

DESIGN RESEARCH ESSAY

Adapting practice-based design research to a South African undergraduate architectural studio: Building a more conscious and critical practice among students

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Abstract

Practice-based design research methods developed internationally in postgraduate architecture programmes aim towards a more conscious and critical design approach. The question asked in this essay, however, is how such research methods can be adapted for undergraduate architectural students, using the University of the Witwatersrand in Johannesburg as the testbed. Two practice-based design research methods at Wits University were thus adapted from the RMIT University and former Adapt-R programmes. The changes for South Africa addressed the disparities between postgraduate and undergraduate students in that country, as well as its complex post-colonial, post-Apartheid, and post-#FeesMustFall institutional context. These undergraduate students were encouraged to unearth their personal and local ways of seeing and knowing through collaborative social reflection, thereby developing a more self-aware form of practice. Conversely, at a contextual level, the students interrogated institutional influences and questioned established notions of mastery within a slowly decolonising university, critically situating themselves within this culture.

Keywords:

practice-based design research; architectural education; undergraduate studies; RMIT model; critical design approach; self-aware practice; Witwatersrand University; South Africa

Introduction

This essay commenced from a personal place. As a mid-career architect now using practice-based design research methods, I became more consciously and critically aware about my work, 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 also to recognise its unique value.

As an undergraduate design educator at a South African university – the University of the Witwatersrand in central Johannesburg, usually just called Wits University – I also began to question whether these practice-based design research methods could similarly affect students. I commenced formal teaching after the #FeesMustFall and #RhodesMustFall student protests of 2015–16 which made it clear that the post-Apartheid project of increased higher education access for historically excluded students was insufficient and that the curriculum itself needed to be decolonised. This decolonisation 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' [1: p. 32]. I realised that practice-based design research methods could potentially be used to validate the diverse knowledge traditions that Wits University's 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 is a part of the South African philosophy of Ubuntu, *'umuntu ngumuntu ngabantu'* or *'motho ke motho ka batho'* [2: p. 272]. It is a belief system which is found across Africa in many cultures and languages yet is also arguably a broader humanist concept not only confined to Africa. Ubuntu's message has been translated variously as: 'I am because we are, and since we are, therefore I am' [3: p. 108]; 'I am because you are, you are because I am' [4: p. 3] or 'that to be a human being is to affirm one's humanity by recognizing the humanity of others and, on that basis, establish humane relations with them' [2: p. 272]. This validation of the individual within a community means that respect for individual ways of seeing can only be attained if one respects the other and acknowledges the other's position as an equal. European colonialism of Africa disrupted this mutual, communal and equal respect of all individuals within a community, by elevating one epistemology, one way of seeing, above all others.

The community which I am discussing in this essay, as a higher education institution, is one that is still grappling with validating and respecting all ways of seeing and knowing in a diverse community. Thus, to paraphrase Ubuntu philosophy for this essay, for a student to gain confidence in their particular design practice is for them 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, within the larger architectural field. This is Ubuntu in practice, by validating and respecting all individual ways of seeing, knowing and being, yet crucially not on their own, individualistic terms but as part of a community: 'I am because you are, because we are'. Wits University is a historically white, post-colonial, post-Apartheid and post #FeesMustFall South African university. It has been actively engaged in a transformative project since the end of Apartheid in the 1990s, addressing issues of access and academic success by students who were previously excluded from the institution. Following the #FeesMustFall project, 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 therefore become inherently political in nature, raising the question of whether they contribute to the university's transformation or not.

The students that I teach 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 and Theory project entitled 'Manifesto' – which I 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 was taking them. This short two-week 'Manifesto' project at the start of the academic year hence held the genesis, albeit unknowingly, for some of the practice-based design research methods that I wished to introduce. Recognising the potential to use adapted practice-based design research methods more intentionally, this third-year introductory project was altered over a five-year period through the use of participatory action research. The action research was participatory because, as part of the same process, I was also researching my own design practice alongside the students who were researching their design practices. Learning from my practice-based design research influenced the adaptation of teaching methods for students and vice versa.

In this way, new methods were added into the 'Manifesto' project in response to reflections upon 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 helped to unpack the impact on students and the institution. By adapting the practice-based design research methods to teach these undergraduate students, the aims were similar to those for my own research: i.e. to encourage a more conscious, critical and confident practice. However, the aims also diverged in order to address the university's decolonial and transformative mission. This created, within an Ubuntu philosophical context, what Achille Mbembe calls a 'pluri-versity' as opposed to the singular worldview of the 'uni-versity' [1: p. 32]. He describes this as:

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.' [1: p. 37]

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 has been categorised into different modes. Christopher Frayling differentiated it by the relationship to design in his frequently quoted triumvirate of 'research *into/ through/ by* design', this being in a similar vein to the writings of Bruce Archer [5, 6]. Nigel Cross' taxonomy of design research was framed by different focuses: i.e. '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 [7].

These different categories of design research obviously overlap with each other in their aim, outcomes and methods. Ray Lucas 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' [8: p. 43]. These loops are also described by Malins and Gray as a process in which reflection *on* past practice moves to reflection *in* the present through insight and questioning and, lastly, reflection *for* future needs and hopes [9]. This cyclical model of design research builds upon Donald Schon's double loop of 'reflection-in-action', connecting to prior experiences, critically responding to action within the process, and 'reflecting-on-action' by analysing one's process, and exploring reasons and consequences [10]. Leon Van Schaik [11], Richard Blythe [12] and Laurene Vaughan [13] also speak of cycles of research wherein 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 [13: p. 16].

