

Boler's Pedagogy of Discomfort

Examining a Turn of the Century Idea for Contemporary Architectural Education

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Abstract: Within the architectural design studio we have the opportunity to employ Boler's (1999) Pedagogy of Discomfort in two dimensions; both to disrupt students' ways of seeing and also their habits of making – the way they execute design as a practice. By challenging students to work with theoretical ideas and methods of creation beyond those they are comfortable with, a transformation in their understanding of the role of architecture and how it operates within the world can result. This paper will reflect on two design studios recently conducted at the University of Melbourne that sought to broaden students' perceptions of architecture's potential to influence perceptions, discourses and behaviours. Furthermore, to enable them to recognise their own capacity to challenge convention and, by extension, their own agency to demonstrate leadership within the built environment. This paper will reframe Boler's pedagogy of discomfort through Markauskaite and Goodyear's (2016) more recent theory of epistemic fluency to establish the enduring relevance of Boler's pedagogical approach for contemporary architectural education.

Keywords: Epistemic fluency; research through design; architectural citizenship; design leadership.

1. Introduction

According to Boler (1999) a pedagogy of discomfort aspires to transform a student's habits of seeing. It should teach students the skills to listen to others more attentively and without judgment; to examine their own value systems and how they came to hold those; alongside the courage to inhabit a more ambiguous sense of self (the ability to actively resist comfortable binary positions such as right and wrong, innocent and guilty). The relevance of this pedagogical approach for architectural practice is that it requires students to consider the needs of clients whose value systems may vary, and thus threaten, their own pre-existing value system. This can result in a willingness to respect and incorporate the ways that others see and make sense of the world – an ability that is also critical to the practice of epistemic fluency.

Epistemic fluency is a more recent pedagogical approach advanced by Markauskaite and Goodyear (2016); it recognises that tomorrow's professionals, when faced with increasingly complex twenty first century problems, will require the capacity to work collaboratively, innovate and adapt to changing

demands in their field of practice. Epistemic fluency is the ability to perform the following five skills synchronously: to connect theory with practice; to learn to act as a professional (with regard to competency and identity); to practise relational expertise (the ability to communicate and collaborate); to exercise a capacity for innovation; and to be attuned to the affordances and constraints of the environment in which one is acting in order to reconfigure this environment as suited to the task at hand (Markauskaite and Goodyear, 2016). Employing a pedagogy of discomfort within the design studio can enhance specific skills necessary for developing epistemic fluency. The first is to foster a willingness to understand and incorporate the disciplinary practices or value systems of others. This is central to a pedagogy of discomfort and requisite to enable deep (as opposed to surface) collaboration across disciplinary boundaries. The second is a willingness to experiment; the confidence to occupy a space where failure is likely to occur. Boler's aspiration that students develop the confidence to occupy uncomfortable, ambiguous positions aligns with the epistemic fluency because, as Gorman (2015) points out, a willingness to fail productively is necessary for innovation itself (Gorman, 2015).

Within the architectural design studio we have the opportunity to employ a pedagogy of discomfort in two dimensions in order to disrupt a student's way of seeing and also their habits of making – the way they execute design as a practice. Applying discomfort in these two dimensions intensifies the space of uncertainty within the design studio and enhances opportunities for students to become more comfortable, and thus confident, occupying and working within uncertain problem spaces. Challenging students to work with theoretical ideas and methods of creation beyond those they are comfortable with can lead to a transformation in their very understanding of the role of architecture and how it operates within the world. This way of working will be important for the future of the architectural profession, particularly relative to an ageing population and the increasing expectation that our built environment should contribute more in support of physical and psychological wellbeing. How does an architect design for a client with dementia, or terminal illness, for example, if they've not experienced that themselves? The studio discussed herein sought strategies to help students understand that architecture is not simply a product, reflection or spectator of social values, but that it plays an active role in the lives of those who inhabit it.

