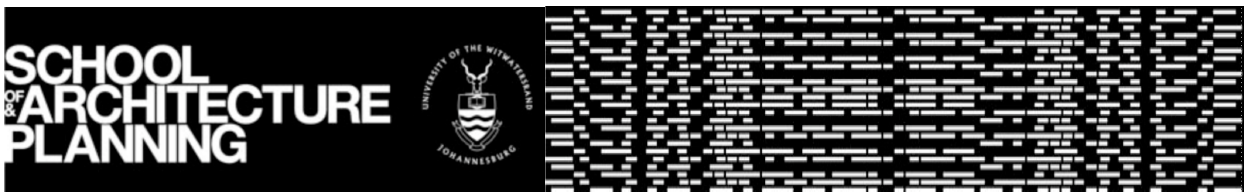
Kanes-Wiseman, L (1981) Women's environmental rights: a manifesto. Moorewomenartists.org

Koolhaas, R (1978) Delirious New York

Le Corbusier (1923) Towards a new architecture

Chapman, T (2018) Hustles

Various manifestoes on iconeye.com (including those of BIG and Teddy Cruz)



UNIVERSITY OF THE WITWATERSRAND

COURSE CODE: ARPL 3005 - 2020 **COURSE NAME**: Architectural Design and Theory 3

DESIGN STUDIO PROJECT 05: MANIFESTO REVISITED

1.0 Introduction

At the beginning of the year, you were introduced to the drivers that have inspired architects in their work:

Power/Difference

Embodiment/Phenomenology

Nature/Ecology/Sustainability

Science/Technology/Virtuality

History/Memory/Tradition

Aesthetics/ Pleasure/Excess

City/Metro/Territory

You were then asked to write an architectural manifesto. Since then you have worked hard on three complex projects and been exposed to a number of exemplary architectural precedents.

2.0 The task

You are now being asked to refine/revise/rewrite your manifesto in the light of what you've learnt during the year with reference to five important architectural principles:

- Legibility
- Contextual sensitivity
- Sustainability
- Accessibility
- The poetics of space.

Illustrate each principle with reference to both an inspiring precedent and one of the buildings you've designed in the course of the year.

The output is a 1500-word essay, with 10 analytical diagrams woven into the text. The essay should be prefaced by a 200-word abstract/revised manifesto, foregrounding architectural principles that are important to you, and demonstrating your attitude to design. Note that although this abstract/revised manifesto appears at the start of your essay, you will probably only be able to write it at the end of your investigative process.

3.0 Submission

Projects are to be submitted as PDFs on Sakai by on Sakai by 13h00 on Monday 5 October 2020

4.0 Learning outcomes

On completion of this project students will demonstrate that they are capable of

- Reflecting critically on their own work, and on the work of another architect
- Demonstrating an understanding of key architectural concepts including legibility, contextual sensitivity, sustainability, accessibility, and space-making
- Building a coherent written argument, supported by appropriate analytical diagrams
- Fulfilling all the requirements of academic writing including correct referencing, correct spelling and correct grammar.

Reading list

Kanes-Wiseman, L (1981) Women's environmental rights: a manifesto. Moorewomenartists.org

Koolhaas, R (1978) Delirious New York

Le Corbusier (1923) Towards a new architecture

Various manifestoes on iconeye.com (including those of BIG and Teddy Cruz)

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF ARCHITECTURE & PLANNING

COURSE CODE: ARPL 3005 - 2022 **COURSE NAME**: Architectural Design and Theory 3

DESIGN STUDIO PROJECT 05: MANIFESTO REVISITED

1.0 Introduction

At the beginning of the year, you were introduced to the drivers that have inspired architects in their work:

- Power/Difference
- Embodiment/Phenomenology
- Nature/Ecology/Sustainability
- Science/Technology/Virtuality
- History/Memory/Tradition
- Aesthetics/ Pleasure/Excess
- City/Metro/Territory

You were then asked to write an architectural manifesto in relation to the personal spatial memory and narrative and situate yourself within one of these above paradigms. Since then you have worked hard on three complex projects and been exposed to a number of exemplary architectural precedents.

2.0 The task

You are now being asked the following questions:

- Has your new-found knowledge about yourself and your design methods unearthed through the Manifesto project, had an impact on how you approached design this year, and if so how?
- How has your **manifesto issue been explored/ expressed in your projects** in order to contribute to the legibility; contextual sensitivity; sustainability; accessibility and the poetics of space of each project. Illustrate each principle with reference to both an inspiring precedent and one of the buildings you've designed in the course of the year.
- Identify one category driver, as per above list, which inspires your manifesto and work, as this will be the category where your portfolio will be included in the digital portfolio and exhibited

The output is

1. 1000-1500 word essay, with a minimum of 12 analytical diagrams woven into the text. The essay should be prefaced by :
    a. 100-200-word abstract – summarising the essay foregrounding architectural principles that are important to you and are expressed in the projects
    b. 50-70 word personal revised manifesto demonstrating your attitude to design.

    Note that although the abstract & /revised manifesto appears at the start of your essay, you will probably only be able to resolve it at the end of your investigative process.
2. Two page spread - for the digital portfolio/ exhibition- converting the essay along with additional project images and drawings AND a marketing digital post – Instagram, Tik-tok etc… added to the two page spread with a QR code

3.0 Submission

1. Essay & abstract: SUBMISSION: 11 am on 17 October 2022 (counts 4% to final course mark)
2. Two page spread for digital portfolio/ exhibition AND a marketing digital post: SUBMISSION: 11 am on 4 November 2022 (revisions might be requested)

4.0 Learning outcomes

On completion of this project students will demonstrate that they are capable of

- Reflecting critically on their own work, and on the work of other architects
- Demonstrating an understanding of key architectural concepts including legibility, contextual sensitivity, sustainability, accessibility, and space-making, and how these are explored through the lens of a personal architectural manifesto/narrative
- Building a coherent written argument, supported by appropriate analytical diagrams
- Fulfilling all the requirements of academic writing including correct referencing, correct spelling and correct grammar.

Reading list

Kanes-Wiseman, L (1981) Women's environmental rights: a manifesto. Moorewomenartists.org
Koolhaas, R (1978) Delirious New York
Le Corbusier (1923) Towards a new architecture
Various manifestoes on iconeye.com (including those of BIG and Teddy Cruz)

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE & PLANNING

ARPL3005/A | **2023**
Architectural | **Theory and Design III**

Project 5 | ***Manifesto Revisited***

1.0 Introduction

At the beginning of the year, you were introduced to the drivers that have inspired architects in their work:

- Power/Difference
- Embodiment/Phenomenology
- Nature/Ecology/Sustainability
- Science/Technology/Virtuality
- History/Memory/Tradition
- Aesthetics/ Pleasure/Excess
- City/Metro/Territory

You were then asked to write an architectural manifesto in relation to the personal spatial memory and narrative and situate yourself within one of these above paradigms. Since then you have worked hard on two complex projects and been exposed to a number of exemplary architectural precedents.

2.0 The task

You are now being asked the following questions:

- ***Conscious practice***: Has your new-found knowledge about yourself and your design methods unearthed through the Manifesto project, had an impact on how you approached design this year, and if so how? How has your manifesto issue been explored/ expressed in your projects in order to contribute to the legibility; contextual sensitivity; sustainability; accessibility and the poetics of space of each project. Illustrate each principle with reference to both an inspiring precedent and one of the buildings you've designed in the course of the year.

- ***Critical practice:*** How has your design practice become more critical? Discuss how your projects have contributed to a more critical analysis or new strategies that challenge the current socio-economic-political context with reference to your projects and precedents.

- ***Careful practice:*** How has your design practice become more careful, with yourself, with users, with the environment? Discuss how you have made efforts to practice design in a more careful manner through addressing self-care; designing for current and future users; and being careful in your choices in terms of heritage/ decarbonization; sustainability – energy, water , materiality and labour.in your projects

- Identify one category driver, as per above list, which inspires your manifesto and work, as this will be the category where your portfolio will be included in the digital portfolio and exhibition

The output is

1. 1000-1500 word essay, with a minimum of 12 analytical diagrams woven into the text. The essay structure should aim for approximately 200 word introduction; 300 words for each issue outlined above, and a 100-200 word conclusion.
2. The essay should be prefaced by :
    a. Beginning of essay – a 100-200-word abstract – summarizing the essay foregrounding how your practice has become more conscious; critical; careful and the architectural principles that are important to you and are expressed in the projects.
    b. End of the essay - 50-70 word personal revised manifesto demonstrating your attitude to design. This will be used in your exhibition poster.

