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'From Boudieu to Friere - By way of Boal'

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Field

From Bourdieu to Friere (by way of Boal): Facilitating Creative Thinking through Play

Robert Brown and Patrick Clark

The context of architectural practice today is in a state of enormous flux, with the profession facing considerable challenges, including: increased competition; shifting working contexts; an increasingly complex urban environment; growing environmental concerns; and emerging opportunities outside the profession's traditional boundaries of practice. We need practitioners who are able to think creatively in response to a multiplicity of opportunities and problems. Intrinsic to this demand is a parallel necessity to break out of our inherited modes of behaviour and thinking, and an ability to formulate and implement new forms of practice in response to a highly fluid context. Architectural education has concurrently been called upon to equip future practitioners with the capacity to respond to future challenges and emerging opportunities.

In response we will draw upon Bourdieu's construct of *habitus* to consider how inherited paradigms of design studio education inculcate students into received ways of working and thinking. In opposition, we will posit Boal's theatre forum as a reference for our own conceptualisation of the design studio as a space of play in which creative thinking can be explored and developed. While such pedagogy carries its own risks, play affords a sense of autonomy and efficacy that Friere argues is vital for enabling and pursuing creative thinking in the face of current and emerging challenges.

Introduction

1 Pierre Bourdieu, Outline of a Theory of Practice, trans. Richard Nice (Cambridge: Cambridge University Press, 1977) p. 164.

2 Brewster Smith, 'Foreward', in Mary Reilly (ed.), Plan as Exploratory Learning – Studies of Curiosity Behaviour (Beverly Hills: Sage, 1974) p. 7.

3 Reference to architectural education is shortened to education within the text.

4 Claire Jamieson, 'Forward Thinking', in RIBAJOURNAL.COM (2011) at http://www.ribajournal.com/index/php/feature/article/forward_thinking/ [Accessed 18.03.11]

5 Hans Harms, 'The Dilemma of the Architect', Research, Vol. 4 No. 1 (1974), p. 9.

6 Sir Colin Stansfield Smith, et. al., 'Architectural Education for the 21st Century' (London: Royal Institute of British Architects, 1999).

7 The Future for Architects: (2011) http://www.buildingfutures.org.uk/projects/building-futures/the-future-for-architects/ [accessed 30 March 2011]. The report also makes particular reference to strategic thinking, something which we would argue needs to be employed concurrent with creative thinking; within the context of our discussion we have however focused our discussion solely on the latter.

8 The Peter and Muriel Melvin Debate on architectural education held in 2011 at the RIBA is but one example; Peter and Muriel Melvin Debate Education in Architecture: Global Difference (September, Royal Institute of British Architects, London, 2011).

9 Jeffrey Ochsner¸'Behind the Mask: A Psychoanalytical Perspective on Interaction in the Design Studio', Journal of Architectural Education, May 53/5 (2000) p. 194.

'The instruments of knowledge of the social world... contribute to the reproduction of the social world by producing immediate adherence to the world, seen as self-evident and undisputed. [1]

'Playful activity, engaged in for its own sake ("intrinsic motivation"), is perhaps the purest case of agenthood: creating interesting effects, testing possibilities, measuring one's own growing skills, all protected by the spirit of "as-if."' [2]

The context of architectural practice today is in a state of enormous flux: competition has developed with disciplines that were previously partners in the design process; shifting eco-political contexts affect not only where we might find work but also present alternative attitudes, methodologies and technologies; an increasing interrelated complexity in an ever-urbanising world; a growing sense of urgency to address ecological concerns; and a heightened awareness of the opportunity to utilise the knowledge and skills of the architect outside traditional disciplinary boundaries. What is called for is professional aptitude and capability to contend with change. Such calls are paralleled by an expectation that architectural education[3] will re-examine the fundamental nature of its praxis, in order to prepare architects for this potentially rich, though challenging, environment.[4] This is nothing new. Over 35 years ago Hans Harms observed a questioning of established values and work methods.[5] In 1999, Sir Colin Stansfield Smith identified the need of education to prepare future practitioners able to respond to a changed field of practice.[6] Twelve years on we hear the same rallying cry, the latest in the Building Futures report 'The Future for Architects? [7]

The imperative to develop creative thinkers is intrinsic to any discussion of both education and practice today; the frequency to which it is referred within current discourse is illustrative of this.[8] Yet this prevalent usage runs the risk of rendering the term creative thinking useless, unless its meaning(s), the process by which such thinking is attained within education, and the implications of its implementation are critically considered. While discourse may have moved on from Jeffrey Ochsner's critique of the 'almost complete silence on...the precise nature of the creative processes in which students are asked to engage in design studio',[9] the primary focus of discussion on the design studio today is more upon the product produced (and the nature of this product's cultural meaning). This is perhaps most clearly evidenced in the turn taken in recent years by the Journal of Architectural Education away from an examination of

architectural pedagogy, and more towards discourse on architecture as cultural artefact.