2. Confinement, infidelity and disrupted notions of home in the design studio

Boler published her pedagogy of discomfort in 1999 while at the University of Auckland. A year later architect Mike Barns appeared to employ this approach within an architectural design studio focused on prison design at the same university. While this was not made explicit at the time, and although the authors have been unable to confirm whether this was deliberate, Barns' studio provided a textbook example of the application of this pedagogy. Students were subjected to learning resources (texts and guest lectures) that challenged their pre-existing value systems. It was McLaughlan's experience of this studio that subsequently informed a recent University of Melbourne design studio that asked students to challenge conventional notions of the house as a typology. To alter a student's worldview a conflict or tension must be generated to inspire a transformation to occur. As Pratt has asked:

Why and when does a person willingly undertake change, especially if one is materially and ideologically safe and comfortable? (1984, 16)

Barns achieved this within his prison design studio at the University of Auckland (2000) by employing a series of learning resources that created an ideological rollercoaster for the students undertaking this

studio. He began this process by specifying Foucault as mandatory reading alongside contemporary criminology theories including 'strain theory'. This is the theory that criminal behaviour is a consequence of people not being given the same opportunities in life; the idea that crime arises in response to the frustration of progress this system creates for individuals (Merton, 1938). For students with the studio, this material disrupted prior assumptions that 'criminals were bad people' and resulted in the adoption of the position that 'criminals are normal people who find themselves in tough situations.' A view further reinforced through a discussion with a group of former inmates who were actively trying to turn their lives around. Boler (1999) advises that the tendency to occupy a binary position in response to new knowledge that illuminates the error of one's pre-existing value system is a characteristic reaction for students. Next Barns invited a prison guard from a high security facility along to the studio. By the end of that conversation, within which the class gained an understanding of the creative and unceasing efforts of inmates to inflict violence on prison staff, all positions of binary refuge had been abandoned. This student cohort was now on a path, as Boler would term it, to occupying a more ambiguous sense of self. The precarious, subjective nature of the value systems that students arrived to studio with had been shattered in light of a world far more complex and confounding than was formerly appreciated. Yet Barns continued to push the class, requiring students to dwell in this discomfort. He would not allow acceptance of the difficulties that plagued this system but asked students to focus instead on the needs of the prisoners themselves. To think about what a prison could be and to question the role this institution performed in society, including the discourses it upheld, alongside the consequences of the behaviours this system perpetuated.

Barns' approach facilitated a transformation in the way that students perceived architecture's capacity to shape our experience of the world. To make evident that while we might accept that certain typologies embody certain characteristics and/or functions, these are socially constructed and, in turn, play a role in influencing human values, expectations and behaviours. This approach resonated with the following conception of the purpose of a curriculum within higher education, as provided by Fraser and Bosanquet, whereby this document should enable:

Teacher and student act as co-constructors of knowledge... the structure of the learning experience is not predetermined ... it emerges from the needs of the students and between the interactions between students, teachers and colleagues... The overarching goal is to empower students ... [to become] effective members of the public ... (2006, 274).

A primary learning objective of the housing studio was to enable students to rethink housing in non-conventional ways and to enable them to develop the ability to conduct a process of research through design. The studio was run with a mixed cohort of fourth and fifth year students with the Master of Architecture programme and was positioned with the intent of providing a comprehensive introduction to research through design as preparatory learning for the capstone subject. Unrequited love provided a lens for interrogating design across three scales: wearable architecture, exhibition design and a residential dwelling. Students were asked to choose a piece of literature that dealt with unrequited love in order to generate their studio clients. This resulted in multiple projects that considered three inhabitants across an array of non-conventional relationships, many that were morally confrontational.

Within the gamut of novels students chose to explore were Milan Kundera's *Unbearable Lightness of Being*, David Ebershoff's *The Danish Girl*, Patrick Suskind's *Perfume: The Story of a Murderer* and F. Scott Fitzgerald's *The Great Gatsby*. Among the projects produced were a residence to enable a stalker; a number of houses that utilized architectural strategies to intensify the power imbalances between the characters within these relationships; a house for a narcissist; a cliff slide dwelling to stage a spectacular

suicide; a museum to facilitate murder and conceal the taxidermy and display of human bodies; two sets of terrace houses designed to keep lovers apart; and a house designed to ensure that two women sharing the same man were constantly aware of each other's presence through the responsive performativity of the architecture itself.

