Towards a dialogical design studio: Mediating absurdities in undergraduate architectural education in South Africa

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The design studio is a key component of architectural education. In South African universities, the design studio tends to be dominated by what I call the Apprenticeship Studio. This teaching approach establishes the studio staff as studio 'masters' who train students to become architects by transferring their practice-based skills and knowledge to the students. This process of training is further complicated by the good intention of the Apprenticeship Studio to often attempt to 'solve' the socio-spatial problems of post-apartheid South Africa. This paper argues that these projects are counter-productive in that they delimit and undermine students' opportunities to become critical and creative spatial thinkers who might better address the socio-spatial 'absurdities' that South Africa foregrounds. As a counter point I suggest that a Process Studio that does not posit normative 'building' design procedures as its goals should be emboldened and maximised to develop stronger educational outcomes for students rather than limiting pedagogy to professional training. The Process Studio aligns itself with the pedagogic value of creativity, the outcome of which aims to achieve: independence and risk-taking; flexible research-based strategies or problem-defining development for design; experimentation and imagination building; and the increased ability to make unforeseen connections. To illustrate the potential of the Process Studio I make reference to a process-oriented project that has been running in the First Year design studio at the University of Cape Town. As a counter-point to this project, I also explore the Place-Making Studio which aimed in 2008 to engage students directly in the making of a water-point platform in an informal settlement in Hout Bay, Cape Town. These three kinds of studios, the Apprenticeship Studio (students design 'buildings' under the tutelage of practicing architects), the Process Studio (students explore creativity and spatial ideas through a dilatory process) and the Place-making Studio (students physically build a place) become a potential triad that constitutes the dialogical design studio. I argue that the dialogical design studio, engaging as it does with the somewhat contradictory kinds of design studios listed above, will not only best facilitate students' abilities to mediate the absurdities and contradictions of studying and working as an architect in South Africa at present, but will also prepare them for an increasingly fluid and unpredictable future for the profession. Key words: Architectural design education, South Africa, creativity, training

Zu einer dialogischen Entwurfslehre: Ein Vermittlungsversuch angesichts einer absurden Realität im Architekturgrundstudium in Südafrika

Die Entwurfslehre ist ein Hauptbestandteil des Architekturstudiums. In südafrikanischen Universitäten wird das Entwerfen oftmals wie in einem Auszubildendenverhältnis vermittelt. Dieser Ansatz sieht die Lehrenden als "Meister", die den Studenten ihre Praxiskenntnis und ihr Wissen vermitteln. Erschwerend kommt der gut gemeinte Versuch hinzu, im Rahmen dieser Ausbildung soziale und räumliche Probleme der Postapartheitaera lösen zu wollen. In diesem Artikel soll dargestellt werden, dass diese Projekte kontraproduktiv sind. Sie beschränken die Studenten eher darin, sich zu kritischen, kreativen Denkern zu entwickeln, die die absurden räumlichen Gegebenheiten des gegenwärtigen Südafrikas vielleicht besser angehen könnten. Als Gegenbewegung schlage ich eine prozessorientierte Entwurfslehre vor, in der es nicht darum geht, allgemeingültige Entwurfsmethoden zu vermitteln, sondern darum, den Studenten erfolgreichere Lernerfahrungen zu ermöglichen, statt die Pädagogik auf Berufstraining zu reduzieren. Diese Prozesslehre orientiert sich an der pädagogischen Bedeutung von Kreativität und hat folgende Ziele: Unabhängigkeit und Risikofreudigkeit; Forschungsarbeit hin zu flexiblen Strategien oder einem Entwerfen, dass Probleme definiert; Förderung von Experimentierfreude und Phantasie, und die wachsende Fähigkeit unvorhergesehene Verbindungen zu schaffen. Das Potential dieses Ansatzes möchte ich anhand eines prozessorientierten Projektes aufzeigen, dass im ersten Studienjahr des Architekturstudiums im Fach Entwerfen an der Universität Kapstadt gelaufen ist. Als Gegenpol dazu untersuche ich ein Entwurfsprojekt von 2008, dass sich dem Kreieren von spezifischen Orten widmet (place-making). Ziel es war, Studenten direkt in den Bau einer Plattform und Wasserstelle in einer stetig wachsenden unterversorgten Siedlung in Hout Bay, Cape Town einzubeziehen. Diese drei Lehransätze, die 'Ausbildung' (die Studenten entwerfen unter der Anleitung von praktizierenden Architekten), die 'Prozesslehre' (die Studenten untersuchen Kreativität und räumliche Ideen mittels eines ungerichteten Prozesses) und das 'Ort-schaffende' Studium (die Studenten arbeiten direkt an einem Ort), bilden eine mögliche Kombination, auf der die dialogische Lehre basiert. Ich behaupte, dass dieser Lehransatz, indem er die obengenannten, teilweise gegensätzlichen Ansätze kombiniert, nicht nur die Studenten am Besten befähigt, den Absurditäten und Gegensätzen zu begegnen, mit denen sie als Architekten im gegenwärtigen Südafrika umzugehen haben werden, sondern sie auch auf eine zunehmend fließende und ungewisse Zukunft im Berufsleben vorbereitet.