    Note that although the abstract & /revised manifesto appears at the start of your essay, you will probably only be able to resolve it at the end of your investigative process.
3. The essay needs to be referenced as per academic standards using either Harvard or Chicago style referencing

3.0 Submission

1. Essay & abstract & revised manifesto & category: SUBMISSION: 23h55 on 19 October 2023 (counts 6% to final course mark)

4.0 Learning outcomes

On completion of this project students will demonstrate that they are capable of

- Reflecting critically on their own work, and on the work of other architects
- Demonstrating an understanding of key architectural concepts including legibility, contextual sensitivity, sustainability, accessibility, and space-making, and how these are explored through the lens of a personal architectural manifesto/narrative
- Building a coherent written argument, supported by appropriate analytical diagrams
- Fulfilling all the requirements of academic writing including correct referencing, correct spelling and correct grammar.

Reading list

Kanes-Wiseman, L (1981) Women's environmental rights: a manifesto. Moorewomenartists.org
Koolhaas, R (1978) Delirious New York
Le Corbusier (1923) Towards a new architecture
Various manifestoes on iconeye.com (including those of BIG and Teddy Cruz)

APPENDIX B : T-SEL SURVEYS

B.1 T-SEL surveys questionnaire 2023 & 2024

B.2 WCSD Social and Emotional competency questions item banks and information sheet

B.3 Statistician letter; Statistical Analysis Summary Table

Transformative Social-Emotional Learning Survey

The survey was a Likert scale – VERY EASY; EASY; DIFFICULT; VERY DIFFICULT. The questions in the survey were divided into social emotional competency categories as per below.

Quiz instructions to students:

"In order to successfully practice architecture you need a combination of design and technical skills you have learnt and practiced in your degree, as well as soft skills.

This survey measures those soft skills, the social and emotional competencies. First, you will take the assessment to measure your self-awareness of your skills.

Secondly, a friend in the class will assess you by completing the same test. The comparison of your test with your friend's assessment of you will give you a good picture of your actual competency level in each category.

Lastly at the end of the year you can take the assessment again to see if there have been improvements." (T-SEL Survey 2023)

Self-awareness: Self concept
Knowing when I can't control something
Knowing when I am wrong about something
Knowing how to get better at things that are hard for me to do at university
Knowing what my strengths are
Self-awareness: Emotion knowledge
Knowing when my feeling are making it hard for me to focus
Knowing the emotions I feel
Knowing ways to make myself feel better when I'm sad
Knowing what my body does when I am nervous
Knowing when my mood affects how I treat others
Knowing ways I calm myself down
Self-management: Emotion regulation
Working on things even when I don't like them
Getting through something even when I feel frustrated
Staying calm when I feel stressed
Being patient even when I am really excited

Self-management: University work
Doing my university work even when I do not feel like it
Working on assignments even when they are hard
Staying focussed in lectures or studios even when there are distractions
Being prepared for project presentations
Planning ahead so I can turn a project in on time
Finishing my university work without reminders
Self-management: Goal management
Thinking through the steps it will take to reach my goal
Reaching goals that I set for myself
Setting goals for myself
Finishing tasks even if they are hard for me
Social awareness
Knowing how my actions impact other students
Knowing how to get help when I'm having trouble with another student
Knowing when someone needs help
Knowing what people may be feeling by the look on their face
Learning from people with different opinions to me
Relationship skills
Respecting a classmate's opinions during a disagreement
Getting along with my classmates
Sharing what I am feeling with others
Talking to a lecturer or counsellor when I have problems at university
Being welcoming to someone I don't usually eat lunch or hangout with
Getting along with my tutors or lecturers
Responsible decision-making
Thinking about what might happen before making a decision
Thinking of different ways to solve a problem
Saying no to a friend who wants to break the rules
Helping make my university a better place
Knowing what is right and wrong

January 2018

FREQUENTLY ASKED QUESTIONS ABOUT THE WCSD SOCIAL AND EMOTIONAL COMPETENCY ASSESSMENT (WCSD-SECA)

Background

This document provides responses to frequently asked questions about the WCSD-SECA instruments that are designed to assess social and emotional competencies (SECs) in grades 5-12. All instruments are free and open-source.

If you have additional questions about this assessment and related research, please contact Laura Davidson, Washoe County School District Director of Research and Evaluation at 775-348-3850 or ldavidson@washoeschools.net.

Frequently Asked Questions

1. **What is the WCSD Social and Emotional Competency Assessment?**

The WCSD SECA is a set of instruments developed through a collaboration between Washoe County School District, the Collaborative for Academic and Social Emotional Learning (CASEL), and the University of Illinois at Chicago through an Institute of Education Sciences Research-Practitioner Partnership grant. The project resulted in the development of two instruments and a bank of items aligned to the CASEL 5 clusters and WCSD SEL standards:

- **Long-Form Assessment**: 40-item instrument measuring eight domains of social and emotional competence: 1) self-awareness of self-concept, 2) self-awareness of emotions, 3) self-management of emotions, 4) self-management of goals, 5) self-management of school work, 6) relationship skills, 7) social awareness, and 8) responsible decision-making.
- **Short-Form Assessment**: 17-item, short-form assessment of global social and emotional competence
- **Item Bank**: 138 items assessing eight domains. Useful for training and item replacement.

2. Can my organization/district/school use these instruments?

Yes! All three instruments are free and open-source. You and your organization can use and adapt the instruments any way you would like. You do not need to request permission to use these instruments, but we appreciate hearing about how organizations intend to use the instruments so we can expand our knowledge base and connect users together. You can contact us at ldavidson@washoeschools.net.

3. How were these instruments developed?

The three instruments were developed through 4-year, iterative process that included the following steps:

- Mapping of items against developmental pacing guides to ensure developmental-appropriateness.
- Four years of survey administration to students in grades 5-9 and 11 in a large, urban school district.
- Rasch modeling techniques to determine how well items assessed students across a range of social and emotional competencies.
- Focus group testing of items with 75+ students in elementary, middle, and high school to improve item readability and comprehension, promote better survey engagement, and develop items that assessed high levels of social and emotional competencies.
- Latent class analyses to better understand characteristics of the different "profiles" of students who rate themselves highly across all social and emotional competency items.
- Multi-level regression modelling to assess relationship of assessments with academic and behavioral outcomes.

4. Are the SECA instruments valid and reliable?

Current Standards for Educational and Psychological Testing call for an approach to measure development that views reliability and validity as fluid properties that vary across populations, locations, and time, rather than as fixed traits of instruments (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014). In that vein, the Standards encourage test adopters to weigh reliability and validity evidence with the intended use of the measure in mind. For example, in WCSD, our primary intended use for the instruments was to assess a broad range of student social and emotional ability levels using a measure that aligned closely with our local SEL standards and the CASEL framework so that early instructional support could occur. With this end in mind, our reliability and validity analyses focused on iteratively improving the item bank, ensuring that items covered the full range of each construct, and allowed selection of item subsets to be used at particular grade levels and in repeated administrations using an Item Response Theory approach.