We anticipated some interesting value conversations going into the semester, however, many of these conversations mined ethical depths beyond what we had imagined. The house designed to respond to Kundera's *Unbearable Lightness of Being* provides one example of how students' ways of seeing were disrupted through this studio process. Within Kundera's novel a wife unhappily resigns herself to sharing her husband with a mistress. The student who selected this novel struggled to come to terms with why anyone would accept a third party into their marriage and this posed a significant, enduring obstacle to the completion of her house design. We were clear that, having chosen this novel, we expected this student to confront this narrative properly. We would not accept a house designed to ameliorate the pain of this relationship, to fix the situation altogether or to shy away from the difficulties the characters were facing. This resulted in subsequent conversations where we argued for a position of non-judgment and questioned whether we necessarily needed to understand, or even remotely comprehend, the life choices of our clients in order to design for their needs. The final project was exceptional but it was one of the hardest won studio successes we've witnessed owing to the ideological challenge it presented for the student in question.

While we did not in any way influence the individual selection of novels employed within our studio, only once did we allow a student to step away from the choice they had made. Changing clients mid-semester would have hindered their progress but, moreover, we wanted this to be difficult. Was our position justifiable? Boler states that:

An ethical aim of a pedagogy of discomfort is to willingly inhabit a more ambiguous and flexible sense of self... Learning to live with ambiguity, discomfort, and uncertainty is a worthy educational ideal (1999, 176-197).

Our aim was not to convince our student that infidelity was somehow acceptable but that whether or not we share in the value systems held by others we should try to develop the skills to respect those differences and to engage with them openly and in good faith. Markauskaite and Goodyear (2016) have suggested that the ability to be flexible will be an increasingly valuable skill for tomorrow's professionals. A willingness to respect, understand and engage properly with the way that others create and understand knowledge will be integral to solving the kinds of complex, global problems we are faced with. Reay et al offer a recent example of this. In a co-created research project between designers and medical practitioners they found that collaboration was hindered by 'a number of boundaries and challenges':

Different areas of expertise often have profoundly different methods, values, theoretical approaches, even conceptions of what counts as knowledge. The difficulty arises not from differences in expertise so much as differences in culture (2017, 66).

Student feedback was obtained on the design of the housing studio curriculum via voluntary questionnaires administered at mid-semester (12 responses from 17 students) and semester-end (8 responses from 17 students). Student responses to the studio's employment of fictional clients and, furthermore, ones who found themselves in challenging situations, suggested this achieved what the brief intended. Students reported that the use of literary characters helped them to 'engage better with the users of the space' and 'added depth to the[ir] understanding of the client [they were designing for]'.

Students also commented that this encouraged different ways of thinking about how to create architecture and enabled them to gain an appreciation of how 'human behaviours and emotions ... are affected by architecture.' One student wrote that the use of the novel as a catalyst for making work helped them to see buildings:

Not just as a space for the activities of the occupants but also as a psychological and emotional stimulant.

Another commented that: 'the narrative dimension forced an architectural position' and that 'this translation created complexity.'

As Hogan and Cranton (2015, 11) have observed, narrative can 'allow for the trying on [of] different points of view.' This is valuable in fostering critical engagement and reflection. Within the studio, the characters and their varying predicaments served as stimuli for strong levels of personal connection and emotional response. To borrow Turkle's (2007) term, the characters were 'evocative objects' – serving as intellectual and emotional catalysts. This aided students in making abstract concepts concrete and in making sense of the relationships, behaviour settings, values and assumptions they were translating from the narrative into architectural space. Fiction was the vehicle through which students were pushed into the realm of discomfort and a tool to help them make these uncomfortable situations 'comprehensible' (Nussbaum, 1997, 10-11). Jarvis (2006) has similarly observed that fiction can be used to encourage transformation. Within this studio narratives became the means through which students began to unpack and examine larger social and cultural issues. Narratives were the vehicle for critical reflection, re-examination of paradigms and preconceived ideas of the self and one's environment.