Underpinning our discussion is a conception of a type of creative thought which enables and reinforces an ability to adapt to the changing demands and opportunities of contemporary and future practice. Inherent in this understanding is a questioning of our received forms of praxis. This assessment is echoed by those within practice and outside it. Architect Stan Allen has called for new ways of working that can deal with urban contexts 'where visible and invisible streams of information, capital and subjects interact in complex formations,'[10] while sociologist Rob Shields has noted the need to construct new methodologies that can cope with parallel and often conflicting conditions.[11] To this we add Dana Cuff's and Robert Gutman's observations on the multiplicity inherent in the nature of contemporary practice; e.g., the wide range of processes and contributors involved in the delivery of buildings.[12]

Practitioners will need to develop new approaches that can deal with these challenges. However, our concern here is how the necessary creative thinking might be fostered within education. Although continuous practice is vital in cultivating any form of sensibility and skill, creative thinking is unlikely to arise only from assimilation through the reiteration of tasks. Rather, this could be enabled through a specific pedagogy: the conception of creative thinking as a praxis of play.[13] This pedagogy of play is distinct from prevailing teaching practices, which inculcate students into a habitus of received ways of working and thinking. With Augusto Boal's forum theatre as a reference, we will explore how students can engage with play as a formative tool within the design process. We will delineate play as capable of fostering a sense of autonomy and efficacy. This argument is grounded in Paolo Friere's proposition that such freedom and self-belief are vital for enabling and pursuing creative thinking in the face of current and emerging challenges.

The Current Context of Creativity in the Design Studio

Transforming existing practice

Defining creative thought is a somewhat quixotic endeavour. As John Habraken has observed, 'one of the most difficult aspects of understanding designing has always been the multitude of divergent acts which occur simultaneously, defying simple descriptions.'[14] Bryan Lawson echoes this, noting that the various modes of thought that occur in the design process often become blurred.[15] This ambiguity extends into education, where definitions of design can be equally plentiful and just as elusive.[16] However, defining the act of creation lies outside the scope and aim of this text. Instead we will focus on the nature of the environment and an approach

10   Stan Allen, Practice – Architecture, Technique and Representation (Amsterdam: G & B Arts International, 2000).

11   Rob Shields, 'A Guide to Urban Representations and What to Do About It', in Anthony King (ed.), Re-Presenting the City – Ethnicity, Capital and Culture in the 21st Century Metropolis (New York: New York: New York University Press, 1996), pp. 227 – 252.

12   Dana Cuff, The Story of Practice (Cambridge: MIT Press, 1998, 6th ed. [1991]); Robert Gutman, Architectural Practice – A Critical View (New York: Princeton Architectural Press, 1988).

13   We conceptualise the design process as one particular approach to creative thinking.

14   John Habraken, cited in Bryan Lawson, How Designers Think (London: The Architectural Press, 1997 [3rd ed.])

15   Lawson (1997).

16   Joseph Press, 'Soul Searching: Reflections from the Ivory Tower', Journal of Architectural Education, May 51/4 (1998), p. 235; Wendy Potts, 'The design studio as a vehicle for change – the "Portsmouth Model"', in David Nicol and Simon Pilling (eds.), Changing Architectural Education, (London: E & F Spon, 2000), p. 241.

17 Bourdieu (1977), pp. 82 – 83.

18 Bourdieu (1977), p72.

19 John Friedman, 'Place-making as Project? Habitus and Migration in Transnational Cities', in Jean Hillier and Emma Rooksby (eds.), Habitus: A Sense of Place (Aldershot: Ashgate, 2005), p. 317.

20 Cuff, Dana, (1998); Amos Rapoport, 'A Different View of Design', The University of Tennessee Journal of Architecture, Vol. 11 (1989); Sharon Sutton, 'Reinventing Professional Privilege as Inclusivity: A Proposal for an Enriched Mission of Architecture', in Julia Williams Robinson and Andrzej Piotrowski (eds.), The Discipline of Architecture (Minneapolis: University of Minnesota, 2001), pp. 173 – 207.

21 Bourdieu (1977).

22 Friedman (2005), p. 317.

23 Ibid.

24 Bourdieu (1977).

25 Jack Mezirow, 1990. 'How Critical Reflection Triggers Transformative Learning', in Jack Mezirow, et. al. (ed.), Fostering Critical Reflection in Adulthood (San Francisco: Jossey-Bass, 1990), p. 14.

26 Ibid.

27 Donald Schon, The Reflective Practitioner: How Professionals Think in Action (New York: Basic Books, 1983); Donald Schon, The Design Studio: An Exploration of Its Traditions and Potential (London: RIBA Publications, 1985); Donald Schon, Educating the Reflective Practitioner (San Francisco: Jossey Bass, 1987); See also Ernest Boyer and Lee Mitgang, Building Community: A New Future for Architecture Education and Practice (Princeton: Carnegie Foundation, 1996).

28 Laura Willenbrock, 'An Undergraduate Voice in Architectural Education', in Thomas Dutton (ed.), Voices in Architectural Education (New York: Bergin and Garvey, 1991), p. 98.