Schlagwörter: Entwerfen / Entwurfslehre in der Architektur, Südafrika, Kreativität, Schulung

There is an absurd disparity in wealth and poverty in South Africa. To be sure, this disparity is simply the disparity of the globalised world; what the West normally spreads out or displaces in space around the globe is compressed into a comprehendible geography in South Africa¹. Its effects are evident through stark juxtaposition in the built environment sometimes a few hundred metres apart, where architect-designed houses easily run at a cost of 30 000 times those built in informal settlements (see Figures 1 and 2).² There is also the absurdity of architectural design education; as the housing crisis unfolds – as it has for the past 100 years³ – why do I care to try and teach my First Year University of Cape Town architecture students about 'Form, Space and Order' so that they might design sensitive and sensible houses -largely-for the wealthy? Moreover, isn't theorising with my students about 'phenomenology'5 or 'radical tectonics' - in an attempt to radicalise these 'sensitive and sensible' designs - an absurd luxury in the face of overwhelming poverty? More to the point, is it really all that important that a design education should aim to empower individuals – the trajectory of a liberal education – to engage the world through their own subjectivity and creativity? Shouldn't classes rather be cancelled in a flood of volunteerism where we help put right the extensive degrading and degraded environments that are a mere ten kilometres from the university?

Of course, the technical answer to these rhetorical questions is that, as Foucault points out, there are a plethora of disciplining⁷ measures of the discipline, not least of which is that which subjects curricula to the scrutiny of accreditation panels where professional degree status is conferred contingent on engaging with issues along the lines of 'form, space and order', 'phenomenology' or 'radical tectonics'. To deny these would be to deny our students the right to one day legally call themselves 'architects'. Yet, an obvious strategy in educational terms is to use these states of absurdity – these juxtaposing desire lines and requirements – as a powerful pedagogic tool by setting up a dialogue between them through that key component of architectural education, the design studio. In other words, the underlying premise of a dialogical design studio would be to embolden three kinds of educational modes that I see as relevant to an architectural education in South Africa, namely, i) vocational training, ii) creativity and iii) direct social or technical engagement. It seems fair to assume that most people would agree to the idea of vocational training in architectural education whilst the other two modes might need further explication – as is done further below. However, even vocational training itself, and the way in which it is undertaken, is not value-free or unproblematic. Thus, the first section below attempts to outline the shortcomings of this approach currently predominant at UCT and how it, in my mind, flippantly 'resolves' the contradictions of the South African context. In fact, vocational training is so dominant at UCT, I would argue, that it tends to eclipse the possibility of either real social engagement or creativity in the design studio, creating more of a monologue than the potential of a dialogical pedagogy. The predominance of vocational training is in strong contrast to an emerging call for an increasing pedagogy of creativity in higher education where creativity is, arguably, '... now a necessity for all.'8 A pedagogy with creativity at its core aims to: prepare students for an increasingly fluid and unpredictable future; keep students open to cultural difference; increase interdisciplinary engagement and the creation of new knowledge, methods and ideas; and, ultimately, instill a love for learning and new ideas. Perhaps its greatest possibility, though, is to help students to shift from 'banking' knowledge to increasing their ability to think for themselves and explore beyond the horizon of limits.¹⁰ Within this mode, studio staff become facilitators of each individual's learning experience rather than teachers disciplining students into the discipline. However, if creativity tends to be focused on the individual, then ensuring students are engaged with social projects in their immediate environment would be a necessary counterbalance to this potentially narcissistic trajectory. Ultimately, though it is the dialogue between these three modes of training, creativity and social

engagement, that I believe can best prepare students for the contradictory and difficult reality that they will encounter in their near, post-education, future.

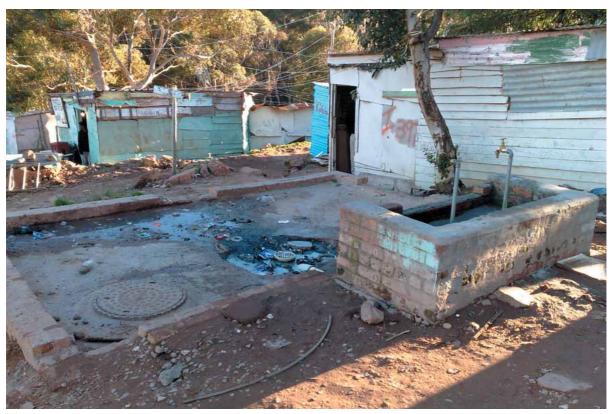


Figure 1
Derelict platform, Imizamo Yethu, Hout Bay, Cape Town (source: author).

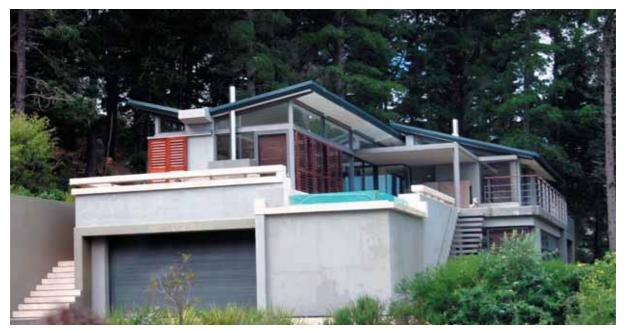


Figure 2 House Butterfly 1, Ryterplaats Estate, Hout Bay, Cape Town, by Archilab (source: author).

UCT's disengaging engagement: A moralising apprenticeship

Notwithstanding the obvious generalisation, the design studios in South Africa architecture schools are by and large, what I call, Apprenticeship Studios. As such, they promote higher education in architecture as a vocational training rather than as a component of liberal education.