Key findings about the psychometric properties of these instruments to-date include:

- Items assess a broad range of student ability levels, with limited evidence of ceiling effect or floor effects on either the long- or short-form instruments.
- Across two survey years, items still primarily target students at low-to-average ability levels.
- Only a small number of items show differential item functioning by grade level and student gender/race-ethnicity (but not English language learner status).
- When statistically controlling for factors known to impact student outcomes, including demographics (grade level, gender, Free and Reduced Price Lunch status, participation in English Language Services and Special Education Services), and the previous year's standardized reading and math test scores, GPA, suspension rate, and attendance rate, multi-level regression models using the short-form measure indicate that students with higher SECs had, compared to students with lower SECs had:
    - significantly higher reading and math standardized test scores (8 point difference)

- weighted GPAs in high school
- lower rates of suspension
- lower absenteeism

5. How should I use these instruments?

Feel free to use these instruments in any way you see fit. To determine if the WCSD-SECA is an appropriate assessment for your needs, consider reading the American Institute of Research's article *Are You Ready to Assess Social and Emotional Development*. In WCSD, we have used the instruments primarily for mass administration to students for low-stakes decision-making, discussion, and trend monitoring. This includes providing schools with school-level reports to help them monitor data trends, debriefing the data with students, families, staff, and community members, and studying the relationship between the measures and students' academic and behavioral outcomes. These are the primary

- **Item bank**: The 138-item bank offers extensive examples of indicators aligned to the five CASEL SEC clusters and has been useful for training purposes and cross-walking to learning standards. These items can help educators understand what some social and emotional competencies might "look like" in a school setting.
- **Long-form instrument**: Currently in use as part of WCSD's annual student climate survey administered to roughly 24,000 students in grades 5-9 and 11. Assesses 8 subdomains of social and emotional competence (see instrument below) to allow for more detailed analyses of specific competencies. Aggregate data is reported back to schools and the community in various forms, including as part of school's annual data profile book, through professional development, and through data summits.
- **Short-form instrument**: Short-form assessment of global SEC for when districts needed fewer than 40 items due to concerns about time and burden.

  To learn more about how we report and use the data, check out our websites:
  - For Climate Survey Reports and data debriefing toolkits, visit our Climate Survey Project website: https://www.washoeschools.net/Domain/231
  - To see how we have shared this data with students, staff and the community, visit our WCSD Data Summit webpage: http://www.wcsddatasummit.net
  - To learn more about how we make this data transparent to the community, visit our WCSD Data webpage: http://www.wcsddata.net

6. How do I score these instruments?

Because these instruments are open-source, you can score them any way you see fit. In Washoe County School District, we use a variety of scoring techniques depending on the audience and the intended use of the data. For example:

- For school climate reports using the long-form instrument, we typically report the overall % easy/very easy across each of the 8 domains as well as the % responding in each of the four response categories.
- As seen on our website http://www.wcsddata.net, we also report sub-domain means and the average item locations within a subdomain to help describe which items reflect higher levels of student social and emotional ability.
- For the short-form measure, we score across all 17 items to represent overall social and emotional competency (either an overall mean or overall % easy/very easy score).

7. Do students' scores on these measures change from year-to-year?

This is an area we are beginning to study in more depth. Student scores do change year-over-year.The extent to which scores change as a result of exposure to social and emotional learning is an area of ongoing study.

8. Can I use the WCSD-SECA as a pre-to-post measure?

WCSD does not currently use the SECA as a pre-to-post assessment to evaluate program impact, but please let us know if you use it for that purpose and what results you find!

9. Who else uses the WCSD-SECA?

Because the WCSD-SECA is free and open-source, we do not require users to request permission to use it. We therefore do not formally keep track of which organizations and school districts are currently using the instruments and how they use and report the data. However, we are happy to share reports from organizations who have shared their findings with us, and we encourage users of the WCSD-SECA to continue contributing to the knowledge base about the instruments and their use in practice by contact ldavidson@washoeschools.net.

Manuscripts Published and In Progress:

- To learn more about the process of developing the instruments, see: Davidson, L. A., Crowder, M. K., Gordon, R. A., Domitrovich, C. E., Brown, R. D., & Hayes, B. I. (2017). A continuous improvement approach to social and emotional competency measurement. *Journal of Applied Developmental Psychology*. http://dx.doi.org/10.1016/j.appdev.2017.03.002.
- To learn more about some of the other Rasch analyses applied to instruments, see: Crowder, M. K., Gordon, R. A., Brown, R. D., Davidson, L. A., & Domitrovich, C. E. (in preparation). Development and validation of the Social and Emotional Competency Assessment (SECA): Item ordering, targeting and differential item functioning.
- Additional manuscripts in progress will include the following topic areas:
    - Examination of dimensionality of the 40-item version to determine whether items align with theoretical expectations of which constructs the items measure.
    - Examination of whether student social and emotional competence might buffer against students' academic risk for drop-out.

Washoe County School District

January 2018

Appendix: WCSD-SECA (Long- and Short- Form; Version January 2018)

Items highlighted (17-item) indicate items that comprise the briefer, composite SEC assessment.

Directions: *Please tell us how easy or difficult each of the following are for you.*
Response Options: *1 = Very Difficult; 2 = Difficult; 3 = Easy; 4 = Very Easy*

Self-Awareness: Self-Concept

1. Knowing what my strengths are. (17-item)
2. Knowing how to get better at things that are hard for me to do at school.
3. Knowing when I am wrong about something.
4. Knowing when I can't control something.

Self-Awareness: Emotion Knowledge

5. Knowing when my feelings are making it hard for me to focus. (17-item)
6. Knowing the emotions I feel. (17-item)
7. Knowing ways to make myself feel better when I'm sad.
8. Noticing what my body does when I am nervous.
9. Knowing when my mood affects how I treat others.
10. Knowing ways I calm myself down. (17-item)

Social Awareness

11. Learning from people with different opinions than me. (17-item)
12. Knowing what people may be feeling by the look on their face. (17-item)
13. Knowing when someone needs help. (17-item)
14. Knowing how to get help when I'm having trouble with a classmate.
15. Knowing how my actions impact my classmates.

Self-Management: Emotion Regulation

16. Getting through something even when I feel frustrated. (17-item)
17. Being patient even when I am really excited. (17-item)
18. Staying calm when I feel stressed.
19. Working on things even when I don't like them.

Self-Management: Goal Management

20. Finishing tasks even if they are hard for me. (17-item)
21. Setting goals for myself. (17-item)
22. Reaching goals that I set for myself.
23. Thinking through the steps it will take to reach my goal.

Self-Management: School Work

24. Doing my schoolwork even when I do not feel like it. (17-item)
25. Being prepared for tests. (17-item)
26. Working on assignments even when they are hard.
27. Planning ahead so I can turn a project in on time.

28. Finishing my schoolwork without reminders.
29. Staying focused in class even when there are distractions.

Relationship Skills

30. Respecting a classmate's opinions during a disagreement. (17-item)
31. Getting along with my classmates. (17-item)
32. Sharing what I am feeling with others.
33. Talking to an adult when I have problems at school.
34. Being welcoming to someone I don't usually eat lunch with.
35. Getting along with my teachers.

Responsible Decision-Making

36. Thinking about what might happen before making a decision. (17-item)
37. Knowing what is right or wrong. (17-item)
38. Thinking of different ways to solve a problem.
39. Saying "no" to a friend who wants to break the rules.
40. Helping to make my school a better place.



3/23/2025

STATISTICAL CONSULTATION SERVICE SUPPORT FOR SANDRA FELIX

This memo serves to confirm Sandra Lourenço Felix (Student number: 9105979M) received support from QNR Data for her research project. Sandra's project is titled "Desiring conscious, critical, careful practice-linking autoethnographic practice-based architectural design research with transformative pedagogy" and it is supervised by Ariane Janse van Rensburg. Mrs Lebo Tawane provided advice during the data analysis phase, having reviewed and audited the analysis done by the student. Mrs Tawane further assisted with the reliability analysis, correlation analysis and cross-tabulation analysis of the study. Two online meetings to discuss the research output.

Should you require further detail and evidence of the support provided by QNR Data please contact me via email/telephone.