29 Kazys Varnelis,'The Education of the Innocent Eye', Journal of Architectural Education, May 51/4 (1998), pp. 212 – 223.

to thinking which we believe can enable an ability to adapt in the face of a shifting context.

We each carry with us a worldview, built up through our experience, acquisition of knowledge and assimilation of beliefs and values. This worldview, drawing on Pierre Bourdieu's conception of habitus, both produces and is produced by practices that form part of 'a system of lasting, transposable dispositions, which integrating past experiences, functions at every moment as *a matrix of perceptions, appreciations, and actions.'* [17] These dispositions are 'structuring structures, that is, as principles which generate and organise practices.'[18] This *habitus*, and the dispositions and practice which are intrinsic to it, are both individual and shared. As John Friedman notes, 'though inscribed in the individual body, it is a collective phenomenon in the sense that a certain *habitus* is and, indeed, must be shared, or at least, implicitly understood and accepted by all the players in the game.'[19] Reference to a shared habitus within a group is most commonly allied to discussions of distinct socio-cultural groups, or society as a whole. We apply it to the architectural profession, recognising it as a distinct socio-cultural (and economical-political) subgroup, as identified by Dana Cuff, Amos Rapoport and Sharon Sutton.[20]

Reference to the group is critical to our discussion of changing practice. We understand *habitus* as something embedded within us, implicitly assimilated and upon which we do not, typically, reflect. Yet, while it is not merely causal, its manipulation generally is limited owing to deeply-seated and assimilated meaning perspectives, habits and ritualized behaviour. As Bourdieu argues, our *habitus* is informed by hegemonic practices which objectify authorized language and practices.[21] While this condition is not permanently fixed, 'because the field is subject to multiple influences, both from within and outside itself, it inevitably undergoes a slow process of change.'[22] Thus, 'the tendency is for the collective habitus to be preserved over relatively long periods of time.'[23] However, it is possible to implement a more immediate transformation through explicit action carried out by a specific agent, revealing to other individuals and/or the group an awareness of the dispositions which inform our practices. This action can 'awaken' schemes of perception, and appreciation of these, in others.[24]

Jack Mezirow has written that 'perspective transformation is the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world.'[25] However, it is not just about becoming aware; it is about acting on that awareness; as Mezirow notes, transformation entails 'reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting upon these new understandings.'[26] The challenge for education is how to put in place a pedagogy that might support students in engaging with such a process.

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30 Schon (1984), p. 6.

31 Stanton (2001), p. 31.

32 Cuff (1991), p. 121.

33 Included within these values is a prioritisation of the geometric space of architects over lived space; See Kim Dovey, 'Putting Geometry in its Place: Toward a Phenomenology of the Design Process', in David Seamon (ed.), Dwelling Seeing and Designing – Toward a Phenomenological Ecology (Albany: State University of New York, 1993), pp. 247 – 269. Simultaneously, values reflecting alternative cultural, political, professional, social and theoretical perspectives (e.g., environment-behaviour studies) outside of the discipline's prevailing values are marginalised or negated; See for example, Sherry Ahrentzen and Linda Groat, 'Rethinking Architectural Education: Patriarchal Conventions & Alternative Visions from the Perspectives of Women Faculty', Journal of Architectural Education, September 47/1 (1992), pp. 95 – 111; Boyer and Mitgang (1996); Press (1998); Rapoport, (1989); Sutton, (2001); or Anthony Ward and Wong Lei Sheung, 'Equity, Education and Design in New Zealand: The Whare Wananga Project', Journal of Architectural Education, February 49/3 (1996), pp. 136 – 155.

34 Thomas Dutton, 'Design and Studio Pedagogy', Journal of Architectural Education, Fall 41/1 (1987), pp. 16 – 25.

35 Robert Brown, 'The Social Environment of Learning', in Allan Davis (ed.), Enhancing Curricula (London: University of the Arts, 2004), pp. 217 – 236.

36 Robert Brown and Denitza Moreau, 'Finding Your Way in the Dark', [Online] Available at: http://78.158.56.101/archive/palantine/palantine/shared-visions-paper/index.html [accessed 28.04.12].

37 Cuff (1991), p. 118.

38 Thomas Dutton, 'The Hidden Curriculum and the Design Studio: Toward a Critical Studio Pedagogy', in Thomas Dutton (ed.), Voices in Architectural Education (New York: Bergin and Garvey, 1991), p. 174.

Structuring practices (and not creativity) within the existing paradigm

Advocates and practitioners of the design studio argue that it already achieves perspective transformation, that criticality and a reformulation of thinking are intrinsic to studio praxis. Donald Schon's seminal writings on the reflective practitioner and design studio teaching, echoed in discourse on education ever since, are a prime example.[27] Yet examination of studio practice since Schon has highlighted that thinking for oneself is subject to attack from the very beginning of education. Laura Willenbrock has commented that students are '...asked to forget most things in (their) past, to come to the studio "naked."'[28] This observation is echoed by Kazys Varnelis' critique of the design studio, who suggests that students are encouraged to abandon any preconceptions of architecture they may have.[29] Despite whatever gains may have been made in architectural education over the last 20 years to address these issues, continuing criticisms from students (e.g., in student forums run by the RIBA) are evidence that the conditions that have prompted these comments have yet to disappear.