Studio 'masters,' who mostly are practicing architects, bring their experience of their real-world projects (or even at times their actual real-world projects) to the design studio for the semester. For example, in 2008, three out of six¹¹ postgraduate design electives at UCT focused on redesigning the iconic modernist Werdmuller Centre¹² in an attempt to present developers with options other than proceeding with its intended demolition. In the virtual space of the Apprenticeship Studio students practise at being in the real-world – practise at practice – working reductively on the design of a 'building' as if it were literally to be built in the near future. Here, the studio master operates as an expert who transfers his 13 expertise to students largely because he already has the answers to the design 'problem'. These answers, or 'design solutions', are in effect typological and technical models that are the sum total of the studio master's experience and expertise in what is buildable and feasible in the city at that point in time. An example of the tendency to typological predominance occurred in 2006 where all six postgraduate design electives at UCT dealt with 'housing'. This typological delimitation establishes design as a technical problem where precedent of what makes good 'housing,' I would argue, forecloses the possibility of the development of mediated subjectivity. In other words, the design projects have little to do with the individual student and their subjectivity, but rather tilt their lances at weighty conditions extant in society itself, namely, 'housing' or 'development'. Not only does the Apprenticeship Studio disempower students by positing the 'solution' with the studio-master and 'precedent,' but its real world verisimilitude – the 'real' site, the 'real' users and clients, the 'real' limit of South Africa's building technology capabilities – to a certain extent, undermines risk-taking and invention as the default mode of the student architect. Whilst a canny lecturer might be able to frame these projects in a dilatory and liberating way, in my interpretation and experience, the studio master dominates as a moralising voice with normative values acting as a pretend watch-dog for the 'city,' the 'profession' and the 'public' who may or may not like or respond positively to the 'building'. Projects set in the Apprenticeship Studio remain largely "problemsolving" operations rather than open-ended idea derives. As such, they are teleological and product-focussed (research is done for the design) rather than dilatory and process-focused (the design produces the research). Knowledge remains static under the Apprenticeship Studio which is weighted more to a form of training in how to be a present-day architect rather than an education in critical and creative spatial thinking that I believe would better equip students for possible changes in the profession and the contradictions in society itself.

It is these contradictions – those absurdities listed at the beginning of this paper – that I believe present the biggest challenge for the Apprenticeship Studio. Despite good intentions, the Apprenticeship Studio becomes a problematic moralising force when it engages with the impoverished and degraded environments that are the legacy of apartheid's spatiality. Even if we temporarily suspend our disbelief and engage with these design studio projects as if they are 'real buildings' the work still presents theoretical difficulties. Firstly, the lingering spatial instrumentality of modernism – not without some effect as others have adequately argued¹⁴ – dominates the Apprenticeship Studio which proposes that architecture, or rather, buildings, can solve or fix the problems of society. Here the apprenticeship studio enacts the instrumentalist logic that produced apartheid space in an attempt to 'heal' or overcome apartheid space itself. Whilst it is accepted that the space of modernism and the space of apartheid are commensurable and symmetrical¹⁵ this problematic is not engaged with by the Apprenticeship Studio which proceeds largely through modernist design processes that still dominate the procedural methods of most South African architectural professionals. Here quantitative design 'determinants' such as site analysis and environmental forces become distilled through a process of 'problemsolving' that provides, for example, the 'solution' to the housing crisis. These reductive moves render the 'building' as an efficient totality, without gesture, desire, irrationality, or otherness. The possibility of a radical tectonics, nascent in the townships and within 'other' traditions, is smoothed out in the cauterizing logic of the rational problem-solving method whilst a moralising voice disallows any interest in form as unjustifiable in a world where so many have so little. To summarise: in following the efficiency model of modernism through the claim that buildings can heal social ills (engineering becomes social engineering), the Apprenticeship Studio enacts an ideology of limits that subjects not only the 'building' to its logic, but also the student and their desires and subjectivity in the process.

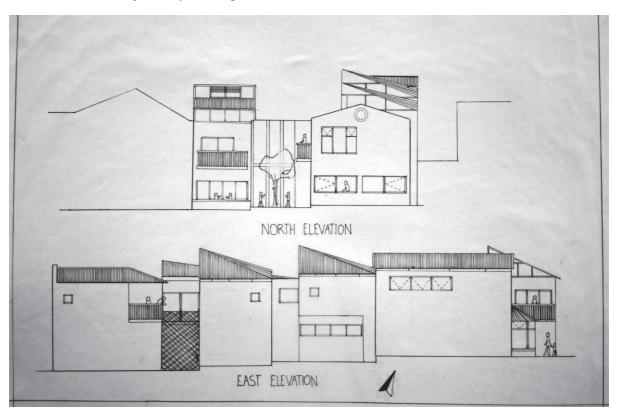


Figure 3 2005, UCT First Year architecture, design for a Refugee Centre, Woodstock, Cape Town.

The second theoretical difficulty presented by the Apprenticeship Studio is that its deployment of a normative architectural language and spatiality also betrays a normalising impulse that has underwritten much design work in places where tradition meets modernity.¹⁶ This is most apparent when the Apprenticeship Studio aims, for example, to 'solve the problem' of informal settlements by 'normalising' their perceived problematic socio-spatial conditions.¹⁷ Whilst the argument was made above that this normalising tendency is the result of the reductive processes of modernism's analytical and problem-solving mode, here we can interpret a darker, more sublimated motive that postcolonial positioning seeks to expose, namely, the tendency to produce 'the other' as 'same'. As such, the Apprenticeship Studio aims to 'normalise' difference by constructing normative design solutions using normative design materials and processes as undertaken in a 'normal' architectural practices. Obviously, to problematise modernity's incessant 'ordering of the space of otherness' as I am doing, is a complicated and dangerous position to occupy. Similarly, by valorising the architectonics, tectonics and spatiality of the informal (analysed as 'the informal vernacular'), we run the risk of romanticising poverty in the name of 'difference' whilst disempowering any chance of real socio-spatial investment for fear of perpetrating further cultural imperialism. Nevertheless, a certain criticality is required to understand how the Apprenticeship Studio tends to conclude with design products that appear to 'clean up' or order the space of otherness. As well-meaning as the Apprenticeship Studio's socially responsible projects are, they can be interpreted as devices that sublimate the psychic difficulties of the everyday contradictions that South Africa foregrounds (the absurdities mentioned at the beginning of this paper). These projects – housing schemes, community centres, schools – are indeed much needed infrastructural developments were they really to be built. Yet, by operating in the virtual space of the design studio these 'buildings' are essentially fantasies that resolve the contradictions of poverty, privilege and otherness in the white space of order. This 'white space of order' exists as the crystalline space of orthographic projection where the intensity of the informal, urban and 'other' environments are 'cleaned up' and rendered empty and neutered, cleansed of disorder, hybridity, visual chaos and otherness (see Figure 3). The net effect, in educational and moral terms, is to leave students with the sense that they have easily helped resolve the contradictions of culture and of capital (and the differential injustices it necessitates). Ultimately, I interpret the Apprenticeship Studio is an act of therapy that allows students and studio master alike to fantasise making the world a more equitable and better place. While all design is arguably utopian and foretells a better future not yet lived, it is the seriousness of the problems that the Apprenticeship Studio so compellingly 'eliminates,' that makes it, in my mind, particularly problematic. The fact that social equity can seemingly be achieved with very little effort, I would argue, puts the student and teacher further from the possibility of effecting real structural change to entrenched social-spatial inequities. The housing crisis / cultural difference / the logic of capital, all disappear within the white space of the A1 sheet, replaced by the 'built' product etched in black line across its surface.