These looping processes of practice-based design research began to be employed in postgraduate architectural programmes at several institutions at the end of the twentieth century, including the Royal Melbourne Institute of Technology (RMIT; now RMIT University) in Australia through their Masters by Design and later PhD by Design programmes. Murray Fraser has outlined the varied approaches by groupings in the United Kingdom, Europe and Australia, notably contrasting the reflective practitioner-oriented RMIT model with the more academic historical and theoretical approach of Jonathan Hill and others from the mid-1990s in the Bartlett School of Architecture at University College

London [14]. Subsequently in some continental European countries, and largely in response to the Bologna Declaration, architectural schools became incentivised to start doctoral programmes, and in doing so they too began to grapple with what doctoral architectural research could or should entail, exploring various approaches to practice-based or design-driven research.

Graduates from these postgraduate programmes say that they have become increasingly conscious and self-aware, and that their practices have thus been transformed [15, 16]. One reported that practice-based design research entailed 'becoming conscious of our processes ... what had been instinctive and intuitive became conscious and accessible' [15: p. 215] Another graduate of the RMIT model claimed they had gained 'greater self-awareness of critical preoccupations in practice'. Leon Van Schaik, the pioneer of RMIT's practice-based design research programme, quotes Robert Keegan when talking 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' [15: p. 14].

The looping reflective cycles of practice-based design research in these kinds of postgraduate programmes focus inwardly and introspectively upon 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. Donna Haraway terms this as 'critical reflexivity' or 'situated knowledge' [17: p. 575], reinforcing Karen Barad's concept of 'diffraction' [18: p. 168], in that it exposes patterns of difference and asks questions about the conditions that produced the original works [18, 19]. 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. In this sense, diffractive research methods can also help to reveal the cultural and socio-political context of students' practice in South Africa, in contrast to reflective methods that 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 the world. Jane Rendell calls this 'critical spatial practice' [20: p. 92], following Michel de Certeau's identification of practices whose tactics interrogate not only the context but also

the limits of their disciplines [21]. As Iain Borden notes in writing about the value of artistic/architectural 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. [22: p. 221]

Therefore, in our adaptation for Wits University, the more reflective practice-based design research methods were used to address the differences between postgraduate and undergraduate students, while more diffractive techniques were included to focus on the students' institutional and South African context. The adapted methods hence had both a personal and social relational focus, embracing the South African philosophy of Ubuntu, which entailed students in unearthing personal investigation into their past practices and spatial memories – essentially who 'I am', who 'we are', set within the institutional culture and within the larger architectural field. Institutional and epistemological boundaries were thus expanded by bringing other cultures, knowledge systems, and ways of being into Wits University (Figure 1).

While the added diffractive research focused on the 'situated knowledge' of the students, the reflective practice-based design research methods were altered to suit the undergraduate context. What, then, are the key differences between postgraduate and undergraduate programmes in what we were addressing? Three specific points were identified.

Firstly, the use of these methods in postgraduate programmes is to evidence already established mastery. In both the RMIT and former Adapt-R model, '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' [23: p. 20]. Clearly, undergraduate students do not meet such criteria. Third-year architecture students typically only have two years of student design practice, being at the beginning of their process of developing

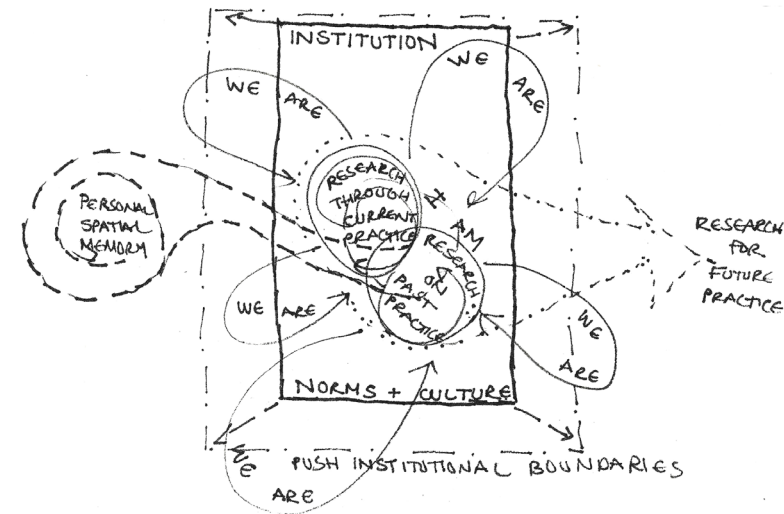


Figure 1:
Diagram showing the methods of practice-based design research for undergraduate architectural students at Wits University in the context of Ubuntu philosophy [Drawing by the author].

architectural mastery. Secondly, postgraduate practice-based design research is typically undertaken at doctoral level over three to five years, often with checkpoint sessions twice a year: for example, the Practice Research Symposia (PRS) in the RMIT and former Adapt-R model, or the conferences held in the Community for Artistic and Architectural Research (CA²RE) model. In the case of the Wits University undergraduate students, the shorter research duration involved completing the introductory 'Manifesto' project over two weeks at the beginning of the academic year and then returning to it at the end of the year through a reflective 'Manifesto Revisited' essay. Research focus groups were also held after graduation, forming another point at which the process was reflected upon. Thirdly, postgraduate programmes tend to focus on the design research work within the wider field of professional practice, whereas implementation at undergraduate level instead need to situate the student in relation to the institutional context, as well as introducing them to multiple and diverse design worldviews. Hence, by accepting these changes to practice-based design research methods, it better suited the personal, philosophical and educational context of South African undergraduate students, and could encourage a more conscious, critical and self-aware design practice.

Social reflective dialogue

The methods that were adapted for undergraduate students at Wits University included the *(De)constructed Archives* and the *Communities of Practice Archives*, both of which had originated in the RMIT and former Adapt-R doctoral model [24–26]. The concept of a *(De)constructed Archive* of personal design practice was referred to by Adapt-R as ‘an individual practitioner’s comprehensive research into his [sic] practice: each practitioner as such represents a case study’ [27: p. 55]. Blythe further used the term ‘venturous practice case studies’ to refer to this archive also being a record that enables new futures for the practice [24: p. 67]. Within the RMIT model, the practitioner’s case study is divided into three orders of knowledge: the first order groups the practitioner’s projects into similar preoccupations or fascinations; the second order makes apparent ‘transformations and shifts in practice’ by reflecting upon these grouped projects; and the third order positions the practitioner ‘within a field of other, parallel, adjacent or contrasting case studies’ [27: p. 55].