Yours sincerely,

Mrs Lebo Tawane
Research and Analytics Manager
QNR Data
lebo@qnrdata.com
+27 60 340 8111

	Reliability of results						Comparison of results across surveys - testing statistical difference																													
	Cronbach's Alpha			Inter-Item Correlations			Crosstabs - Self 1 to Self 2			Crosstabs - Self 1 to Other			Crosstabs - Self 2 to Other			Crosstabs -Gender Self 1			Crosstabs -Gender Self 2			Crosstabs -Gender Other			Crosstabs -Race Self1			Crosstabs -Race Self2			Crosstabs -Race -Other		
	Self 1	Other	Self 2	Self 1	Other	Self 2	Fisher's Exact Test	Phi	No. valid cases	Fisher's Exact Test	Phi	No. valid cases	Fisher's Exact Test	Phi	No. valid cases	Fisher's Exact Test	Phi	No. valid cases	Fisher's Exact Test	Phi	No. valid cases	Fisher's Exact Test	Phi	No. valid cases	Pearson Test	Cramers V	No. valid cases	Pearson Test	Cramers V	No. valid cases	Pearson Test	Cramers V	No. valid cases
Self - awareness (10 items)	0.51	0.71	0.65	0.09	0.20	0.15																												
Self-awareness: Self concept/ self control	0.24	0.39	0.35	0.06	0.14	0.12	0.20	0.25		0.66	0.08		0.70	0.04																				
Knowing when I can't control something							0.34	0.19	43	1.00	0.00	47	0.69	-0.12	37	0.78	0.04	54	0.54	0.10	43	0.47	-0.13	47	0.54	0.20	54	0.50	0.23	43	0.58	0.20	47
Knowing when I am wrong about something							0.23	0.20	43	1.00	0.00	48	1.00	0.02	38	0.53	-0.11	54	0.26	-0.17	43	0.72	-0.09	48	0.72	0.16	54	0.04	0.45	43	0.40	0.25	48
Knowing how to get better at things that are hard for me to do at university							0.20	0.21	43	0.36	0.15	48	1.00	-0.05	38	1.00	0.01	54	0.19	0.23	43	0.75	-0.07	48	0.75	0.15	54	0.15	0.35	43	0.11	0.36	48
Knowing what my strengths are							0.02	0.38	43	0.27	0.18	48	0.09	0.31	38	0.08	0.27	54	0.39	0.17	43	0.45	0.15	48	0.10	0.34	54	0.62	0.20	43	0.59	0.20	48
Self-awareness: Emotion knowledge	0.63	0.65	0.57	0.22	0.24	0.18																												
Knowing when my feeling are making it hard for me to focus							0.02	0.41	42	1.00	-0.09	48	0.54	0.08	37	0.74	0.08	54	0.66	-0.10	42	1.00	0.04	48	0.47	0.22	54	0.45	0.25	42	0.42	0.24	48
Knowing the emotions I feel							1.00	-0.08	42	0.40	0.12	47	0.31	0.23	38	0.53	0.13	53	0.06	0.31	43	1.00	0.04	48	0.38	0.24	53	0.52	0.23	43	0.39	0.25	48
Knowing ways to make myself feel better when I'm sad							0.74	0.07	42	0.57	0.09	47	0.73	0.09	38	0.05	0.29	53	0.19	0.23	43	0.77	0.08	48	0.22	0.29	53	0.52	0.23	43	0.80	0.14	48
Knowing what my body does when I am nervous							0.04	0.37	42	0.14	-0.25	47	0.31	-0.25	38	0.76	-0.06	53	1.00	0.04	43	0.74	-0.05	48	0.70	0.17	53	0.61	0.20	43	0.41	0.25	48
Knowing when my mood affects how I treat others							1.00	0.05	42	1.00	-0.08	47	0.17	0.26	38	1.00	0.06	53	0.34	-0.17	43	0.69	0.12	48	0.44	0.23	53	0.06	0.41	43	0.05	0.40	48
Knowing ways I calm myself down							0.17	0.22	42	0.25	0.18	46	0.12	0.27	38	0.03	0.34	53	0.19	0.23	43	0.13	0.25	47	0.16	0.31	53	0.40	0.26	43	0.43	0.24	47
Self - management (14 items)	0.76	0.84	0.81	0.18	0.27	0.25																												
Self-management: Emotion regulation	0.63	0.52	0.56	0.30	0.21	0.25																												
Working on things even when I don't like them							0.11	0.28	43	0.38	0.15	48	0.74	0.10	38	0.78	0.05	54	0.75	-0.09	43	0.77	-0.04	48	0.83	0.13	54	0.60	0.21	43	0.08	0.38	48
Getting through something even when I feel frustrated							0.20	0.23	43	0.77	-0.08	48	0.52	0.12	38	0.57	0.11	54	0.11	0.28	43	1.00	-0.03	48	0.48	0.21	54	0.35	0.28	43	0.88	0.12	48
Staying calm when I feel stressed							0.00	0.59	43	0.07	0.28	48	0.06	0.32	38	0.01	0.39	54	0.06	0.31	43	0.07	0.28	48	0.35	0.25	54	0.50	0.23	43	0.39	0.25	48
Being patient even when I am really excited							0.01	0.39	43	0.77	0.08	48	0.31	0.20	38	1.00	-0.03	54	0.53	0.14	43	0.55	0.10	48	0.95	0.08	54	0.09	0.39	43	0.17	0.32	48
Self-management: University work	0.59	0.76	0.65	0.19	0.35	0.25																												
Doing my university work even when I do not feel like it							0.55	0.10	43	1.00	0.04	48	1.00	0.03	38	1.00	0.02	54	0.75	-0.07	43	0.36	0.16	48	0.26	0.27	54	0.73	0.17	43	0.21	0.31	48
Working on assignments even when they are hard							0.35	0.15	43	0.73	0.08	48	0.69	-0.10	38	1.00	0.00	54	0.51	0.12	43	1.00	-0.03	48	0.79	0.14	54	0.67	0.19	43	0.94	0.09	48
Staying focussed in lectures or studios even when there are distractions							0.00	0.49	43	0.56	0.11	48	1.00	-0.01	38	0.57	0.11	54	0.76	-0.05	43	1.00	-0.01	48	0.24	0.24	54	0.04	0.45	43	0.28	0.28	48
Being prepared for project presentations							0.22	0.21	43	0.29	0.18	48	0.23	0.26	38	1.00	-0.01	54	1.00	-0.02	43	1.00	-0.03	48	0.03	0.41	54	0.27	0.30	43	0.30	0.28	48
Planning ahead so I can turn a project in on time							0.00	0.49	43	1.00	0.03	48	0.04	0.37	38	0.57	0.11	54	0.75	-0.07	43	0.11	-0.27	48	0.50	0.21	54	0.14	0.35	43	0.12	0.35	48
Finishing my university work without reminders							0.49	0.13	43	1.00	0.04	48	0.11	0.29	38	1.00	0.00	54	0.03	-0.38	43	0.20	-0.22	48	0.98	0.05	54	0.80	0.15	43	0.92	0.10	48
Self-management: Goal management	0.63	0.71	0.69	0.30	0.38	0.35																												
Thinking through the steps it will take to reach my goal							0.04	0.35	43	1.00	-0.07	48	0.17	0.28	38	1.00	0.01	54	0.72	0.08	43	0.71	-0.07	48	0.20	0.29	54	0.52	0.23	43	0.58	0.20	48
Reaching goals that I set for myself							0.01	0.45	43	0.05	0.31	48	0.47	0.17	38	1.00	0.03	54	1.00	0.00	43	0.76	0.06	48	0.58	0.19	54	0.34	0.28	43	0.25	0.29	48
Setting goals for myself							0.01	0.45	43	1.00	-0.01	48	1.00	0.04	38	1.00	0.01	54	1.00	0.03	43	1.00	-0.05	48	0.25	0.28	54	0.85	0.14	43	0.36	0.26	48
Finishing tasks even if they are hard for me							1.00	-0.03	43	0.16	-0.23	48	0.43	0.14	38	0.18	-0.20	54	0.52	0.13	43	0.47	-0.13	48	0.57	0.19	54	0.45	0.25	43	0.94	0.09	48
Critical Social Awareness (16 items)	0.76	0.83	0.77	0.16	0.24	0.19																												
Social awareness	0.62	0.61	0.72	0.24	0.23	0.37																												
Knowing how my actions impact other students							0.03	0.42	43	0.05	0.33	48	0.00	0.66	38	1.00	-0.02	54	1.00	0.03	43	1.00	-0.03	48	0.14	0.32	54	0.63	0.20	43	0.11	0.36	48
Knowing how to get help when I'm having trouble with another student							0.10	0.29	43	0.53	0.13	48	0.30	0.21	38	0.78	0.05	54	0.34	0.16	43	0.52	0.12	48	0.59	0.19	54	0.78	0.16	43	0.07	0.38	48
Knowing when someone needs help							0.32	0.20	43	0.26	0.17	47	0.24	0.20	37	0.76	0.06	54	0.65	-0.11	43	0.73	-0.08	47	0.01	0.47	54	0.63	0.20	43	0.86	0.13	47
Knowing what people may be feeling by the look on their face							1.00	0.06	42	0.14	0.23	48	0.36	0.17	37	0.75	-0.06	54	1.00	0.03	42	0.07	-0.29	48	0.23	0.28	54	0.61	0.21	42	0.52	0.22	48
Learning from people with different opinions to me							0.02	0.44	43	1.00	-0.04	48	0.51	0.09	38	1.00	0.05	54	0.39	-0.18	43	0.02	-0.36	48	0.71	0.16	54	0.27	0.30	43	0.01	0.48	48
Relationship skills	0.72	0.69	0.60	0.31	0.29	0.20																												
Respecting a classmate's opinions during a disagreement							0.34	0.17	42	1.00	-0.08	48	1.00	-0.08	37	0.64	0.09	54	0.12	-0.27	42	0.55	-0.16	48	0.93	0.09	54	0.12	0.37	42	0.62	0.19	48
Getting along with my classmates							0.03	0.47	43	0.16	0.31	47	1.00	-0.04	38	0.39	-0.13	54	0.54	-0.17	43	0.53	0.16	47	0.32	0.25	54	0.28	0.30	43	0.11	0.36	47
Sharing what I am feeling with others							0.12	0.27	43	0.77	-0.04	48	0.51	0.16	38	0.27	0.16	54	0.12	0.27	43	0.23	0.22	48	0.40	0.23	54	0.91	0.11	43	0.47	0.23	48
Talking to a lecturer or counsellor when I have problems at university							0.02	0.39	43	0.34	0.18	48	0.20	0.23	38	0.77	0.04	54	0.34	0.19	43	0.07	0.27	48	0.44	0.22	54	0.94	0.10	43	0.93	0.10	48
Being welcoming to someone I don't usually eat lunch or hangout with							0.01	0.61	43	0.34	0.16	48	0.10	0.47	38	0.68	-0.07	54	0.52	0.17	43	1.00	0.02	48	0.11	0.33	54	0.45	0.25	43	0.36	0.26	48
Getting along with my tutors or lecturers							0.37	0.15		0.34	0.16	48	0.10	0.47	38	0.13	0.21	54	1.00	0.02	43	0.52	0.16	48	0.51	0.21	54	0.58	0.21	43	0.44	0.24	48
Responsible decision-making	0.51	0.66	0.34	0.18	0.30	0.13																												
Thinking about what might happen before making a dCision							0.11	0.27	43	1.00	-0.01	48	0.47	0.11	38	1.00	0.05	54	1.00	-0.05	43	0.06	-0.30	48	0.87	0.12	54	0.55	0.22	43	0.67	0.18	48
Thinking of different ways to solve a problem							0.19	0.23	43		0.22	48	1.00	0.06	38	0.18	0.25	54	0.62	-0.08	43	0.13	0.26	48	0.40	0.24	54	0.65	0.20	43	0.98	0.07	48
Saying no to a friend who wants to break the rules							0.14	0.27	43	1.00	0.00	48	0.19	0.24	38	1.00	-0.02	54	0.65	-0.11	43	0.69	0.12	48	0.79	0.14	54	0.13	0.36	43	0.81	0.14	48
Helping make my university a better place							0.00	0.47	42	1.00	-0.01	47	1.00	0.00	38	0.38	0.14	53	0.17	0.23	43	1.00	0.00	48	0.03	0.42	53	0.78	0.16	43	0.05	0.40	48
Knowing what is right and wrong																1.00	-0.04	54							0.46	0.22	54						