3. Towards a collective inhabitation of discomfort

The danger of a pedagogy of discomfort is that in the process of rendering a student's sense of self more precarious they can become angry or defensive. This occurred, somewhat surprisingly, not through the moral contentiousness of the material but because we forced students to work with methods of production and representation that caused discomfort. As Boler points out (1999, 191) 'it is often easier to react angrily rather than feel one's vulnerability.' We required students to explore architecture relative to the emotional tensions that domestic spaces contain, rather than from a position of function, structure and materiality. Furthermore, we required that they do so through exercises that seemed far removed from the process of architectural design – film making, writing, exhibition design and creating wearable pieces of architecture. This meant that many students were working well outside their comfort zone and was a deliberate strategy of forcing experimentation across mediums through formative, low-risk summative tasks (each not worth more than ten per cent of the final grade).

The wearable piece of architecture students were required to create had to somehow alter the wearer's physical experience of the world in a way that resonated with the emotional state of the character they had chosen. The wearable was then to be tested, to establish its success relative to helping the wearer establish empathy with this character, and documented via a short film. This was followed by a precedent study of unconventional houses. The cumulative aim of these three exercises was for students to assemble a repertoire of architectural strategies to influence human behaviour through subtle disruptions designed to alter how spaces are inhabited and, thus, how relationships might play out within them. The final six weeks of semester was allocated to the design of the residential dwelling. Experimentation across mediums inevitably sounded more inviting to students when we pitched the

studio than the reality of being stuck in the midst of this process. We fielded more than one indignant accusation that these methods could not possibly bear any relevance to the design of a building.

A clear agenda of our studio was to find a way to push students past a shallow understanding of a client's needs and thus facilitate a richer and empathetic architectural response. This was informed by our collective knowledge of mental health facilities design. Traditional approaches that prioritised functionality have given way in recent years to 'patient-centred' and 'co-design' approaches that seek to better understand and address the design of these facilities based on the patients' experience of them. This aspires to show greater sensitivity to patient needs and empathy for the physical and / or psychological challenges they may be facing (McLaughlan 2014; Liddicoat 2017). We also learnt lessons from observing a Love Hotel studio run during the summer semester by two of our colleagues, Laura Martires and Virginia Mannering. Their experience highlighted the challenges that arise when students are asked to work with clients and life experiences well beyond their own.

While the Love Hotel studio was the vehicle through which students explored a broader agenda of responding architecturally to the urban context, students were asked to write fictional narratives to create a set of clients for three small-scaled proposals. This aspect of the process was of the most interest to us as it made apparent the differences in the way that a typical student cohort might view the complexities of human relationships relative to their studio leaders. In short, the depth of understanding between someone who was in their early to mid-20's and someone a decade older (i.e. those setting the brief) became quickly apparent. Several students within the Love Hotel studio appeared to have a Hollywood-film or romance-novel idea of how human relationships played out that hindered what could have been much richer, grittier architectural schemes. This was particularly evident in cases where students had chosen to design for clients with an interest in BDSM and polyamory but provided conventional hotel rooms, complete with kitchenettes and living room furniture, without pausing to question the fit of this functionality.¹ Correspondingly, our formative learning tasks were conceived with a view to enabling students to engage more deeply; to enhance their ability to:

Think what it might be like to be in the shoes of a person different from oneself, to be an intelligent reader of that person's story, and to understand the emotions and wishes and desires that someone so placed may have (Nussbaum 1997, 10-11).

We approached the formative design tasks with a view to disrupting conventional thinking and engendering the subtle paradigm shifts we felt would be required to enable the students to tackle the house design from an informed position. We believed these exercises had value but were concerned that the time devoted to these non-architectural tasks would come at a direct cost to the quality of the final submissions.