At postgraduate level, the *(De)constructed Archive* covers the entire body of professional practice, in many cases spanning decades. Postgraduate researchers therefore start with a broader view of practice and from that they select the projects to examine more carefully:

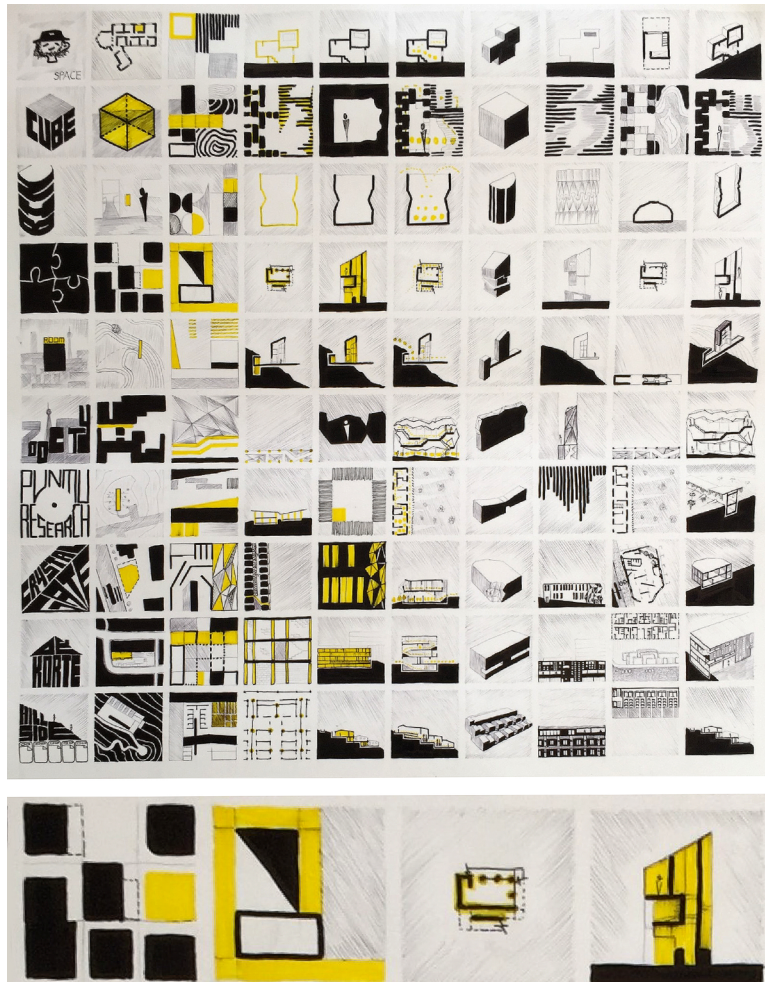
The research is a journey of unfolding this line, revealing its intrinsic capacity to become architecture. We will travel through spatial histories and mental maps, the many projects it has conceived, the praxis it has developed and knowledge fields of special interest. We travel by drawing what we see, 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. [28]

When it came to Wits University, the *(De)constructed Archive* and the *Communities of Practice Archive* were embedded in the aforementioned project titled ‘Manifesto’, which takes place at the beginning of the third-year Design and Theory course. It consists of a short two-week project that serves as the introduction to the course and sets out the groundwork for exploring



Figure 2:
‘Manifesto’ poster
of 10x projects from
first and second
years drawn in 10x
categories which
reveals this student’s
preoccupation with
the relationship
of building to
landscape and
nature [Drawings by
student no. 7641-
2019].

Figure 3:
'Manifesto' poster
which shows
another student's
preoccupation with
the relationship of
light and dark, solid
and void [Drawings
by student no. 7161-
2019].

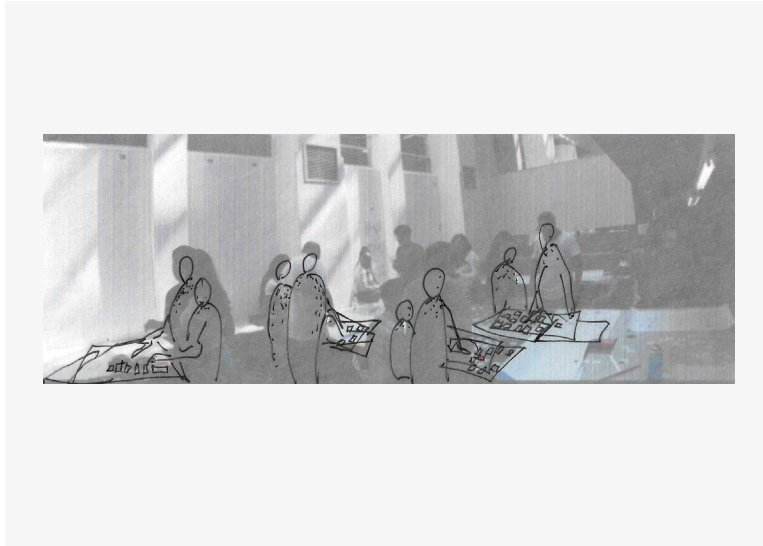


the fascinations and preoccupations in the subsequent design projects. It can be compared to the first PRS session and first order of knowledge in the RMIT model, when students reflect on their body of work [9]. There are then typically three or four design projects during the academic year, allowing students ample opportunity to explore and reflect upon different briefs, programmes, and sites. At the end of the year, students revisit their work through the 'Manifesto Revisited' essay, showing evidence of how they explored their initial fascinations and preoccupations through their design work. Although similar in intent to the PRS sessions or CA²RE conferences, the self-scrutiny for the Wits University students only takes place during the course of a single year.