Cronbach's Alpha

0	no internal consistency
0-0.6	Poor reliability
0.6+	reliable
0.7-1	acceptable reliability
0.8-1	good reliability
0.9-1	redundancy between items

Reliability on Self-awareness & Self-management categories done - as Cronbach's Alpha Test sometimes not accurate for groups of less than 5x questions

Inter-item correlation

>0.5	high correlation
0.2 -0.5	ideal correlation
<0.2	low correlation

Comparison - statistically significant differences

Fisher's Exact Test <0.05 statistically significant differences

Phi

>-0.5	large positive difference
-0.3 to -0.5	medium negative difference
-0.1 to -0.3	small negative difference
0	no association
0.1 to 0.3	small positive difference
0.3 to 0.5	medium positive difference
>0.5	large positive difference

8% <0.05 **3%** % items in surveys SSD **3%** % items in surveys SSD **8%** % items in surveys SS **5%** % items in surveys SSD **3%** % items in surveys SSE

No gender different items 10% 0%

Pearson Test as more than 2x2 comparison)

Pearson test <0.05

Cramér's V Value

0.00 - 0.10	Weak or negligible
0.11 - 0.30	Moderate
0.31 - 0.50	Strong
> 0.50	Very strong

5%

No gender different items 13% 0%

APPENDIX C: FOCUS GROUP QUESTIONS

C.1 Student Focus Group Questions

C.2 Colleague Focus Group Questions

STUDENT FOCUS GROUP 1 – May 2024: questions

- Impact of the third-year pedagogy?
  - **How** you learnt – teaching; support
  - **What** you learnt – about yourself; about architecture; about practice
- Did what you learnt from P1 and P5 feed through into your design practice?
  - Correlation of Project 1 Manifesto with Project 5 Reflective essay and Final Mark in third-year.
- Social-emotional learning surveys
  - Large discrepancy between how you feel about self-management – emotion regulation (40% below average) and others perception (60%)
  - Large discrepancy between how you initially felt about self - management goal management and university work and others perception
  - Self-assessment of all metrics got easier – but emotion regulation still hard?

STUDENT FOCUS GROUP 2 – May 2024: questions

- Impact of the third-year pedagogy?
  - **How** you learnt – teaching; support
  - **What** you learnt – about yourself; about architecture; about practice
- Did what you learnt from P1 and P5 feed through into your design practice?
  - Correlation of Project 1 Manifesto with Project 5 Reflective essay and Final Mark in third-year.
- Social-emotional learning surveys
  - Large discrepancy between how you feel about self-management of your university work (65% above average) and others perception (92%)
  - Large discrepancy between how you initially felt about self management goal management – (50% below average) and others perception (92%)
  - Others perception – most things very easy for you
  - Self-assessment of all metrics got easier – except for emotion regulation and university work which dropped?

STUDENT FOCUS GROUP 3 – May 2024: questions

- Impact of the third-year pedagogy?
  - **How** you learnt – teaching; support
  - **What** you learnt – about yourself; about architecture; about practice
- Did what you learnt from P1 and P5 feed through into your design practice?
  - Correlation of Project 1 Manifesto with Project 5 Reflective essay and Final Mark in third-year.
- Social-emotional learning surveys
  - Large discrepancy between how you feel about self-management – emotion regulation (35%) and others perception (15%)
  - Others perception – most things harder than you think they are – which bucks the average?
  - Self-assessment of all metrics got easier – showed very strong above average improvement

STUDENT FOCUS GROUP 4- May 2024: questions

- Impact of the third-year pedagogy?
  - **How** you learnt – teaching; support
  - **What** you learnt – about yourself; about architecture; about practice
- Did what you learnt from P1 and P5 feed through into your design practice?
  - Correlation of Project 1 Manifesto with Project 5 Reflective essay and Final Mark in third-year.
- Social-emotional learning surveys
  - Large discrepancy between how you feel about self-management – university work and goal management and others perception
  - Others perception – most things easier than you think they are
  - High emotion regulation and responsible decision making above average
  - Self-assessment of all metrics got easier – showed very strong above average improvement in emotion regulation off a high base and emotion knowledge

WOMEN ARCHITECT COLLEAGUES FOCUS GROUP 1 – February 2024: questions

- What is mastery in architecture in the South African context?
- How is this defined or measured?
- Do the SAIA Architectural Awards of Excellence provide a reliable measure of this?
- Why are black architects and women architects not well represented in these awards?

TEACHING COLLEAGUES FOCUS GROUP 2 – March 2024: questions

- Unpack the pedagogy, how we taught, and the curriculum, what we taught, in the ARPL3005, the third-year design course over the last few years
- What was significant about the pedagogy and curriculum that departed from your previous experiences teaching?
- What has the impact been on students, in your opinion? What has most contributed to that impact?