So, just as students are asked to begin working with the design process as a way of creative thinking, they are told to abandon any existing knowledge and ways of working. Concurrently, they are placed on unknown ground where they are uncertain of how to proceed, what they are supposed to learn or even where to start; it is then suggested that they plunge into the act of designing, as only by doing this can they 'begin to understand what the studio master says and does.'[30] In effect, this new way of thinking and working is presented as 'a riddle to be decoded.'[31] Faced by this seemingly indeterminate condition, students turn to the tutor, whose role is to be their 'guide into the mysteries of design.'[32] This runs in parallel with their being asked to abandon their existing beliefs, and work with a new set of beliefs communicated by their tutor; the transmission of values that results is seen by some as central to education.[33] Delivered tacitly, rather than as an explicit part of the formal teaching, these values have been referred to as 'the hidden curriculum'.[34] These values are presented as self-evident and irrefutable.[35] The extent of students' acquiescence to this indoctrination is reflected in their own admission that, 'that is what we are supposed to think here.'[36] Simultaneously, the elevated status of these values is reinforced through practices (e.g., architecture as an endurance test, including long hours and confrontational assessment formats such as the traditional jury system), which Cuff suggests involve 'the intense indoctrination characteristic of an initiation rite.'[37]

While the values and ways of working which are demarcated are contestable, of primary concern here is how students are encouraged to conform to normative values, generating and reinforcing an 'uninformed consent to the dominant culture.'[38] Within this educational milieu, authorised schemes of thought and perception generate their own reified

39 Bourdieu (1977), p. 164.

40 Pierre Bourdieu, The Logic of Practice, trans. Richard Nice (Cambridge: Polity Press, 1990) p. 20.

41 Dutton (1991); Jeffrey Ochsner (2000).

42 Bell Hooks, Teaching to Transgress: Education as the Practice of Freedom (London: Routledge), p. 9.

objectivity, 'thereby founding immediate adherence, in the doxic mode, to the world of tradition experienced as a "natural world" and taken for granted.'[39] Coming to be seen as self-evident by both students and tutors, they thus remain unquestioned. As Bourdieu posits, these objective structures are internalized; acting in convergence, they provide "the illusion of immediate understanding...which at the same time excludes from that experience any inquiry as to its own conditions of possibility.'[40]

In this paradigm, students' existing values are denigrated while those of the educational establishment are reified, and thus existing patterns of thinking are reinforced and perpetuated. Moreover, the students' sense of autonomy and efficacy is undermined, which concurrently fosters a sense of dependency upon the tutor.[41] This dependency is evinced both in students conforming to normative values and their relinquishment of a sense of authorship of their work to the tutor. These consequences contrast negatively with the much-recognised need for creative thinkers proactively responsive to change. The pedagogic practices set out above do not foster such a capacity, but rather impede its development.

Creativity – a risky proposition

We need new pedagogies that will enable students to critically reassess, or step outside, received forms of practice and thinking to explore and cultivate new processes. Yet this agenda exposes students to, what is for many, a threatening proposition. It asks them to engage in a critical scrutiny of established values and ways of working, not only of the discipline but equally their own, which to date may have offered considerable support and security. That this intention echoes in some way inherited teaching paradigms is not unrecognised; the distinction is however that while the latter does so without offering insight into why, and instead only negates them, our proffered pedagogy opens up to why such a critical questioning of established norms and working practices is both viable and necessary in order to drive creativity.

Still, this poses a sense of risk and, together with their embedded thinking, may elicit a confrontation with any attempt to engage them in a process of critical re-examination. Educator Bell Hooks' comments reflect this struggle noting, "For reasons I cannot explain [the classroom] was also full of 'resisting' students who did not want to learn new pedagogical processes, who did not want to be in a classroom that differed in any way from the norm. To these students, transgressing boundaries was frightening."[42]

A key challenge is that none of us hold an objective viewpoint of reality; rather, our understanding of the world is informed by personal, subjective preconceptions and prejudices as much as it is by any absolute truth. We see what we want to see through selective 'codes by which we

43 David Lowenthal, The Past is a Foreign Country (Cambridge: Cambridge University Press, 1985).

44 Erik Blumenthal, Way to Inner Freedom: A Practical Guide to Personal Development (Rockport: Oneworld Publications, 1997), p. 84.

45 Paolo Friere, Pedagogy of the Oppressed (London: Penguin Books, 1996).

46 Paolo Friere, Education for Critical Consciousness (Bucks: Hazell Watson & Viney, 1974).

47 Paolo Friere and Danaldo Macedo, Literacy: Reading the Word and the World (Westport: Bergin & Garvey, 1987).

48 This certainly seems to be the status quo in the UK.

49 Friere (1996), p. 48.

delineate, symbolize and classify the world around us.'[43] This condition is exacerbated by an unwillingness to change; we want to hang on to our existing world view, what Jerome Blumenthal refers to as 'tendentious apperception.'[44] Rather than discarding our prejudices and being receptive to new ways of looking at things, we are predisposed to fall back on that which is familiar and safe.