For these undergraduate students, they have already completed approximately ten project during first and second years on the programme, and hence it is all those projects which are then (de)constructed in the 'Manifesto' project to form their personal archive. To aid them in analysing their projects, they are tasked with drawing analytical sketches or vignettes of their past project's responses to the following ten categories: site, geometry, structure, enclosure, circulation, massing, façade, and also different spatial relationships: public/private, served/servant spaces, and major/minor spaces. These sketches are purposefully kept small (5cm x 5cm) and drawn by hand in order to encourage students to focus on the singular element that defines each category. The outcome is therefore approximately ten projects, each with ten category drawings, making a matrix of 100 drawings (Figures 2 and 3). Students were then required to reflect upon this matrix of drawings, trying to extract the preoccupations or fascinations that can be traced across their projects.

The tasks and categorisations within the 'Manifesto' project helped undergraduate students to unearth tacit knowledge about their emerging design practices. However, some students undoubtedly struggled to find themes or fascinations within their work. Therefore, a socially reflective dialogue was then introduced to the *(De)constructed Archive* as part of the project, echoing one of the principles of Ubuntu philosophy that 'through participation and interaction with others we see ourselves' [4: p. 5]. In other words, it helped to reveal a student's own fascinations and preoccupations by interacting with other students. This happened on two levels; firstly, discussing their thoughts and findings compelled students to more clearly articulate their ideas, especially in response

Figure 4:
Pairs of students in
the Wits University
design studio
holding socially
reflective discussions
with each other
[Still-frame taken from
a film recording by
the author, and then
anonymized].



to questions. Secondly, by seeing how their friend's ideas differed from theirs, it allowed them to better express their own thoughts. It was a similar process to the social reflection of the RMIT model, in which the practitioner-researchers discuss their ongoing research in the PRS sessions: 'learning that takes place in non-hierarchical and multiple iterations and exchanges between body, world and language and by social means' [12: p. 61]. Yet it also differed in that instead presenting to a bigger group as in the PRS sessions, the Wits University students discussed their findings with their tutor and one other student. This more intimate process social reflection however helped to build confidence amongst students, especially those who struggled to articulate themselves.

To show the Wits University students the type of dialogue that I wanted them to engage with, I carried out a social reflective dialogue with a colleague and a few students in front of the class, reflecting upon my own *(De)constructed Archive*. This set the scene, highlighting the type of engagement with each other that the task required. Similarly, within the classroom setting, watching a colleague engage critically with my design research was instructive for the students. My *(De)constructed Archive* was presented as a personal narrative of institutional influence between the two departments I had studied at: the School

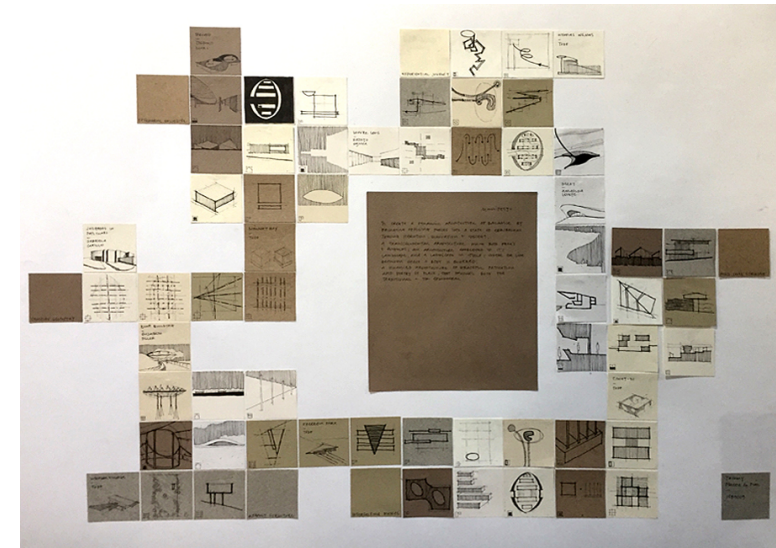


Figure 5:
'Manifesto' poster
of 10x projects and
10x categories but
now arranged in
a narrative format
[Drawings by student
no. 0098-2020].

of Architecture and Planning at Wits University and the Faculty of Architecture at the University of Porto. Students then repeated the process by discussing their findings, collaborating and helping each other (Figure 4).

As a result of this exercise, the students' posters moved from being merely matrixes of their fascinations and preoccupations to telling personal stories and constructing narratives about their design journeys (Figure 5). The outcomes of the *(De)Constructed Archive* project undoubtedly improved due to this added socially reflective dialogue, since students now found their research to be more meaningful and illuminating. Within a South African architectural undergraduate class it also promoted social cohesion amongst students from very diverse backgrounds, tapping into Ubuntu philosophy by promoting 'togetherness, coexistence, respect and cooperation amongst students' [4: p. 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 their *(De)constructed Archive*; let us call him 'Funani' (a name that means 'searching' in Zulu). He could not find any particular way of seeing or fascination, even after discussions with colleagues and me as his tutor. Drawing from my own discoveries about one aspect of my design practice – by which I had realised that my emphasis on colour, materiality, texture, and pattern was rooted in childhood memories of playing with fabric at the foot of my seamstress mother's sewing machine – I therefore encouraged 'Funani' to reflect upon his spatial memories as a young boy. He duly did so by recalling his early spatial memories of living in a Zulu hut, and then realising the parallels with some of his design projects (Figure 6):

I spent more than ten years staying in a Zulu hut. It shifted my thinking ... The Zulu hut, according to its design, [only has] a short door which is multi-functional. The door, firstly, works the normal way for all doors 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 [the lack of] natural light and ventilation. [29]