TEACHING COLLEAGUES FOCUS GROUP 3 – March 2024: questions

- Unpack the pedagogy, how we taught, and the curriculum, what we taught, in the ARPL3005, the third-year design course over the last few years
- What was significant about the pedagogy and curriculum that departed from your previous experiences teaching?
- What has the impact been on students, in your opinion? What has most contributed to that impact?

APPENDIX D: CONFERENCE & SYMPOSIUM PAPERS PRESENTED DURING THE ACTION RESEARCH CYCLES

Cycle #1: 2018 to 2019

What modes of Design Research are transformative and venturous?

- *SoAP PhD Symposium, University of the Witwatersrand, September 2019: oral peer review*
- *CA²RE Conference in Ghent, Belgium, 4 to 6 October 2019: extended abstract peer review for conference acceptance and two oral peer reviews at conference; published in conference proceedings*

Abstract.

"Design although it generates a building is also a search for meaning, for a change in values and perceptions and even a change in power and politics, although in some instances it is a search to legitimise existing power dynamics and entrench them. Design is so much more than just the generative act. (Sullivan, 2010). In the South African context where our built environment and cities are struggling more than twenty years into democracy to subvert their Apartheid segregationist beginnings, design research has the capacity to understand the historical connections between design, power and politics, and purposefully subvert them and even venture new modes of practice. Where the transformation of academia and practice of architecture is imperative, the design research question is not so much the generic one asked by Fraser, "What are the most effective modes or routes through which architectural design research can be pursued? " (Fraser, 2013) but rather, 'What are the most effective modes or routes through which architectural design research can be pursued which support and forward the transformation imperative of both academia and practice? Can the intellectual space and conditions be created that support a strong critical culture of architectural design research, with its' hopefully resultant transformation of our built environment?' Through analysing various international Design Research modes and their applicability to the South African context, an understanding will be gained of how Design Research can be transformative and venturous both within practice and academia, but also within the larger socio-political context. As Teddy Cruz so aptly put it "new experimental practices of research and intervention will emerge from zones of conflict" (Cruz, 2013)

Keywords. Design Research; Modes; Transformative; Venturous; South Africa" (Felix 2019, 59)

A PhD in practice-based design research in architecture at the University of the Witwatersrand

- *Arts Research Africa conference, University of the Witwatersrand, January 2020: Q & A session at conference and paper peer review before publication; published in conference proceedings*

Abstract

"How does the new PhD in practice- based design research in the School of Architecture at Wits position itself? This paper is an account of the author- practitioner's exposure to the long history of engagement with design research in the school through the example of architects such as Pancho Guedes and others." (Felix 2020,60)

Cycle #2: 2020

Practice-based design research: Iterative cycles of research

- *South African Journal of Art History Conference, September 2020: paper peer review - unpublished*

Abstract

The driver to commence Practice Based Architectural Design Research, is research for practice, to transform current and future practice, by "understand[ing] what has been done" (Vaughan 2017) in past practice. Research into past practice unearths knowledge of design processes by reflecting on the body of work and practice in all its forms. This new knowledge is then tested by research through practice, where further discoveries of design processes are made, and leads back to research into and for practice. This reflective and iterative process posits that past, present and future practices are coterminous, and that a dialectical interchange arises through an ongoing exchange of looking, reflecting, understanding, and testing. Current trends in architectural practice indicate moves away from what RIBA (2014) terms 'core' practice of designing buildings to 'diverse' practice which uses the skills and knowledge of architects in other ways. My architectural practice has included a myriad of modes: designing, building, writing, researching, painting, teaching, and architect-developer practice in the housing sector. This process of research for, into, and through (Frayling 2012) my own practice will be explicated with reference to context, both regional and global, and precedents of Practice Based Design Research.

Keywords: practice based design research; architecture; design; reflective practice

Back to the future: Unearthing tacit design knowledge through experimental frameworks of reflective past practice design research

- *CA²RE Conference, Milan, Italy, October 2020: two oral peer reviews at conference; published in conference proceedings*

Abstract

"Reflective past practice design research is a fluid, coterminous and interdependent process of research on, into and about the past , through and in the present and for the future as per Archer (2012); Blythe (2013); Fraying (2012); Lucas (2016); Malins and Gray (1995) and Vaughan (2017). This temporal process is applied to my own design practice, partially within the context of design pedagogy through a series of experimental frameworks that unearth different types of tacit design knowledge both for myself and my students. This unearthing of tacit design knowledge about one's own process is contingent on achieving a critical distance, which is facilitated through a series of exercises designed with different frameworks. The frameworks are thus seen as the means to unearth the tacit knowledge but also as the instrument of critical distance.
Keywords: practice-based design research; reflective research; critical distance; frameworks; tacit design knowledge" (Felix 2020,375)

Cycle #3: 2021

Agile and adaptable teaching strategies in an unequal society: reflections from the design studio at the University of the Witwatersrand, Johannesburg, South Africa

- International Perspectives on the Future of Architecture and Urbanism in the Post-COVID Age symposium, 29 to 30 January 2021: abstract peer review; unpublished

Abstract

Twenty-five years after the transition to democracy, South Africa remains a highly unequal society. However various spaces have offered historically deprived individuals a measure of freedom, and opportunity. One of these was the university campus, and, for architecture students, the design studio. The studio was a place where underprivileged students could find an enabling environment in the context of impoverished housing, the absence of computer hardware and software, and poor connectivity. These spaces of freedom were severely compromised by the Covid-19 pandemic, the closure of the universities, and the move to online learning. The pandemic thus threatened to sharpen a range of pre-existing social, economic, and digital divides. In the sudden transition to online learning, the immediate response of the university was standardization. However, this approach failed to acknowledge the diverse circumstances of our students and would inevitably exacerbate the divides amongst rich and poor, urban, and rural, connected and disconnected. Whilst poor students' were further disadvantaged, middle class students experienced significant savings in transport, printing and boarding costs, and affluent students' priviledge increased. We therefore had to devise responsive, customized, and flexible ways of teaching to reach every student, effectively pursuing a student-centric pedagogy. This paper reflects on our teaching experience during lockdown using surveys of our students and interviews. It became apparent that we needed to intensify communication with our students; devise new ways of assessing their work; and up-end traditional student/teacher hierarchies. These ways of teaching reassert that students and teachers are "jointly responsible for a process in which all grow" (Freire, 2018).

Keywords: design studio; student-centric teaching

Playing with fabric: photographic design research reflections on colour, materiality and texture in architectural projects

- CA²RE Conference, Hamburg, Germany, March 2021: two oral peer reviews at the conference; published in conference proceedings

Abstract

"A child playing with scraps of fabric surrounded by a never-ending visual and sensory feast of fabrics, matching and mis-matching colour, texture and pattern, these are the memories of my childhood. That this playful female domesticity was transposed to my feminist architectural practice. My research seeks a critical understanding of the evolution of my architectural language, through reflective design research on past practice. Questions arise of how one reconstitutes an archive of practice, and how this reconstituting is also an appropriating and re-understanding of the archive through (re) presentation. The choice of architectural research production or (re)presentation tools or media reveals different types of tacit knowledge of design. Photography is thus chosen as the medium or tool to reflect on the use of colour, texture and materiality in past practice.
Keywords: practice based design research, feminism, colour, materiality, architecture, photography" (Felix 2021,364)

Cycle #4: 2022

Exploring the transformative potential of practice-based design research methods in architectural design pedagogy

- Arts Research Africa Conference, University of the Witwatersrand, September 2022: paper peer review before publication in conference proceedings

Abstract

"This paper discusses the application of practice-based design research (PbDR) methods in transforming the design practice of architecture students. It explores how reflection and diffraction, two PbDR methods, can be used to shape students' design practice and challenge institutional biases. The author shares the experience of implementing these methods in a third-year architecture design studio at the University of the Witwatersrand in South Africa. Changes were made to the curriculum, including the introduction of reflection and the use of diffractive methods, to foster personal and institutional transformation. The paper highlights the importance of collaborative dialogue, social reflection, and engaged pedagogy in this transformative process." (Felix 2022,236)

Cycle #5 - 2023

Which pedagogical strategies support the conscious, critical, careful design practice of students?