Another significant obstacle is the transition of students from pre-university education to higher level education. All too often the former is based more upon Paolo Friere's notion of the 'banking system', in which students are the passive recipients of knowledge transmitted to them for direct assimilation without critical discussion or reflection.[45] The emphasis is upon students obtaining knowledge, or being able to apply this knowledge within pre-determined problem-solving exercises, and not upon working with this knowledge creatively in response to open-ended questions. As Friere notes, the 'tradition however, has not been to exchange ideas, but to dictate them…imposing an order to which [the student] has had to accommodate. By giving the student formulas to receive and store, we have not offered [the student] the means for authentic thought.'[46]

Students in university education, although they may desire freedom of thought, can find it hard to imagine, much less act upon it, as they have scarcely experienced it within their previous education. As Freire and Danaldo Macedo argued, creativity involves risk taking.[47] Yet this risk-taking is not something that, as passive recipients of authorised knowledge and values, they were previously urged to pursue. Much of the pre-university system is risk-adverse, aimed at a bottom line of results as measured in test results and league tables.[48] Students are not prompted to question things, nor are they supported in engaging in or developing creative thinking, Instead, they are tacitly encouraged to remain passive, 'immersed in a culture of silence.'[49]

This condition both reflects and impacts on why many students fear creativity. It represents an unknown path, and it is the inherent fear of the unknown that brings about an entrenchment within existing patterns of thinking. This aversion to risk is illustrated in students' desire to 'get it right', and their lack of engagement in open-ended inquiry. Rather than trying to question and reveal new possibilities, they try to identify a short cut to a 'right answer'. In the design studio this can be reflected in students' trying to do what they think the tutor will like, which only reinforces the previously noted sense of dependency on the tutor. Not yet willing to make the step needed for transformative critical thought, students struggle with the challenges before them and find the whole process uncomfortable and unsettling.

A transformative-based approach to education also poses risk for the tutor. Students must trust the tutor to support them in taking risks, holding faith that this will lead to enhanced understanding and a capacity for creative thinking. Such an endeavour carries risk for the tutor, as the tutor must deliver the support necessary to enable the student to achieve that goal, and justify the students' faith in their teaching.[50] The open-endedness of this form of enquiry also exposes them to various criticisms, ranging from accusations that the tutor 'is not teaching the students', to questions on the clarity of the teaching agenda.

Fostering Creative Thought through Play

Play as a course of action

Jeffrey Ochsner has posited the design process as analogous to 'inventive play.'[51] Ochsner further notes,

> [the kind of] 'experience we wish our students to discover was identified…as belonging to the realm of play in children, and is found at the root of creativity and imagination in adults. It is this experience that allows us to see the external world as we rationally know it, but also allows us simultaneously to imagine the world as it might otherwise be.' [52]

We can all recall moments of such play in our own lives, perhaps most easily from our childhood. One notable point of reference is the experience of kindergarten. In this setting the intention is not to transmit specific knowledge; rather, children are encouraged and supported to explore. However, a pedagogy based on this experience is not limited to children. An engagement with play in adults can fundamentally change our outlook and force us to look again at seemingly self-evident conditions, and by this act, enable us to control our own creativity. David Winnicott takes this further, suggesting that 'it is in playing and only in playing that the individual child or adult is able to be creative.'[53]

Unfortunately, by the time most of us reach adulthood we have effectively surrendered a sense of efficacy in our own creative capacities. As Ken Robinson sadly reminds us, 'most children think they're highly creative; most adults think they're not.'[54] We go through an education system that encourages us to fall in line with prevailing thought, and not to question or step outside its boundaries. Wider society reinforces this, illustrated for example through its acquiescence to the socio-economic controls put in place in the public realm by privileged interests, whereby the sense of the public good has been replaced by economic interests.[55] We have, in

50 Brown (2004)

51 Ochsner (2000)

52 Ochsner (2000), p. 196.

53 David Winnicott, Playing and Reality (London: Routledge, 1971), p. 73.

54 Ken Robinson, Out of Our Minds – Learning to be Creative (Chichester: Capstone, 2001) p. 1.

55 See for example: Andrea Kahn, 'Imaging New York', in Peter Madsen and Richard Plunz (eds.), The Urban Lifeworld – Formation, Perception, Representation (London: Routledge, 2002), pp. 237 – 251; Anna Minton, Ground Control – Fear and Happiness in the Twenty-First Century City (London: Penguin Books).

effect, *learned* not to be creative but to comply instead with the limitations imposed upon us, even our own self-limitations. Yet, while dormant, our capacity for play, and hence creativity, is not lost; we can take inspiration from children, who in their curiosity re-imagine the world as they explore and seek to understand it. Theirs is a world unbounded by mental limits.