Following the fruitful experience of 'Funani' with spatial memory, a *Personal Spatial Narrative* exercise was added to the *(De)constructed Archive* in the following year. Students were thus asked to compare their *(De)constructed Archive* to an early spatial memory to gain a better self-awareness of their particular ways of seeing. 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' [30: p. 109]. Through the *Personal Spatial Narrative* many students realised, as 'Funani' did, that their ways of seeing and designing were embedded in communitarian and familial spatial experiences from indigenous cultures. In this way, Ubuntu not only facilitated ontological diversity but also validated all these ways of being, the

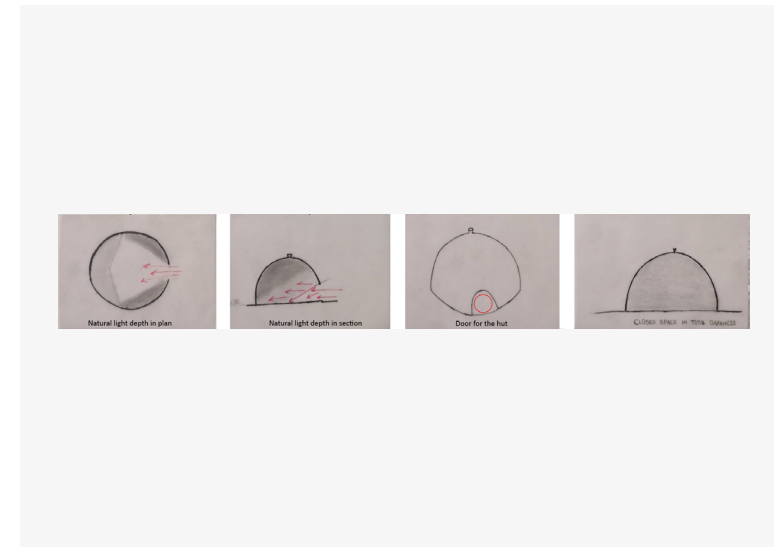


Figure 6:
Personal spatial
memory drawing
by Funani recalling
growing up in a
Zulu hut [Drawings
by student no. 1902-
2021].

personal within the communal, as being relevant for the students' development of their design practice.

Notably, the idea for the *Personal Spatial Narrative* was not adapted from postgraduate programmes such as the RMIT model. Instead, it arose spontaneously from reflection on the research process by myself and by the students. However, it does share some similarities with Van Schaik's idea of accessing spatial memories through 'eidetic recall', allowing the architect to become aware and conscious of their 'mental space', thus forming an integral part of their spatial intelligence [26: p. 41, 47]. There are also parallels with Gaston Bachelard's concept of primal images:

.... each one of us, then, should speak of his [sic] 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. [31: p. 11–12]

A similar method is the 'memory-sketching' of Cooper Marcus, who asks students to draw spatial or environmental memories revealing 'environmental autobiographies' [32: pp. 74–82]. The object of this exercise is to unearth a sense of identity and reveal students' spatial values and biases. Marcus has noted the transformational effect the project had on her students, with one student saying: 'This is the first time in my whole student experience that anyone has said my life is of any consequence' [33: p. 35]. James Thompson writes that becoming an architect is a meaning-making process in which the most effective strategy is narrative, such that 'personal stories find new ways of connecting past, present and future selves' [34: p. 2]. He regards narrative as how students both evoke psychological resilience and locate their personal identities within their social context.

Returning to the case of 'Funani', he spoke of trying to escape that personal memory, of how his design projects embrace light rather than the darkness he had experienced growing up the Zulu hut. Students hence view their spatial memories in a binary manner, seeking to either stop the negative traces or reinforce the positive ones. The revelatory moment for 'Funani' could thus be read as the modern colonialised institution overriding traditional spatial experience, which is why he felt that his design practice is breaking with that tradition. This work of students in understanding the principles that underpin their own spatial memories, and how these can be explored positively in contemporary design projects, is obviously not completed in their third year of studies, but is something which is ongoing. As many students noted, the (De) constructed Archive with its *Personal Spatial Narrative* was simply the start of a reflective journey of learning about who they are as designers. As one of them explained:

So I think it's good to have that kind of 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; either way, the answer is still beneficial to you. [29]



Figure 7:
Personal spatial memory drawing and resultant manifesto that starts by saying it is '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' [Drawing and text by student no. 2260-2023].

As another expressed it in his manifesto, 'I want to take this theme forward and see how far I can push it' (Figure 7).

The *Personal Spatial Narrative* is thus transformational for students who had, until that moment, viewed their past spatial experiences as not relevant to their journey to become an architect. Each student's 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 to provide a counterpoint to an institutional culture that was hitherto steeped in colonial and Apartheid legacies, where only the Eurocentric worldview was valued. Students are introduced to each other's spatial ideas, often very different from their own, creating through acts of 'epistemic disobedience' [35] a version of Mbembe's notion of 'pluriversity'.



Figure 8:
Some works by
'Nomvelo': the
personal spatial
memory of her
bunk bed (left);
her sketches of
Mapungubwe
Interpretation
Centre by Wits
alumni Peter Rich
(middle two); the
drawing (right) of
her exploration
of the inside/
outside theme
for a project for a
new South African
parliament under
a tree, echoing
how traditional
leaders meet to
discuss important
community matters
[Drawings by student
no. 3992-2022].

Institutional influence

The third order of knowledge in the RMIT model is that of situating the work within a field of other practices that share similar preoccupations. These are termed 'Communities of Practice' and are intended to 'expand on the idea of a literature search to establish a field of knowledge ... [among] the researcher's immediate creative community' [24: p. 67]. In doing so, the 'Communities of Practice' allows the student to 'differentiate their own research from that of seemingly neighbouring peers: divergence and dissent become as important as possible confluence and resonance' [27: p. 58]

For the Wits University students, what we called the *Communities of Practice Archive* was adapted at undergraduate level to focus specifically upon institutional influence and to question the concept of 'mastery' within the South African architectural profession. The *Communities of Practice Archive* was implemented in a step-by-step manner like the *(De)constructed Archive*. Students were tasked with identifying 10x projects of architects they either aspired to or whose projects had proven to be instructive precedents for their own design projects. Once again, the students were asked to redraw these other projects through small vignette sketches exploring the same 10x categories as before. However, they needed to include some African practitioners, and especially some South African architects – and indeed Wits alumni – within their

Communities of Practice Archive, in order to understand a more local way of practising. This prompted the students to engage critically with the particular architectural culture of Wits University, by situating themselves either within that culture or in counterpoint to it. This was done because, for students, it is hard to see clearly the educational imprint of their own institution. In my own case, I could only understand the culture of Wits University when studying at the University of Porto, a very different European institution.