If my – admittedly heavy-handed – characterisation shows the Apprenticeship Studio to be so limiting and problematic, what other approaches could there be to an architectural education in such a complex and contradictory country as South Africa? At UCT there seems to be an emerging strategy dealing with these complexities which one might characterise as the beginnings of a dialogical design curriculum – one in which different types of design studios are put into dialogue with one another. The intent here is to engage students in strongly developed and alternating strands which could either be synthesised by students at the end of their three year undergraduate degree or could be continued singularly to their own conclusion and depth. Two of these strands, namely, the Process Studio and the Place-making Studio, attempt, in some ways, to deal with the perceived limits of the Apprenticeship Studio. The first semester at UCT is mostly based on a project titled 'My Cape Town' which exemplifies, to some extent, the Process Studio. At present, the logistics are being put in place to implement the second part to this dialogical design curriculum, namely, the Place-making Studio as a design-build project in the Second Year. These two approaches are still in the process of being formed; what follows in the exploration of each is a combination of what has been taught and achieved, and what will hopefully be achieved in the future. It also recounts an attempt – somewhat failed, somewhat successful – to implement a design-build project in the First Year studio of 2008. The desired educational outcomes and modes of engagement of these two strands are dealt with in the sections below.

The Process Studio: My Cape Town

The First Year at UCT is gearing up to complete the transition from the Apprenticeship Studio to what might be characterised as a subjective, creative, and liberating studio where the design process is non-normative and unpredictable. The educational aim of the Process Studio is to: engender in students independence and risk-taking; to develop the idea of research emerging from the process of design itself; to build experimentation and imagination; and to develop the ability to make unforeseen connections. All these are seen as key aspirational values for later professional work but also as key strategic skills to deal with impending social and professional fluidity and transformation. The Process Studio has no fixed methods to predetermine or to ratify each project as being an embodiment of 'truth' or correct in design method, in fact,

the design studio staff work more as facilitators of a dilatory process than experts ratifying 'building' products. As Paul Feyerabend proposes:

It is clear, then, that the idea of a fixed method, or of a fixed theory of rationality, rests on too naïve a view of man and his social surroundings. To those who look at the rich material provided by history, and who are not intent on impoverishing it in order to please their lower instincts, their craving for intellectual security in the form of clarity, precision, 'objectivity,' 'truth,' it will become clear that there is only one principle that can be defended under all circumstances and in all stages of human development. It is the principle: *anything goes*¹⁸ [original emphasis].

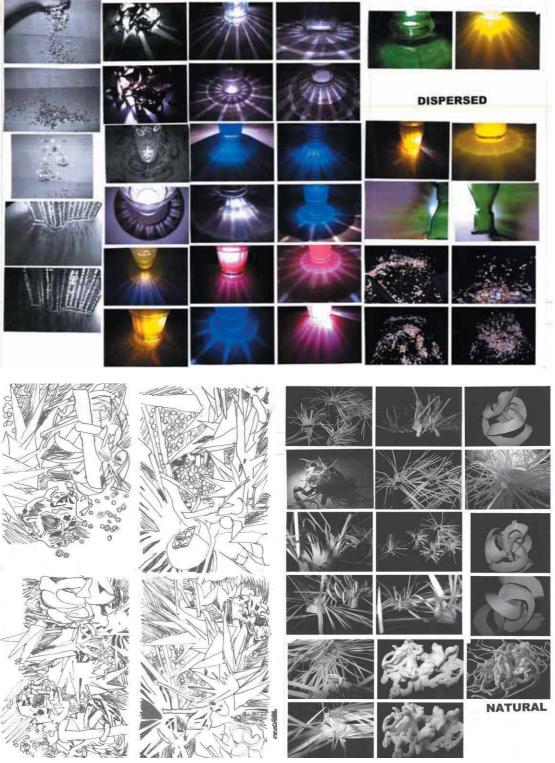


Figure 4 Sandra Sbrana, enactments of words 'dispersed' and 'natural' for 'My Cape Town'.