Reference to play is, like design, a somewhat quixotic endeavour. Brian Sutton-Smith suggests that play is rather ambiguous and that, 'we cannot trust most of our contemporary psychological definitions of play.'[56] Mary Reilly further notes that while universal it is a construct that eludes classification.[57] Within the context of this paper articulating a precise definition may not be critical however; more important to understand here is what play does. Reilly identifies a number of descriptions, including play as: a carrier of learning; a way to engage with a diversity of experiences and interests; and play as imagination (or imagination as play).[58] Play is also suggested to be a curiosity-based phenomenon that allows us to explore an outer reality through interaction with it, and through this enabling a mastering of both specific skills and social rules.[59] This mastery can provide us with a sense of mental well-being through the sense of accomplishment we can feel, notably when that play involves overcoming a degree of challenge and risk. Of further note is that play can be pleasurable, offering stimulation and a sense of physical well-being.

Winnicott suggests that a special feature of [creative] play is that it 'depends for its existence on living experiences, not inherited tendencies.'[60] Creative play provides an opportunity to test out new ideas and possibilities, rather than to follow a predetermined course of action within normative conventions. One of its main advantages is the richness that it can reveal; all ideas are open to exploration as there are no explicit or implicit agendas and there is an opportunity to be broad and discursive in the exploration that takes place. It is, in effect, a game of *what if,* in which participants are free to examine alternatives and explore their meaning and implications. The movement from a narrowed direction of thinking, to one that is open to multiple possibilities can be liberating. 'Play…provides opportunities for imaginative leaps to occur, encouraging inventive ways of handling materials beyond the constraints of convention.'[61] As Angela Brew suggests, 'extending the range of what we consider relevant to any given situation opens us open to new insights.'[62] Edward de Bono takes this thought even further, suggesting merit in looking at 'the least obvious approaches rather than the most likely ones.'[63] Equally formative is the opportunity to break out of existing patterns by making connections between seemingly unconnected things. 'Play provides an excellent opportunity to try combinations of behaviour that wouldn't be tried under functional pressure.'[64] Such notions are reflected in de Bono's views on lateral thinking, through which known information and phenomenon can be seen with a new perspective, and is particularly useful 'as a way to restructure existing patterns of thinking and provoke new ways' and

56 Brian Sutton-Smith, 'Evolving a Consilience of Play Definitions: Playfully', in Stuart Reifel (ed.), Play & Culture Studies Volume 2 – Play Contexts Revisited (Stamford: Ablex, 1999), p. 239.

57 Mary Reilly, 'Defining a Cobweb', in Mary Reilly (ed.), Play as Exploratory Learning – Studies of Curiosity Behaviour (Beverly Hills: Sage, 1974b).

58 Ibid.

59 Mary Reilly, 'Introduction', in Mary Reilly (ed.), Play as Exploratory Learning – Studies of Curiosity Behaviour (Beverly Hills: Sage, 1974a).

60 Winnicott (1971), p. 146.

61 Roy Prentice, 'Experiential Learning in Play and Art', in Janet Moyles (ed.), The Excellence of Play (Buckingham: Open University Press, 1994), p. 127.

62 Angela Brew, 'Unlearning Through Experience', in D. Boud, R. Cohen and D. Walker (eds.), Using Experience for Learning (Buckingham: The Society for Research in to Higher Education and Open University Press, 1993), pp. 87 – 98.

63 Edward De Bono, Lateral Thinking (London: Penguin Books, 1970) pp. 9 – 10.

64 Jerome Bruner, Functions of Play (London: Grant McIntyre, 1972), p. 82.

65   De Bono (1970), p. 11.

66   Merriam-Webster: (2009) http://
     www.merriam-webster.com/
     dictionary/play?show=1&t=1317419191
     [accessed 15 March 2009].

67   Note: while these thoughts are the
     author's own, the authors wish to
     acknowledge inspiration for this
     wording from: Andrea Kahn, 'Defining
     Urban Sites, in Carol Burns and Andrea
     Kahn (eds.), Site Matters, - Design
     Concepts, Histories, and Strategies
     (New York: Routledge, 2005).

68   Reilly (1974a), p. 15.

69   Albert Solnit, 'From Play to Playfulness
     in Children and Adults', in Albert Solnit,
     David Cohen and Peter .Neubauer
     (eds.), The Many Meanings of Play –
     A Psychoanalytic Perspective (New
     Haven: Yale University, 1993) p. 30.

70   Paolo Friere, Pedagogy of
     Freedom (Maryland: Rowman
     & Littlefield, 1988), p. 67.

raise awareness of alternatives.[65] Play, and with it creative thinking, can be deliberately discursive and chaotic. The challenge is to encourage students to take the seldom trodden path in an open-ended search for the previously unanswerable, unobtainable and unthinkable.