Some of the students felt there was a close correlation between their architectural fascinations, the architectural culture of Wits University, and their early spatial memories. One student, who we shall name 'Nomvelo' (meaning 'mother of nature' in Xhosa), wrote in her 'Manifesto' document:

I instinctively relooked 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 [responds] to and [resembles] the physical context in which it's built. 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 that 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. [29]

At the end of the year, in her 'Manifesto Revisited' reflective essay, 'Nomvelo' noted how her initial idea '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' [29] Her project sketches reflect those explorations (Figure 8). She thus expresses the Ubuntu sentiment of 'I am because you are' because she framed her design practice both in relation to her past spatial memories and also to part of Wits University's architectural community.

Questioning mastery

When discussing which South African architects were influential for students in the *Communities of Practice Archive*, some commonplace names – mostly white male architects – frequently came up. However, the students couldn't easily think of any local women architects or architects of colour. Why, some 30 years after the end of Apartheid, are the award-winning architects whose mastery is peer-reviewed and acknowledged by awards and publications still mainly white men? When looking at the Awards of Excellence handed out by the South African Institute of Architects (SAIA) over the last two decades, the same pattern shows up (Figure 9). White male architects were also overrepresented in the jury panel composition over the same period, except in the most recent editions of the awards. The reasons for this overrepresentation might well be because white men constitute 59% of professional architects registered with the South African Council for the Architectural Profession, according to their 2023 data – a statistic

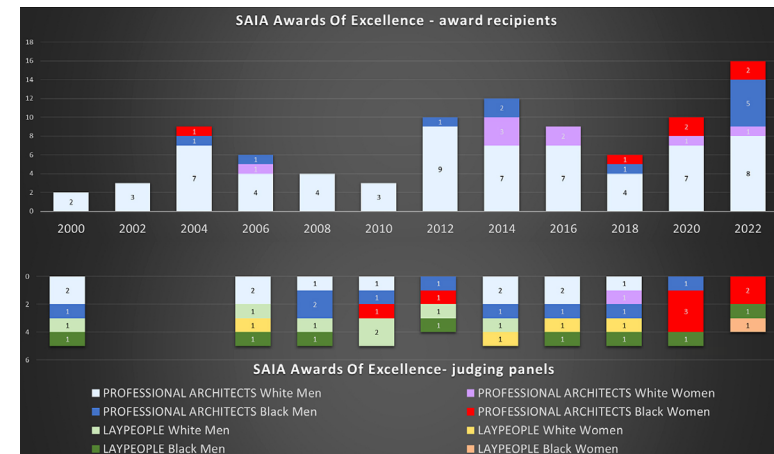


Figure 9: Graphs comparing the racial and gender breakdown of the South African Institute of Architects' Awards of Excellence in terms of recipients (top) and jury panels (bottom) as based on various SAIA sources [Graphs compiled by the author].

which is problematic when compared to the latest South African Population Census in 2022, which recorded white men as comprising only 3.5 % of the population [36].

Why are these statistics important for students and architectural educators in South Africa? The typical undergraduate class at Wits University 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 requires students to question the mastery depicted by the SAIA Awards, especially as it emanates from such a tight circle of membership, panels and award recipients. It directly compels students to interrogate what kind of mastery they really wish to include within their *Communities of Practice Archive*.

In this way, this exercise contrasts the students' *Personal Spatial Narrative* with the institutional culture and with the broader professional scene within South Africa. In this context, the *Communities of Practice Archive* becomes a tool for transforming and decolonising the institution and the profession. One student wrote about pushing back against the architectural precedents he faced in the Zimbabwean city where he was raised:

Growing up in a colonized 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, [as 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. [29]

This critical questioning of whose mastery, and what mastery, overlays a critical lens onto the Ubuntu philosophy that forms a key part of the project. It questions the influence not only of a student's personal community and the Wits community, but also the larger architectural profession and the South African socio-political context on their design development.

Have students become more conscious, self-aware and critical as a result?

Adapting the practice-based design research methods of the *(De)constructed Archive* and the *Community of Practice Archive* for the Wits University students highlights the disparity between postgraduate and undergraduate levels. Firstly, whereas the former, and especially doctoral students, evidence their established mastery through this type of research, undergraduates have to gradually build up their abilities by developing a more conscious, critical and confident practice.

During the focus group discussions with teaching staff, one tutor expressed feeling that students were not mature enough in their design practice at the beginning of their third year of studies as their work was a bit 'thin' when compared to the architects' projects they were analysing [29]. This comment hit the crux of the matter: can undergraduate students with a 'thin' body of work develop a more conscious, self-aware and critical practice through these adapted design research methods?