The premise of the Process Studio, or rather, the My Cape Town project in the Process Studio, is to temper or mediate the anarchic sentiments of 'anything goes' (through initial stages that are open-ended and playful acts of discovery) by requiring students to identify words that establish a dialogue between subjectivity and a contextual or culturally-mediated reality. The point should be made, that the Process Studio is not a self-gratifying indulgence – 'self expression' – but rather aims to foreground the relationship between the self and the world in a continually evolving dialogue and exchange. In the My Cape Town project, students are asked to identify and research three words that describe Cape Town for them. These subjective interpretations are nevertheless mediated through the physical, peculiar and particular conditions of Cape Town as a distinctive place. However, it is the suggestive nature of words that prompts the students to work in a dilatory and exploratory way. As Feyerabend suggests we have much to learn from children in how their approach to words and play combine:

They use words, they combine them, they play with them, until they grasp a meaning that has so far been beyond their reach. And the initial playful activity is an essential prerequisite of the final act of understanding.¹⁹

And he further states that:

such unreasonable, nonsensical, unmethodical foreplay thus turns out to be unavoidable precondition of clarity and of empirical process.²⁰

The 'My Cape Town' project is a good example of this strategy of 'play' as indicated by Figures 4–7. Here these personal and subjective interpretations are mediated through the physical, peculiar and particular conditions of Cape Town as a distinctive place. The qualities or characteristics of the words describing Cape Town are then required to be enacted (as opposed to represented) through models or other media. These initial experiments and explorations need to *embody*, rather than *symbolise*, the character and qualities hinted at in the words. Students have to work subjectively and intuitively where any mention of a 'building' is purposefully bracketed out of the very first three weeks of studying architecture and yet where ideas of location and context are real issues to be engaged with. This open - and yet grounded and reasoned – process is dilatory in its initial stages (as opposed to the Apprenticeship Studio where the analytical mode works reductively to a 'solution' already held by the studio master). As the work proceeds, the logic inherent in the words became mediated by the materiality of the enactments and vice versa, until the projects start to develop a new internal logic that is greater than the initial parts and the student's initial subjective notion. The tension between subjective readings of an external reality prompts what I would call a 'moral imagination', an imagination strengthened rather than delimited by the boundaries of its life-world. The projects 'test-out' where the boundaries of architectural design exist. As such, this 'moral imagination' is perhaps key to empowering students with a critical or located subjectivity embedded in the world but that is nevertheless creative, inventive and unlimited in its potential.

The initial conceptual work of 'My Cape Town' is revisited some six weeks later after students have gained more normative skills *vis-à-vis* architectural drawing. The challenge to locate a site and programme based on these emerging readings and interpretations of Cape Town forces students to once again mediate 'their' models or projects with the external reality of Cape Town as a physical place. The challenge (to both studio staff and students) is to avoid turning the earlier 'enacted' work into literal blueprints for the emerging 'building' by attempting to analyse and understand the results of the process through first principles rather than as specific answers or schemas. However, over the three years in which this project has been running, the conceptual logic and material reality of the early investigations tends not to drive the projects which become quite normative as the difficulty of the task (for both students and staff who generally have been schooled in the Apprenticeship Studio) becomes apparent. Obviously, this is a perennial challenge for all design studios that proceed from a conceptual framework rather than a typological or methodological one. Furthermore, although the brief

does not stipulate it, students feel compelled to arrive at a 'building' at the end of the design process whereas installation pieces or other forms of spatiality would be equally as welcome. It also remains difficult to shift the emerging drawings and models of the 'building' out of a normative orthographic projection into something more powerful. As Robin Evans suggests:

Recognition of the drawing's power as a medium turns out, unexpectedly, to be recognition of the drawing's distinctness from and unlikeness to the thing that is represented, rather than its likeness to it... 21

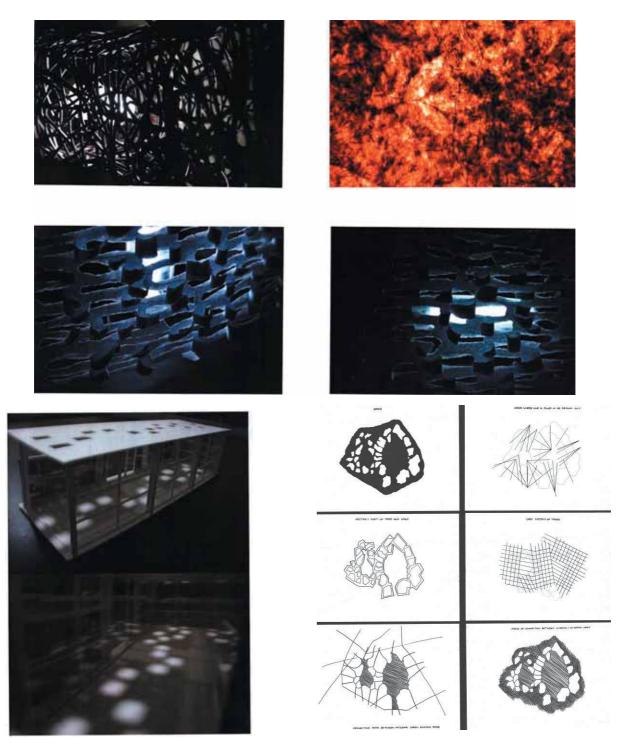


Figure 5
Tarryn Jankes, 'torn' the word chosen for 'My Cape Town' results in religious space set between trees (analysed bottom right).