- SoAP PhD Symposium, University of the Witwatersrand, September 2023: colleague peer review at the symposium
- AMPS – Teaching Beyond the Curriculum, November 2023: paper peer review; unpublished

Abstract

In this time of global multiple crises of socio-economy, ecology and recently health, the need for architects to practice in different ways from those practices that may have contributed to these crises is evident. This study outlines pedagogical strategies that support conscious, critical and careful practice, in an undergraduate design studio at a South African university. Practice-based design research methods are employed within a parallel-engaged pedagogy of care, validating ways of seeing, empowering student agency and situational awareness, and extending the duty of care in design practice beyond the client to users, the city and the continuation of the life-sustaining web which is our world.
The impact of these strategies on the conscious, critical and careful design practice of architectural students is assessed through cross-validation of self and social reflection, and Social Emotional learning surveys.

Cycle #6 - 2024

Questioning Mastery – Unpacking black women architects' absence in the SAIA – Architectural Awards of Excellence

- Ongoing and Emerging Discourse in African Architecture Conference, University of the Witwatersrand School of Architecture and Planning @ Wits Rural Facility, July 2024: Q & A at the conference; unpublished
- Faces of the City – University of the Witwatersrand Centre for Urbanism and Built Environment Studies and School of Architecture and Planning Seminar, 16 July 2024: Q & A

Abstract

As a white woman I acknowledge the sticky problem of speaking for black women. Perhaps I will even be accused of a type of mansplaining, womensplaining; whitewomensplaining, or in contemporary cultural terms Karensplaining. To my accusers, I give fire to the flame, by saying these are my friends, my colleagues, my students. I realise that I cannot speak for them, all I can do is listen to their voices. Broadcast their voices, make them more visible. Using my white privilege to do so is messy, complicated, fraught with contradictions and irony. I wade into this morass, humbly, hoping that what you take away from this talk is not my voice but theirs.
This research is part of shifts in feminist practice from 'herstories' where women and black women architects are rewritten into history, to critiquing architecture and its patriarchal and at times racist and colonial culture from a black women's perspective. Finally to new forms of practice, collectivity, or practicing 'otherwise' which sees process rather than product as architecture, moving away from form and building. These shifts ask us to reveal the otherhow and otherwise ways in which black women practice. Reveal these as not only legitimate ways of practicing but in many ways critical ways of practicing that respond to the current global interconnected social, political and economic crises. As a researcher I see these ways of practicing in my black women colleagues, and students. This research arose from a position of part confidante, part collaborator or co-conspirator, and part voyeur, watching their practice journeys, alongside them.

APPENDIX E: ETHICS DOCUMENTS

E.1 Ethics Approval

E.2 Informed Consent Forms Students; Colleagues; Professional Architects

E.3 Participant forms: Students; Colleagues; Professional Architects

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Felix

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H23/04/9**
PROJECT TITLE	Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy
INVESTIGATOR(S)	Ms S Felix
SCHOOL/DEPARTMENT	Architecture and Planning/
DATE CONSIDERED	21 April 2023
DECISION OF THE COMMITTEE	Approved Risk Level: Low
EXPIRY DATE	17 August 2026

DATE 18 August 2023 **CHAIRPERSON** _____
(Professor J Watermeyer)

cc: Supervisor : Prof H Le Roux and Prof A Janse Van Rensburg

---

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **A SIGNED COPY** returned to the Secretary electronically. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure as approved I/we undertake to submit an amendment of the protocol to the Committee. **I/we agree to completion of a regular progress report. For Minimal and Low Risk studies, this is due annually on 31 December. For Medium and High Risk studies, this is due twice annually on 30 June and 31 December.**

_____ 18 / 08 / 2023
Signature **Date**

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

Student Consent Form- prior to course project activities commencement

Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy.

Sandra Felix

I, …….., agree to participate in this research project.

I agree to the following: (Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/group discussions may be audio recorded	YES	NO
I agree that ARPL3005/3005A project activities may be video recorded	YES	NO
I agree that the ARPL3005/3005A project activities may be photographed, or drawn	YES	NO
I agree that my participation in interviews/ projects activities will remain confidential and my participation in surveys will remain anonymous (my name or other identifying data will not be used by the researcher in their research report/publications or conference presentations associated with the research)	YES	NO
I agree that other researchers may use the information I provide in my interviews/ surveys/ projects activities (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on	YES	NO
I agree that the creative work including designs, drawings and films to be produced during the ARPL3005/3005A course during my degree at Wits can be posted in the public realm, exhibited, published in articles or books and presented in conferences or published for research purposes	YES	NO
I understand and accept that no remuneration/reimbursement and no direct costs to me for the publication will be involved	YES	NO
I understand that the posting of this creative work in the public domain will remain the intellectual property of the University of the Witwatersrand	YES	NO
I agree that the creative work outlined above if published **can be attributed to me as the author** of said creative work carried out during my studies, and thus my name can revealed and published in relation to said creative work	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Former Student Consent Form- post course completion

Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy.

Sandra Felix

I, …….., agree to participate in this research project.

I agree to the following: (Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/focus group discussion may be audio recorded	YES	NO
I agree that my ARPL3005/3005A project activities that were video recorded, photographed or drawn can be used as part of the research	YES	NO
I agree that my participation in interviews/ projects activities will remain confidential, and my participation in surveys will remain anonymous (my name or other identifying data will not be used by the researcher in their research report/publications or conference presentations associated with the research)	YES	NO
I agree that other researchers may use the information I provide in my interviews/ survey/ projects activities (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on	YES	NO
I agree that the creative work including designs, drawings and films produced during the ARPL3005/3005A course during my degree at Wits can be posted in the public realm, exhibited, published in articles or books and presented in conferences or published for research purposes	YES	NO
I understand and accept that no remuneration/reimbursement and no direct costs to me for the publication will be involved	YES	NO
I understand that the posting of this creative work in the public domain will remain the intellectual property of the University of the Witwatersrand	YES	NO
I agree that the creative work outlined above if published **can be attributed to me as the author of said creative work** carried out during my studies, and thus my name can revealed and published in relation to said creative work	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Architects/ Professionals Consent Form

Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy.

Sandra Felix

I, …….., agree to participate in this research project.

I agree to the following: (Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/focus group discussion may be audio recorded	YES	NO
I agree that my Workshop activities that were video recorded, photographed or drawn can be used as part of the research	YES	NO
I agree that my participation in interviews and Workshop activities will remain confidential and my participation in surveys will remain anonymous (my name or other identifying data will not be used by the researcher in their research report/publications or conference presentations associated with the research)	YES	NO
I agree that other researchers may use the information I provide in my interviews/ surveys/ Workshop activities (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on	YES	NO
I agree that the creative work including designs, drawings and films produced during the Workshop can be posted in the public realm, exhibited, published in articles or books and presented in conferences or published for research purposes	YES	NO
I understand and accept that no remuneration/reimbursement and no direct costs to me for the publication will be involved	YES	NO
I understand that the posting of this creative work in the public domain will remain the intellectual property of the University of the Witwatersrand	YES	NO
I agree that the creative work outlined above if published **can be attributed to me as the author of said creative work** carried out during participation in the Workshop, and thus my name can revealed and published in relation to said creative work	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Staff / Colleagues Consent Form

Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy.

Sandra Felix

I, …….., agree to participate in this research project.

I agree to the following: (Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/focus group discussion may be audio recorded	YES	NO
I agree that my participation and teaching of ARPL3005/3005A project activities may be video recorded, photographed or drawn and may be used as part of the research	YES	NO
I agree that my participation in interviews/ projects activities will remain confidential, and my participation in surveys will remain anonymous (my name or other identifying data will not be used by the researcher in their research report/publications or conference presentations associated with the research)	YES	NO
I agree that other researchers may use the information I provide in my interview/ survey/ projects activities (depending on their own ethics clearance being obtained but my name and any personal information will not be used or passed on	YES	NO
I agree that the creative work including designs, drawings and films produced during the ARPL3005/3005A course at Wits can be posted in the public realm, exhibited, published in articles or books and presented in conferences or published for research purposes	YES	NO
I understand and accept that no remuneration/reimbursement and no direct costs for the publication will be involved	YES	NO
I understand that the posting of this creative work in the public domain will remain the intellectual property of the University of the Witwatersrand	YES	NO
I agree that the creative work outlined above if published **can be attributed to me as the author of said creative work** carried out during my studies, and thus my name can revealed and published in relation to said creative work	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Former Colleagues Consent Form

Desiring conscious, critical, careful practice – linking practice-based architectural design research with transformative pedagogy.