The lack of practice experience 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* when they had only undertaken a few design projects up till that point. Discussing their archives with other students assisted them in understanding their work more clearly and made the class realise the rich diversity across the cohort. Yet, despite adding in this socially reflective dialogue, the difficulties experienced by some students due to their 'thin' body of work remained. This is what led to one of the real breakthroughs by introducing the *Personal Spatial Narrative*. By looking back and reflecting on early spatial memories, students like 'Funani' and 'Nomvelo' became able to articulate their spatial worldviews more clearly and to express those through their design projects. The emergence of these diverse spatial worldviews was instructive in a classroom setting, creating in a very real way the 'pluriversity' and contributing to the task of decolonising the curriculum. As another tutor stated:

What I do think is quite valuable, and this is maybe where they get quite passionate, is when they have to personalise ... [a] 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 is ... quite powerful for them maybe it starts giving them permission to take their practice of architecture more seriously, that there are patterns they are starting to develop. [29]

Similar sentiments were expressed by students, who recognised that despite their 'thin' body of work at the start of their third year, the 'Manifesto' project as coming at the right time in their design development. As one wrote later:

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' [i.e. the work experience year after third-year] and then going into Honours again. [29]

In South Africa, following a three-year undergraduate degree, students have to work in an architectural office for a year before returning to university to complete their Honours and Professional Masters degrees in Architecture. The value of the 'Manifesto' project towards the end of their undergraduate degree is in prompting the students to think about their design practice and potentially find an employment position in their 'year out' that fits with their interests. This 'year out' in professional practice also allows students to explore those newly unearthed fascinations before returning to postgraduate study. Students hence spoke of the 'Manifesto' project providing a reference point or foundation for being able to push boundaries further during their 'year out' [29].

Other students were more sceptical about the impact of the 'Manifesto' project on their design practice, at least initially. Yet, even they when coming back to Wits University a year or two later for postgraduate study, tended to express an appreciation for having taken that first step in their third year towards a more conscious, self-aware design practice. One particularly hesitant student, who we shall call 'Thomas' (after 'Doubting Thomas'), had written in his 'Manifesto' document at the beginning of third year (Figure 10):

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. [29]

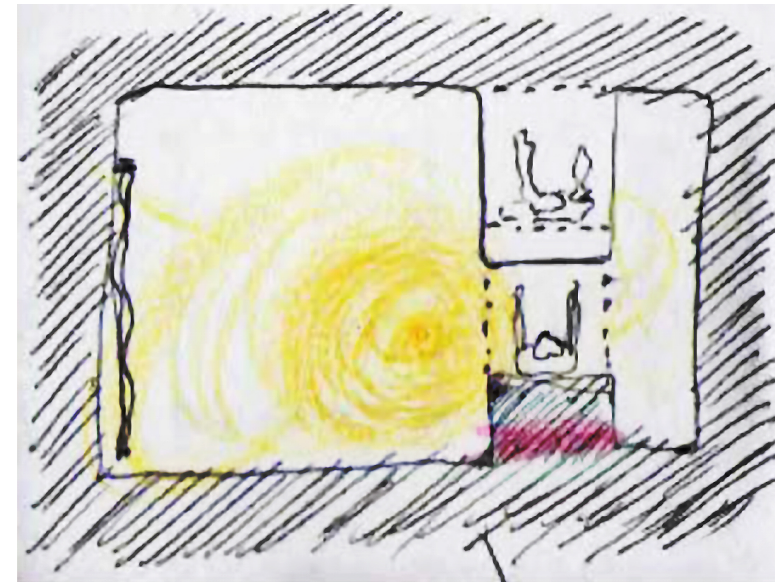


Figure 10:
Personal spatial
memory drawing of
his childhood bunk
bed by 'Thomas'
[Drawing by student
no. 6755-2022].

By the time of the 'Manifesto Revisited' essay at the end of third year, however, 'Thomas' was speaking of having grown 'aware of [his] biases and inclinations' and that he now 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' [29]. He displayed real self-awareness by articulating the desire for a project to be expressive of all the living things who inhabit or use it. Finally, two years later, when back as a postgraduate student, the scepticism of 'Thomas' had abated. He noted although the 'Manifesto' and 'Manifesto Revisited' at the time had felt more like 'manufacturing interests rather than unearthing them ... [which] defeated the purpose', now he realised that it was paying 'dividends in self-awareness and design response ... [by] seeing patterns re-emerging in Honours projects' [29].

In assessing the impact of these adapted practice-based design research methods, it is clear from feedback from focus groups that the Wits University students had indeed become more conscious and self-aware. They commented that they better understood themselves as designers, and has gained knowledge about what they liked and what type of architect they wanted to be [29]. 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. The development of conscious self-awareness and critical practice was evident to different degrees in most students. Interestingly, the ways in which this self-awareness contributed to new levels of confidence in their design voices were particularly evident in those students who had previously struggled with self-confidence. Hence, even though the white male students would speak eloquently about their newly gained self-awareness as designers, they did not mention the issue of confidence at all. This absence was noted, especially since other groups of students did talk at length about having built up their confidence, with one black female student noting:

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. [29]

Through these practice-based design research methods, it became clear that for this student and many others they were able to realise that their opinions mattered, and therefore they grew in confidence. However, it was also evident that this was only the first step in their journey towards a fully conscious, self-aware design practice. Undergraduate students in this regard cannot compare to postgraduate doctoral students. Nonetheless, they too were gaining confidence and critical agency through their diverse design voices and spatial histories.

This sense of agency also contributed to a critical view of Wits University as an institution, particularly the architectural culture into which students were being indoctrinated both within the institution and outside of it within the architectural

profession. The *Communities of Practice Archive* help to question existing mastery in South Africa's architectural profession by expanding the canon beyond those certified by narrowly defined awards, judged predominantly by white male architects. For many students, this was revealing; they had regarded the architectural culture within which they were studying as normative, never having critically questioned it. They also realised the extent to which the professional architectural culture in South Africa remains untransformed in terms of gender and race. Thus, the *Communities of Practice Archive* at the undergraduate level at Wits University should be seen as a political tool to critique the institution and the profession, and to situate the student either as for or against this existing architectural culture.

In conclusion, adapting the practice-based design research methods at undergraduate level rather than postgraduate level, and doing so within the South African context, created both a personal and institutional impact. On the personal level, each student took steps towards a more conscious, critical, self-aware and confident design practice, according to their journey of becoming an architect. However, they were also actively building up a Ubuntu-style 'pluriversity' and participating in the transformative and decolonial mission of the post-colonial, post-Apartheid and post #FeesMustFall version of Wits University, by contributing their diverse spatial histories and ways of knowing and being to its architectural curriculum.