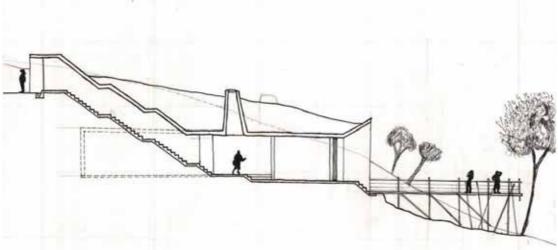
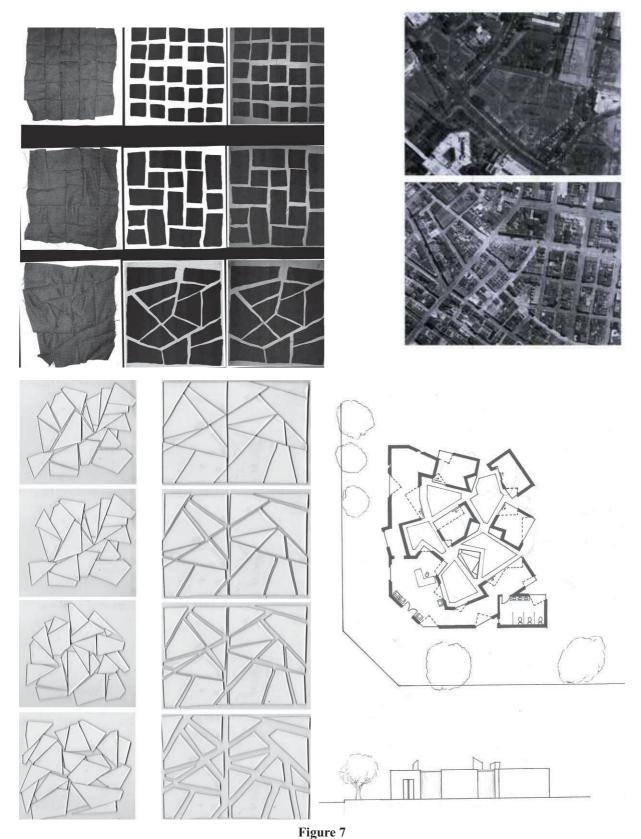


Figure 6
Temende Mudzinga, diorama built following the word 'scenic' and subsequent exhibition space for 'My Cape Town'.

It is in this gap between the representation and the thing that further discovery and invention can occur, where the peculiar and particular of the context and place of Cape Town can perhaps continue to emerge. Here students are encouraged to consider how the representational techniques themselves can enact the original words used to describe Cape Town. Following Evans again, students and staff need to resist the attempt to close this gap too soon in an attempt to produce a 'faithful' one-to-one analogue of the 'building' instead of continuing with the design process as a series of dilatory investigations:

Transfiguration, transformation, transition, transmigration, transfer, transmission, transmogrification, transmutation, transposition, transubstantiation, transcendence, any of which would sit happily over the blind spot between the drawing and its object, because we can never be quite certain, before the event, how things will travel and what will happen to them on the way. We may, though... try to take advantage of the situation by extending their journey, maintaining sufficient control in transit so that more remote destinations might be reached. ²²



Sal Ahmad's 'My Cape Town,' shows spatial studies of the word 'fragmentation' leading to an art therapy centre in District Six where the original fragmented urban fabric re-surfaces.

2010 has been the third year of running 'My Cape Town' and, although it is impossible to objectively measure its relative success, it seems fair to say that it has at the very least introduced an effective counter-point to the Apprenticeship Studio into the design curriculum. The few examples illustrated here (Figures 4-7) are in strong contrast to the example coming from an

Apprenticeship Studio project in 2005 (Figure 3). In this latter example the student's difficulty in mastering the requirements of what it is to design a 'Refugee Centre' in a tough urban environment is reflected in the stark naïveté of the design and drawings. The gap between the student's ability and the expected 'answer' to the design problem is a disempowering enactment of the hierarchy between student and 'studio master'. The examples from the My Cape Town project show creativity and experimentation that lead to arguably more sophisticated and hence empowering 'buildings' that intend to embody the student's originating ideas. In my judgement, the students have been empowered through the personal aspects and individuality of each project, and also understand that the studio staff cannot have the 'answer' to the project and are rather co-pilots on an unfolding journey of discovery. This shift from studio teaching staff as experts to facilitators, I believe, will have fundamentally positive results in producing a contingent of creative critical spatial thinkers who can define and manage their own agendas and research – a key to any education of value. By locating the project through the particularities and peculiarities of Cape Town, the projects managed to continue the South African concern for 'place' and 'context' whilst simultaneously mediating subjectivity through external realities. Furthermore, by beginning non-typologically the students are reliant on their inventiveness and imagination in generating their designs. Finally, subjectively-driven projects such as 'My Cape Town' might help 'other' voices emerge in these multiple 'journeys of discovery' where there are no 'experts' to overwrite unfamiliar interpretations or cultural differences.

The place-making studio: design-build platform

In the second semester of 2008 the First Year students started design work on the first designbuild project²³ to be undertaken at UCT in the undergraduate degree²⁴ for more than 30 years. As the ambiguity of the title suggests, the project aimed to engage students with ideas of 'place-making'25 as well as the physical act of making a place. The intention was to enact the predominant theories of place-making rather than simply reading about them and then designing them at the cool distance that the Apprenticeship Studio allows. The tradition of design-build in architectural education has generally been strongest in the USA. Most design-build projects purposefully aim to i) teach students the realities of what it is to build; ii) to expose students to the importance of dealing with clients and the dynamics of group work; and iii) also engage students in a form of volunteerism that transforms and improves otherwise disempowered and disadvantaged people and communities. Studio 804 at the University of Kansas, the Howard S. Wright Neighbourhood design-build at the University of Washington, and the Yale School of Architecture where the First Year Building Project has been going since 1967, all follow this model. Some design-build projects also aim to teach students the inventive role that technology and the physical act of building can have in design (such the Valparaiso School's experiments in Ritogue, Chile²⁶). Rural Studio²⁷ in Alabama is somewhat unique in that it covers all four aspects in a very successful way by teaching students the role that invention in the face of limited resources can play in positively reconstructing degraded social environments. More locally, Austrian and German schools of architecture have engaged their students on designbuild projects in the townships of Johannesburg, focusing mostly on crèches.²⁸

Lessons learnt from these international examples suggest that design-build projects present enormous challenges in terms of architectural education and the design studio itself. They require a dedicated staff member pre-empting massive logistical pitfalls in a carefully orchestrated process;²⁹ anyone familiar with building construction knows that simply getting a building built is nothing short of a small miracle and becomes even more improbable when coupled with educational objectives. The dynamics of client-student interaction are highly unpredictable and might (especially in the politically complex dynamics of South African township life) lead to abandoning the project. Safety of students and budget / fundraising are worries that make the

design-build project a burdensome undertaking for university staff under increasing pressure to produce research outputs and increasing admin loads.