It is an understanding of creative thought that informs our own approach to the design studio. Our conception of play understands it as to operate 'in a speculative manner.'[66] Intrinsic to this definition is that play has a sense of agency; it is a way of testing and constructing our own, and sometimes comprehending others', sense of the world.[67] In this sense, play can serve as a 'strategy to apprehend the unknown.'[68] This strategy is not however merely about reviewing the past or reflecting on the present, but equally that it provides 'a constructive expression of curiosity that enables "players" to prepare for future challenges and opportunities.'[69]

It is, however, essential to clarify that a pedagogy of play is neither about a case of anything goes, nor is it about asking students to (figuratively) wander off aimlessly in the vain hope that they will find a way forward. It requires structure. This structure is not about setting boundaries, but about providing a platform from which to start and venture outwards. Those in creative industries, from architects to writers, are all familiar with the challenge of working in a 'blank site'; it is the site which, at first glance, imposes the most restrictions that is often the one that provides the most inspiration. These apparent limitations provide us with something to work with, or against. In the absence of such a platform there is the potential for students to drift unproductively. Within an educational environment this platform might be a carefully worded question or challenge which provides a prompt for discursive action. In a related sense, play needs a clearly delineated place and time in which to operate. This provides room for the participant to manoeuvre, uninhibited by external distractions or impediments. It is also about providing a space in which to do; while playing involves dreaming, thinking and reflecting (echoing Schon's discussion of the reflective practitioner), play is particularly about actively searching and (re)inventing.

While play is both accessible and familiar, for some it can be threatening. Having been en-cultured into a prior education system which is risk (and play) adverse, the introduction of play into the learning environment has the potential to be inhibiting. Starting the act of creative play without knowing where it is going is risky; this fear of not knowing (which runs contrary to the knowing-based education to which students have been conditioned) can prompt a hesitancy to start playing. Yet as Friere advises, 'for us, to learn is to construct, to reconstruct, to observe with a view to changing – none of which can be done without being open to risk.'[70] What is needed is an open environment which supports the taking of risks and engagement in creative play. A key aspect of this environment, though not the focus of our discussion here, is the social relationships that exist

71 Brown (2004).

72 This construct originates in previous
work carried out by one of the authors.
For further reading, see Robert Brown
and Denitza Moreau, 'Seeing the World
Through Another Person's Eyes', in David
Nicol and Simon Piling (eds.) Changing
Architectural Education (London:
E & FN Spon, 2000) pp. 49 – 57.

73 Steven Brookfield, Developing
Critical Thinkers (Milton Keynes:
Open University Press, 1987).

74 David Nicol, 'Research on Learning and
Higher Education Teaching', UCoSDA
Briefing Paper Forty-five (1997).

75 Friere (1974); Friere (1996); Friere (1998).

76 Brookfield (1987); N. Entwistle,
'Motivational Factors in Students'
Approach to Learning', in Rod Schmeck
(ed.) Learning Strategies and Styles (New
York: Plenum Press, 1996); Friere (1998).

77 Ochsner (2000).

78 Angela Anning, 'Play and legislated
curriculum', in Janet Moyles (ed.),
The Excellence of Play (Buckingham:
Open University Press, 1994) p. 70.

between students, and between students and the tutor. The significance of these social relationships on learning cannot be underestimated.[71] More central to our argument is the recognition of students' existing attitudes and thoughts, and fostering a setting in which these beliefs and knowledge can be shared and constructively examined.

Central to this social environment is something we would define as 'beginning with where students are at'.[72] One aspect of this is to understand the students' motivations and concerns. It is important to recognise the sense of trepidation students feel in taking on risk and it has been suggested that alerting students to the risks involved is an ethical obligation.[73] This *beginning with where they are at* is also about building upon students past experiences and their existing knowledge, understanding and values which come out of that experience. This allows the student to begin with what they are already familiar, and hence is more accessible and non-threatening. They are able to build upon their existing *habitus*, while simultaneously having opportunity to explore new ideas and ways of working. This allows not only their existing thinking and practices to serve as a frame of reference to consider new approaches, but equally for the latter to expose their existing thinking and practices to interrogation. This enables them to work with and reflect upon how the two relate, which enables a deeper understanding to be developed.[74] This approach is reflective of Friere's construct of 'generative themes'; it encourages students to reveal to themselves what they already know, providing a space from which they might emerge and intervene with the world.[75]

Beginning with where the students are at also affirms their sense of self-worth, and so encourages more active participation by the students.[76] To further build the students' sense of confidence they must be able to venture forward uninhibited by fear. Crucial to this is providing an environment which is receptive to all ideas, where these ideas are not subjected to judgements of right or wrong. Tutors should question students, but only to reveal opportunities or test potential. If the questioning implies criticism instead of exploration, the students' defences will be engaged.[77] Angela Anning observes, "For the adult and child, a 'play' context allows the learner the freedom to experiment without the fear of expensive or potentially embarrassing error." [78] The students need to feel that they have some ownership of this process, and that its control does not lie solely with the tutor (although the tutor will maintain some aspect of control in order to provide the necessary support and leadership). This sense of ownership further reduces the fear that students may feel, and reinforces their sense of freedom and autonomy.