Sandra Felix

I, …….., agree to participate in this research project.

I agree to the following: (Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview/focus group discussion may be audio recorded	YES	NO
I agree that my past participation and teaching of ARPL3005/3005A project activities that were video recorded, photographed or drawn can be used as part of the research	YES	NO
I agree that my participation in interviews/ projects activities will remain confidential, and my participation in surveys will remain anonymous (my name or other identifying data will not be used by the researcher in their research report/publications or conference presentations associated with the research)	YES	NO
I agree that other researchers may use the information I provide in my interview/ survey/ projects activities (depending on their own ethics clearance being obtained but my name and any personal information will not be used or passed on	YES	NO
I agree that the creative work including designs, drawings and films produced during the ARPL3005/3005A course at Wits can be posted in the public realm, exhibited, published in articles or books and presented in conferences or published for research purposes	YES	NO
I understand and accept that no remuneration/reimbursement and no direct costs for the publication will be involved	YES	NO
I understand that the posting of this creative work in the public domain will remain the intellectual property of the University of the Witwatersrand	YES	NO
I agree that the creative work outlined above if published **can be attributed to me as the author of said creative work** carried out during my studies, and thus my name can revealed and published in relation to said creative work	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Good day Student

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is **Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.**

I am inviting you to take part in this research through your participation in projects set for ARPL3005 Architectural Theory and Design III, and then subsequent surveys and exit interviews. If you decide to take part, your participation in this research study will last about one academic year. The course-related research activities will take place at the studio as per the ARPL3005 course schedule, whilst interviews will take place at my office at a time set or as agreed during working hours, and surveys will be conducted online on Ulwazi or similar sites.

With your permission, I would like to audio-record the interview, and video-record the studio activities. The video recordings will enable a recording of visual material produced in the course as well as presentation and discussion around the visual material with myself and with your colleagues This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews will be confidential and the surveys anonymous. However, participation in the research during the course projects means that in those areas neither confidentiality nor anonymity can be guaranteed due to the collective nature of studio work and presentations. However, should you agree that your course project work can be included in my research, when I share the results of the research study, I will not include your name or anything else that could identify you, unless you expressly request that any creative work completed by you be attributed to you as the author of said work completed whilst registered at the University of the Witwatersrand.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time. Should this occur please contact the Wits CCDU if you feel that you need counselling.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers.The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za
Supervisors:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,

Good day former Student

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is **Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.**

I am inviting you to take part in this research through your past participation in projects set for ARPL3005 Architectural Theory and Design III which you have completed and passed, and then subsequent surveys and exit interviews. If you decide to take part, your participation in this research study will be ad-hoc interviews and discussions over the period of one academic year, but you can stop being in the study at any time. Interviews will take place at my office at a time set or as agreed during working hours, and surveys will be conducted online on Ulwazi or similar sites.

With your permission, I would like to audio-record the interview or group discussions. Also with your permission previous video recordings of activities in ARPL3005 will be used for research purposes . This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews will be confidential and the surveys anonymous. However, due to your past participation during the ARPL3005 course projects means that in those areas neither confidentiality nor anonymity can be guaranteed due to the collective nature of studio work and presentations. However, should you agree that your past course project work can be included in my research, when I share the results of the research study, I will not include your name or anything else that could identify you, unless you expressly request that any creative work completed by you be attributed to you as the author of said work completed whilst registered at the University of the Witwatersrand.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers.The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za
Supervisors:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Good day Architect/ professional

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux,. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is *Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.*

I am inviting you to take part in this research. If you decide to take part, your participation in this research study will last the duration of an interview/ focus group.

With your permission, I would like to record the interview/ focus group. This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews/ focus groups will be confidential, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers. The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za

Supervisor:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE & PLANNING

Good day Architect/ professional

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux,. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is *Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.*

I am inviting you to take part in this research. If you decide to take part, your participation in this research study will last the duration of an interview

With your permission, I would like to record the interview. This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews will be confidential, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers. The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za

Supervisor:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Good day Architect/ professional

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux,. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is *Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.*

I am inviting you to take part in this research through your participation in a workshop, and then subsequent surveys and exit interviews. If you decide to take part, your participation in this research study will last the duration of the workshop (one day) and a subsequent interview and survey approximately six months to a year after the workshop has taken place. The workshop-related research activities will take place at a studio and time to be confirmed, whilst interviews will take place at my office, or on Teams at a time set or as agreed during working hours, and surveys will be conducted online.

With your permission, I would like to audio-record the interview, and video-record the workshop studio activities. The video recordings will enable a recording of visual material produced in the workshop as well as presentation and discussion around the visual material with myself and with fellow workshop participants. This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews will be confidential and the surveys will be anonymous. However, participation in the workshop activities means that in those areas neither confidentiality nor anonymity can be guaranteed due to the collective nature of studio work and presentations. However, should you agree that your workshop work can be included in my research, when I share the results of the research study, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will receive a CPD certificate for your participation in the workshop. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers. The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za

Supervisor:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Good day Colleague

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux,. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is *Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.*

I am inviting you to take part in this research through your participation in projects set for ARPL3005 Architectural Theory and Design III, and then subsequent surveys and exit interviews . If you decide to take part, your participation in this research study will last about one academic year. The course related research activities will take place at the studio as per the ARPL3005 course schedule, whilst interviews will take place at my office at a time set or as agreed during working hours, and surveys will be conducted online on Ulwazi or similar sites.

With your permission, I would like to audio-record the interview, and video-record the studio activities. The video recordings will enable a recording of visual material produced in the course as well as presentation and discussion around the visual material with myself and with your colleagues This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews and surveys will be confidential and anonymous. However, participation in the research during the course projects means that in those areas neither confidentiality nor anonymity can be guaranteed due to the collective nature of studio work and presentations. However, should you agree that your course project work can be included in my research, when I share the results of the research study, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers.The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za

Supervisor:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Good day former Colleague

My name is Sandra Felix I am a PhD student and staff member in the School of Architecture and Planning at the University of the Witwatersrand, Johannesburg. My supervisors are Dr. Ariane Janse Van Rensburg and Dr. Hannah Le Roux,. I am conducting a research study about practice-based design research commencing with self-ethnography and then applying these methods to design pedagogy, and lastly designing workshops for professionals. The study title is *Desiring conscious, critical, careful practice-linking practice-based design research to design pedagogy.*

I am inviting you to take part in this research which studies your past participation in projects set for ARPL3005 Architectural Theory and Design III, through surveys and interviews . If you decide to take part, your participation in this research study will be ad-hoc interviews and discussions over the period of one academic year but you can stop being in the study at any time. Interviews will take place at my office at a time set or as agreed during working hours, and surveys will be conducted online on Ulwazi or similar sites.

With your permission, I would like to audio-record the interview or group discussions. Also with your permission previous video recordings of activities in ARPL3005 will be used for research purposes . This data will be stored on my University One Drive which is password protected for 10 years and deleted after 15 years. Only the researcher will have access to the data.

The interviews will be confidential and the surveys will be anonymous. However, participation in the group discussions means that in those areas neither confidentiality nor anonymity can be guaranteed due to their collective nature. However, should you agree that your participation and teaching of ARPL3005 can be included in my research, when I share the results of the research study, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life, however, should some of the questions asked may make you feel sad or upset I will stop the interview and continue another time.

This research study will be written up as a PhD dissertation and journal articles and/ or conference papers.The dissertation will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0)11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:
Sandra Felix , sandra.felix@wits.ac.za

Supervisor:
Dr. Ariane Janse van Rensburg, Ariane.JanseVanRensburg@wits.ac.za,
Dr. Hannah Le Roux, Hannah.LeRoux@wits.ac.za