Survey responses (only made available to us at the end of the semester) identified that the film exercise polarized students with only half of the students finding it useful. This highlighted that, although we had successfully employed the film exercise in a previous semester, we had not properly articulated the value and purpose of it within the context of this brief. However, this also revealed that the film exercise was the most demanding of the formative tasks that may have influenced its reception. Reactions

1. The Love Hotel studio was run as a six-week summer intensive studio which limited the degree to which these schemes could be developed. As noted, however, client engagement was not the primary pedagogical purpose of the Love Hotel studio or the basis on which studio outcomes were assessed. The purpose of citing it here is to give background to our own process of development; not to criticise the quality or outcomes of this studio.

to the wearable exercise were more positive. Students wrote that 'the wearable helps you sync your thinking with the novel's character and empathise with them', that this was a 'quick' and 'easy' way to understand the predicament their client was in, and that placing oneself in the client's shoes enhanced the house design. One student commented:

I started to think in terms of the architecture of the body and how it feels and began thinking in terms of materiality – how the architectural experience could be experienced emotionally.

Our approach hit a deeper nerve with one student who responded, at the mid-semester point, by threatening to take us to task for what was felt to be an inappropriate approach to a master's level studio. This led us to question if we were taking risks with our curriculum that were potentially harmful to our students' success. By that stage, however, we were seeing remarkable results that we assumed (and student feedback would later confirm) was owing to the challenges we were setting down and to the degree of autonomy we were allowing students to exercise over the direction of their own projects. But we also questioned, on a personal level, whether this could damage our own credibility as teachers and if pulling back to a more comfortable and conventional approach was worth consideration. We faced an ethical dilemma: did we give into our fears and prioritise the desire to protect the teaching reputations we had worked so hard to establish or continue along a path that we intuitively felt to be in the best interests of our students? Without intending to we found ourselves embracing Boler's discomfort, living the 'mutual transaction' she advises should take place:

It is important that the educator explore what it means to 'share' the student's vulnerability and suffering (1999, 178).

This turn of events prompted us to be upfront with our students about the uncertainty within which we were operating. Wolgemuth and Donohue have made the point that both participant and researcher (or student and educator in our case):

Must feel comfortable to share their beliefs, assumptions, and vulnerabilities, acknowledging that comfort creates a space for fully experiencing discomfort, ambiguity, and transformation (2006, 1033).

We realized there were two things we'd not been entirely honest with students about. The first was the degree to which this studio was underpinned by a personal research agenda and the second was the slightly hands-off approach we had developed in response to this particular group of students. Our learning objectives, as explicitly stated, included the ability to rethink housing design in non-conventional ways; to understand how design has the potential to influence behaviour; to use fiction to inform the generation of architecture; to experiment across a range of mediums in the generation and representation of architecture and; to gain an understanding of the process of research through design. But we were also driven by a desire to understand how architecture can be imbued with tension - something that had been bugging McLaughlan since her own capstone studio more than a decade prior. We had effectively enlisted students to help with this research question, using unrequited love as a mechanism to generate tension, but we'd forgotten to inform them of it. So we came clean about the fact that this was a design interrogation for which we didn't possess any clear answers. Of course we had a fall-back position in place - if tension wasn't achieved then each student would still have an appropriately developed scheme for a non-conventional house.

We also explained that our seemingly hands-off approach was a demonstration of active resistance on our part, and although uncomfortable for us, seemed to be in the best interests of the group. We had a high percentage (perhaps 40 per cent) of students who were capable of critically self-directing their output and because our interest lay in developing more confident, resourceful designers, we were offering only minimal feedback and direction with regard to their work. We still had students that needed our direction and we gave this but having this high-achieving group model what a relatively autonomous design process looked like enabled us to extend this expectation more widely across the studio. While we had come to the studio with certain expectations regarding how the brief might be addressed, we had been repeatedly surprised both by the level of sophistication and the left-field responses students were bringing to it. We proposed two ways of dealing with this. We could haul the students back to where we envisaged the studio would have gone – a space of relative comfort for us, where we knew exactly what to teach and how. Or we could continue to work as we had been – slightly hands off and in a space of discomfort because we had no way of predicting what turn the studio would take next. We acknowledged that we knew the latter was a more demanding and stressful way to work, for the students as much as for us, and we gave them the choice to make. They chose to persist with the more autonomous approach. Despite the stress, the students were enjoying the freedom our studio allowed. While our surveys were not designed to capture a response to this element of the studio, since it evolved organically, we have since received emails from several students confirming that they felt this approach was valuable. As personal correspondence falls beyond the terms of our ethics agreement we are unable to cite those comments here.