Figure 8 Place-making platform, Imizamo Yethu, Hout Bay. Source: Luis Mira.

It is for these reasons that the Place-making Studio's pilot design-build project was small in scale and involved the design and building of a platform with seating and other suitable elements. Whilst a more ambitious project might have aimed at building a house or a crèche (a building), this project aimed to give students an opportunity to enact the 'place-making' theories that they have been exposed to as part of their design curriculum by upgrading an existing derelict platform and water-stand. The landscaping approach to the project alleviated the need for structural engineer's excessive involvement in what was intended to be a logistically delimited project located in Imizamo Yethu informal settlement in Hout Bay, Cape Town. The project was supported by the City of Cape Town in their ongoing upgrade of the settlement and as a consequence the platform had prescribed minimum and maximum dimensions. As such, the learning potential aimed to deal in a very direct and literal way with the limitations of budget and client requirements. Integrating precast concrete elements and strategising ways to deliver a qualitative 'place' beyond the quantitative requirements of the City also formed part of the challenge. The design of the project was run as a series of mini-competitions by groups of three or four students with the 'winning' scheme being redesigned by all 66 students and further detailed in the First Year Technology course run by architect Luis Mira. This collaboration with the Technology studio has obvious benefits that can introduce students to the importance of relevant information in detail drawing in relation to the physical outcome that those drawings will direct. The requirement to use pre-cast elements was intended to allow all students to mix and cast concrete in a controlled environment before going to a chaotic and fluid building site. The aim was to ensure that all students gained embodied experience of materials which

is a key learning possibility that is often excluded from architectural education and its typical Apprenticeship Studio.³⁰ This embodied experience literally places students in a context that most are unfamiliar with, necessarily adding to the complexity of their life-world. Most importantly, it was intended that the students would appreciate the extent, and limits, that a physical intervention can have on the lives of people who are otherwise without material means to ameliorate their environment.

Unfortunately, due to funding-raising logistics the platform was not built by the students in 2008. After they moved to Second Year it became difficult to co-ordinate their further involvement. Consequently, Luis Mira invited these students to take part in the building process which only occurred in September 2009, but few could attend. Nevertheless, the platform stands and is well-used by the inhabitants that live near it in Imizamo Yethu (Figure 8). In some senses the place-making platform failed to live up to its expectations as a complete learning experience. This proved what is already known – that design-build projects are extremely difficult to coordinate and achieve. In simple terms, a staff member needs to have this single task as their main commitment for their teaching agenda for the year. Until this resourcing issue is managed the likelihood of a design-build project being successfully implemented will be minimal.

Conclusion

South African architectural students are exposed to an unusual range of contrasting and contradictory 'absurdities'. Whilst this adds to the difficulty in their educational development it also prompts a great opportunity to engage with different pedagogic modes, and thereby facilitate a richer educational experience. This paper has pointed to what those modes might be. Thus, if the Place-making studio can be summarized as a hands-on engagement with the hard reality of social and building conditions, then the Process Studio allows students to develop an attitude of risk-taking, open-inquiry and a limitless sense of creativity and possibility. Where the Process Studio staff are facilitators of each individual's path of discovery, then the Apprenticeship Studio transfers normative disciplinary knowledge through its practitionerexperts. This paper began by overstating the limitations and problems of the Apprenticeship Studio in order to make the case for these other kinds of teaching and learning processes in the architectural design studio. Of course a degree in architecture must engage with the important lessons of the Apprenticeship Studio even if for the simple reason that professional accreditation requires some aspects of this kind of teaching and vocational training. To not do so would be to disempower and undermine our students' employability in the current economic system. Furthermore, as Schon³¹ points out there is real benefit for the students to be had in the iterative, disciplined process that traditional 'problem-solving' design approaches ensure. Here the studio staff become the reflective and questioning conscience of the student whose 'problem-solving' work on a normative design project in the design studio becomes a 'muscle-memory' training for a later professional life. There are also strategic design lessons to be learnt from the Dutch pragmatists such as Rem Koolhaas who engage with the logic of global capital in an inventive and radical way, rather than occupying the rarefied position of the architect who waits for the 'right' client; the Apprenticeship Studio would be key to allowing students to learn to see how and where the normative design brief can be broken open and exploited for non-normative design results.

The design studio at UCT, then, will hopefully continue to shift until a triad emerges that institutes a dialogue between the Apprenticeship Studio, the Process Studio and the Placemaking Studio. Whilst the shifts might be confusing for students and might not add up to a single

narrative of pedagogic outcomes (*either* training *or* creativity *or* social engagement), I believe the engagement with these differing modes will assist students in making their own way in a world increasingly based on complex and contradictory trajectories and increasing absurdities. Whilst projects such as the place-making platform can only hope to be an infinitesimally positive shift in the absurdity of South Africa's built environment, the dialogical studio can hopefully empower students to better deal with the apparent absurdities and contradictions of our situation. Here education is instrumental in social change by liberating and empowering individuals as critical, creative spatial thinkers rather than only training architects. This is a delayed and veiled outcome that – quite rightly – cannot be calibrated, in as much as a moral imagination cannot be calibrated.