Competing Interests

The author has no competing interests to declare.

References

1. Mbembe A. Decolonizing the university: New directions. *Arts and Humanities in Higher Education*. 2016; 15(1): 29–45. DOI: <https://doi.org/10.1177/1474022215618513>
2. Ramose MB. The philosophy of ubuntu and ubuntu as a philosophy. In: Coetzee PH, Roux APJ (eds). *The African Philosophy Reader*. Routledge; 2003: 270–280.
3. Mbiti JS. *African Religions and Philosophy*. Heinemann; 1969. Available at: <https://go.exlibris.link/6VwFmJfn>
4. Ngubane NI, Makua M. Intersection of Ubuntu pedagogy and social justice: Transforming South African higher education. *Transformation in Higher Education*. 2021; 6. DOI: <https://doi.org/10.4102/the.v6i0.113>
5. Frayling C. Research in Art and Design. *Royal College of Art Research Papers*. 1993; 1(1).
6. Archer B. The nature of research. *Co-Design: Interdisciplinary Journal of Design*. 1995; 6–13.
7. Cross N. Design research: A disciplined conversation. *Design Issues*. 1999; 15(2): 510.
8. Lucas R. *Research Methods for Architecture*. Hachette UK; 2016.
9. Malins J, Gray C. *Appropriate Research Methodologies for Artists, Designers, and Craftspersons: Research as a Learning Process*. Malins and Gray; 1995.
10. Schon DA. *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. Proquest/CSA Journal Division; 1987.
11. Van Schaik L. *Building a Culture: Reflections on Three Decades of Design Practice Research at RMIT*. Uro Publications; 2020.
12. Van Schaik L, Blythe R. What if design practice matters? In: Fraser M (ed.), *Design Research in Architecture: An Overview*. Ashgate; 2013: 61–69.
13. Vaughan L (ed.). *Practice-based Design Research*. Bloomsbury; 2017. DOI: <https://doi.org/10.5040/9781474267830>
14. Fraser M. Introduction. In: *Design Research in Architecture: An Overview*. Ashgate; 2013: 1–14.
15. Van Schaik L. *Mastering Architecture: Becoming a Creative Innovator in Practice*. Wiley; 2004.
16. Nilsson F, Dunin-Woyseth H. Research as a driving force for change: On triadic practice in architecture. *Reflections*. 2014; 17: 15–27.
17. Haraway D. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*. 1988; 14(3): 575–599. DOI: <https://doi.org/10.2307/3178066>
18. Barad K. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press; 2007.
19. Barad K. Diffracting diffraction: Cutting together-apart. *Parallax*. 2014; 20(3): 168–187. DOI: <https://doi.org/10.1080/13534645.2014.927623>
20. Rendell J. Tendencies and trajectories: Feminist approaches in architecture. *The SAGE Handbook of Architectural Theory*. SAGE Publications; 2012: 85–106. DOI: <https://doi.org/10.4135/9781446201756.n6>
21. Certeau M de. *The Practice of Everyday Life*. University of California Press; 1984.
22. Borden I. The value of arts and humanities research to life in the UK. *Arq*. 2008; 12(3–4): 216–222. DOI: <https://doi.org/10.1017/S1359135508001140>

23. Van Schaik L. The Design Practice Research Model of ADAPT-r. *ADAPT-r Exhibition Book*. University of Westminster; 2016: 19–25. Available at: <https://e.issuu.com/embed.html#3375798/41406014>
24. Blythe R. ADAPT-r : An approach to practice-based PhD training in architecture design and art. *ADAPT-r Exhibition Book*. 2016; 65–72. Available at: <https://e.issuu.com/embed.html#3375798/41406014>
25. Blythe R, Stamm M. Creative practice research glossary. In: Verbeke J (ed.). *The ADAPT-r Creativity Book*. KU Leuven University; 2017: 335–348. Available at: <https://e.issuu.com/embed.html#3375798/48555043>
26. Van Schaik L. *Spatial Intelligence: New Futures for Architecture*. Wiley; 2008.
27. Blythe R, Stamm M. Doctoral training for practitioners: ADAPT-r (Architecture, Design and Art Practice Research), a European Commission Marie Curie Initial Training Network. In: Vaughan L (ed.), *Practice-Based Design Research*. Bloomsbury; 2017: 53–64. DOI: <https://doi.org/10.5040/9781474267830>
28. Stangeland SH. *Performing relational design - PRS Europe*. RMIT University Practice Research Document. 2016. Available at: <https://practice-research.com/presentations/prs-europe-april-2016/performing-relational-design>
29. Felix S. Author's private collection of records consisting of student and staff interviews as well as film recordings/photographs/scans of teaching sessions, focus groups, students' design project work, etc.
30. Hlatshwayo M. Decolonising the South African university: First thoughts. *SAJHE* (Stellenbosch University). 2023; 37(3). DOI: <https://doi.org/10.20853/37-3-4854>
31. Bachelard G. *The Poetics of Space*. Beacon Press; 1994.
32. Sarvimäki M. *Case Study Strategies for Architects and Designers: Integrative Data Research Methods*. Routledge; 2017. DOI: <https://doi.org/10.4324/9781315707693>
33. Marcus CC. Environmental autobiography. *Room One Thousand*. 2014; (2): 12.
34. Thompson J. *Narratives of Architectural Education: From Student to Architect*. Routledge; 2019. DOI: <https://doi.org/10.4324/9781351121873>
35. Mignolo W. Epistemic disobedience and the decolonial option: A manifesto. *TRANSMODERNITY: Journal of Peripheral Cultural Production of the Luso-Hispanic World*. 2011;1(2). DOI: <https://doi.org/10.5070/T412011807>
36. South African Government. *Census Statistical Release*. 2022: 1–113. Available at: https://census.statssa.gov.za/assets/documents/2022/P03014_Census_2022_Statistical_Release.pdf

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