Tillman-Healy's (2001, 212) 'ethic of friendship' provides a possible explanation for why our honesty was so well received. In research 'an ethic of friendship' means that research participants are treated with respect and their stories honoured by researchers and used for 'humane and just purposes.' Wolgemuth and Donohue borrow this idea when discussing the employment of an inquiry of discomfort within emancipatory narrative research. They state:

If empathy is the ethical stance by which inquiry of discomfort researchers approach participants, then friendship is the overriding structure for that stance... researchers must concern themselves with the whole of participants' lives, privileging participants' feelings, experiences, and the needs of data and information gathering (2006, 1033).

An ethic of friendship can equally be applied to teaching within higher education. This should include an honest acknowledgement of ethical paradoxes that is also integral to Boler's approach:

[recognising that] our ethical dilemmas are 'intrinsically paradoxical'... that contradictory beliefs and desires may coexist, provides creative spaces to inhabit (1999, 197).

Paradoxes exist within the design studio because educators and students bring their own, varying desires for a project outcome. As Deamer has suggested these should be openly acknowledged:

an environment in which the assumptions behind the illusions [can be] discussed can only make the student's critical faculties sharper. It also ensures that... architectural education goes beyond the production of an artefact... we are educating people who will put their designs out in the world... with vigilance and intelligence (2005, 16).

Electing to make our own vulnerability explicit within this studio necessitated that we place trust in our students to respond in a mature and respectful manner. But also to have the fortitude to maintain faith in our abilities as teachers even with our uncertainties exposed. Unintentionally, this offered the

students a valuable opportunity to put into practice the openness to difference that we wanted them to learn from engaging with this studio. What we did not foresee was that this action would engender a degree of trust and openness within the studio that facilitated a richer, more experimental set of architectural investigations than in any previous studio we've taught.

4. Conclusion

The ability to listen to others more attentively and without judgement is as important in designing for clients whose values and life experiences are different to our own as it is to collaborating across disciplinary boundaries. Both require a willingness to respect and meaningfully engage with the ways that others see and make sense of the world, whether that relates to a value system that is personal or related to broader disciplinary ways of seeing and understanding knowledge. Central to a pedagogy of discomfort and the facilitation of epistemic fluency is to enable graduates to become more comfortable occupying spaces of uncertainty and ambiguity. The studio can be focused to better enable students to develop the confidence to work within uncertain spaces and the willingness to let go of pre-existing ideas about how knowledge is formed, including how research and design processes are pursued. This allows multiple understandings to co-exist while resisting the need to place these within a hierarchy that values one form of knowledge production (usually that which is familiar) over other forms. A willingness to fail productively becomes an important strategy in developing this confidence.

Within the design studio we can intensify the space of uncertainty by employing discomfort in two dimensions - to disrupt students' ways of seeing, through the material they encounter, and to disrupt their habits of making. There are clear benefits to this pedagogical approach including the confidence to occupy and work within uncertain problem spaces and the recognition of one's capacity for agency and leadership. This requires and provides opportunities for students to develop an appreciation of the value of trusting themselves and others, and the skills both to work autonomously but also to accept and offer help within a creative working environment. A pedagogy of discomfort should be accompanied by an ethic of friendship that is honest in acknowledging the conflicting values and ethical paradoxes that exist within the context of the design studio. This is an approach that does not assume what is in the best interests of a student's development but extends trust that they are capable of making important decisions about their own learning.

Understanding that architecture is not simply a product, reflection or spectator of social values, but that it plays an active role in shaping and upholding perceptions, discourses and behaviours is critical to enable students to engage meaningfully with these architectural typologies and the clients they cater for. Student feedback provided evidence of students becoming more open to alternative points of view, of greater engagement with user's needs, values and perspectives, and increased self-awareness through their own negotiations of discomfort. Boler's pedagogy of discomfort provides a mechanism for cultivating this understanding. This can assist educators in empowering graduates to provide leadership through the disciplinary skill set specific to the architectural profession; to employ their skills in design thinking to advance agendas broader than the simple production of buildings; and to create graduates who are resourceful, independent thinkers, with a capacity for collaborative, integrative thinking.

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