Notes

- 1. Edward Soja, *Postmodern Geographies: The* reassertion of space in critical social theory, (London: Verso, 1990), p.107.
- R3.7 million for Archilab's House Butterfly 1 in 2003 versus R375/m2 or R1500 for a purchased 2mx2m township 'shack' (see Jonathan Ferrari, 'The Mayinje House: An architecture of activism,' unpublished M.Phil thesis, University of Cape Town, 2004, p.20)
- 3. Pauline Morris, *A history of black housing in South Africa*, (South African Foundation, 1981)
- 4. Ching's classic remains a de facto First Year text book, Francis DK Ching, *Architecture: Form, Space and Order*, (New York: Van Nostrand Rheinhold, 1979)
- 5. Juhani Pallasmaa, *The Eyes of the Skin*, (London: Academy Editions, 1996)
- 6. Annette Le Cuyer, *Radical Tectonics*, (London: Thames & Hudson, 2001); Reiser + Umemoto, *Atlas of Novel Tectonics*, (New York: Princeton Architectural Press, 2006)
- 7. Michel Foucault, 'The Order of Discourse,' in Robert Young, *Untying the Text. A Post-structuralist Reader*, (London: Routledge, 1981)
- 8. Norman Jackson et al, *Developing Creativity in Higher Education. An Imaginative Curriculum*, (London: Routledge, 2006), Foreword.
- 9. Paulo Freire, *Pedagogy of the Oppressed*, (New York: Continuum Books, 1993), Chapter 2.
- 10. Graham Jeffrey, *The Creative College: building a successful learning culture in the arts*, (London: Trentham Books, 2005)
- 11. The other three electives were: a place of remembrance in Langa township; a township street densification project; and an urban infill project to 'challenge the traditional developer notions of what kinds of developments are

- feasible in the Cape Town city centre' (from project handout).
- 12. Ilze Wolff, 'Werdmuller Centre an artifact of an ephemeral context,' in *SAJAH*, vol.24, no.1, 2009.
- 13. Whether or not the studio master is a 'he' the attitude of the role is arguably a male-gendered one.
- 14. Michel Foucault, 'Space, Knowledge and Power,' in Paul Rabinow (ed.) *The Foucault Reader*, (New York: Pantheon Books, 1984); Bill Hillier, *Space is the Machine: A Configurational Theory of Architecture*, (Cambridge: Cambridge University Press, 1999); Kim Dovey, *Framing Places. Mediating power in built form*, (London: Routledge, 1999).
- 15. Derek Japha, 'The social programme of the South African Modern Movement,' in Hilton Judin and Ivan Vladislavic (eds), *Blank____ Architecture, apartheid and after*, (Rotterdam: NAi Publishers, 1998).
- 16. See for example, Nicholas Coetzer, 'The Production of the City as a White Space: Representing and Restructuring Identity and Architecture, Cape Town,' 1892-1936, unpublished Ph.D thesis, University College London, 2004; Abidin Kusno, *Behind the Postcolonial. Architecture, Urban Space and political cultures in Indonesia*, (London: Routledge, 2000), Chapter 5; Gulsum Nalbantoglu, 'Limits of (in)Tolerance: The Carved Dwelling in the Architectural and Urban Discourse of Modern Turkey,' in Gulsum Nalbantoglu and Wong Chong Thai, *Postcolonial Space(s)*, (New York: Princeton Architectural Press, 1997).
- 17. This impulse extends back nearly 200 years as noted in Comaroff, J. and Comaroff, J. Of Revelation & Revolution: The Dialectics of Modernity on a South African Frontier (London:

- University of Chicago Press, 1997), 'Mansions of the Lord' pp.287-301 and is noted elsewhere, for example, in Haifa: Mark LeVine, 'Fateful Triangles. Modernity and its antinomies in a Mediterranean Port City, in Alev Cinar and Thomas Bender (eds), *Urban Imaginaries*. *Locating the Modern City*, (University of Minnesota Press).
- 18. Paul Feyerabend, *Against Method. Outline of an anarchistic theory of knowledge*, (London: NLB, 1975), p.28
- 19. Paul Feyerabend, *Against Method. Outline of an anarchistic theory of knowledge*, (London: NLB, 1975), p.26
- 20. Paul Feyerabend, *Against Method. Outline of an anarchistic theory of knowledge*, (London: NLB, 1975), p.27
- Robin Evans, Translations from Drawing to Building and Other Essays, (London: Architectural Association Publications, 1997): 154
- Robin Evans, Translations from Drawing to Building and Other Essays, (London: Architectural Association Publications, 1997): 182
- 23. Luis Mira (architect) was instrumental in identifying the site and realising the project.
- 24. Jonathan Ferrari undertook a successful designbuild recycling-resourced project in Samora Machel township called the Mayinje House and completed as part of the M.Phil degree under Professor Iain Low. See Jonathan Ferrari, 'The

- Mayinje House: An architecture of activism,' unpublished M.Phil thesis, University of Cape Town, 2004.
- 25. The classic introductory text for First Year students being Christian Norberg-Schulz, *Genius Loci. Towards a Phenomenology of Architecture*, (London: Academy Editions, 1980).
- Rodrigo Perez de Arce, Valparaiso School.
 Open city group, (Montreal: McGill-Queen's University Press, 2003).
- 27. Andrea Oppenheimer and Timothy Hursley, Rural Studio. Samuel Mockbee and an architecture of decency, (New York: Princeton Architectural Press, 2002).
- 28. See Ora Joubert (ed.), 10 Years + 100 Buildings. Architecture in a democratic South Africa, (Cape Town: Bell-Roberts Publishing, 2009): 162-7.
- 29. William J. Carpenter, *Learning by building*. *Design and construction in architectural education*, (New York: Van Nostrand Reinhold, 1997), p.124.
- 30. See Alan Chandler, 'A Philosophy of Engagement,' in Katie Lloyd-Thomas (ed.), *Material Matters: Architecture and Material Practice*, (London: Routledge, 2006) for examples of pedagogic engagement with the physicality of making.
- 31. Donald Schon, *The Design Studio: An exploration of its traditions and potentials*, (London: RIBA publications, 1985).

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