This environment must also be one that is communal; our earlier reference to the kindergarten as a space of creative play is worth briefly returning to here. In kindergarten one not only learns through individual play, but equally through interaction with others. This engagement allows all

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79 Dutton (1991); Henri Lefebvre, The Production of Space, trans. Donald Nicholson-Smith (Oxford: Wiley Blackwell, 1991).

80 Dutton (1991), pp. 176 – 177.

81 Carl Rogers, Freedom to Learn for the 80's (Columbus: Charles E. Merrill, 1990).

82 Florence Namulundah, Bell Hooks' Engaged Pedagogy (London: Bergin & Garvey, 1998).

83 Friere (1996). Intrinsic to the term conscientização is a sense of becoming aware of contradictions and understanding one's own position in relation to those contradictions, and taking subsequent action.

84 Brookfield (1987).

85 De Bono (1970).

86 Friere (1974); Arlene Goldbard, New Creative Community: The Art of Cultural Development (Oakland: New Village Press, 2006). See also Augusto Boal, Theatre of the Oppressed (New York: Urizen Books. 1979).

87 Goldbard (2006).

participants to reveal personal and shared limits and benefit from others' experience and understanding. Building on arguments from Dutton and from Henri Lefebvre, the space of learning is socially constructed.[79] Within this space, students are exposed to the viewpoints of others. As Dutton, notes, 'what is produced by the students as meaning and knowledge is forged on public terrain where it can be engaged critically, individually and collectively.'[80] The tutor should be equally involved in this site as a fellow participant open to new learning, instilling an atmosphere where all are open to new ideas.[81]

A key benefit arising from this environment is the sense of autonomy and efficacy it engenders within students. Strengthened by this freedom and sense of confidence, they are more likely to question ideas, reinforced by an understanding that knowledge is socially constructed. Instead of seeing the object of learning as a structure imposed by authority, students come to understand that they can take ownership of their learning;[82] the same can be equally said of their comprehension of their own and external practices. It is what Friere terms *conscientização*, a process whereby the student becomes critically aware of their own position.[83] Armed with this meta-cognition, they are able to look further than received paradigms and their existing perspectives, and engage with more abstract, reflective thinking.[84] As de Bono states, such thinking is essential to change and progress.[85]

Putting play into practice – the workshop as an opportunity to transgress

The workshop is a well-known pedagogic device; its use is central to the design studio in architectural education, and equally across other creative-based disciplines. For us, intrinsic to its nature is using it as a space in which students can play with creative thinking, free of any inhibitions of assessment. It gives them room to manoeuvre away from any preconceived ideas and approaches they may have, and to practice what it means to be a creative thinker.

A workshop as a space of play is reminiscent of Freires 'culture circles' and, particularly, Augusto Boal's approach to forum theatre in the context of community cultural development.[86] Boal's method involved creating an environment in which observers are not divided from the actors and instead are able to participate in the performance. Within this environment, actor/spectators and spectator/actors share problems (in this case unresolved political or social problems), which are translated into a performance that acts out potential solutions to all. The 'joker' or the co-ordinator invites all to consider the performance and its proposed resolution, and imagine other ways to proceed. This whole process is then repeated, where the participant's reflections are turned into action to reveal another approach and take the enquiry in a new direction.[87]

In the design studio, the workshop itself is the performance, the act of reciting what is valued and problematised at the given time. The former is initiated by a prompt which allows the students to start with something with which they are already familiar, though in a slightly different way; this initial gesture acts as a warm-up exercise for the more active play which is to follow. The latter is triggered by the tutor through the framing of questions raised by the nature of the context in which the students are working, or the students' work. These questions are typically not straightforward but rather are intended to provoke lateral thinking. Together with clearly defined parameters of time (e.g., an afternoon, a day, a week, depending on the issues, participants and other circumstances, such as logistics), the provocations provide a platform from which students can begin to explore. The workshop itself often consists of a ceaseless and frenetic activity through which, as described in the example from Boal, the process becomes product.[88] While this process is not without thought, there is a distinct emphasis on *doing* in the workshop, of generating and testing ideas; this recognises that outside the workshop there is time for both a steadier, medium-paced development of ideas, and slower - but incisive - reflection. The tutor acts as an observer and conductor to interject into the process and to critique (i.e., not to assess, but to identify further questions to pursue) the progress of the students' inquiry. The tutor also acts as participant, sharing with the students his/her own (purposefully divergent) response to the same questions posed to the students. In exposing him/herself to the same risk the students are asked to take on, an environment of shared play is reinforced.

Further inspiration for the design studio workshop is found in the open-endedness of Boal's forum theatre. Here, a space is provided for both the incongruous and contradictory. Ideas are not rejected as unworthy of attention; instead, when duly considered, they are welcomed for the potential they might reveal. Such constructs echo Clark Abt's oxymoron-learning strategy, or Edward de Bono's lateral thinking.[89] What limits this open-endedness from being fragmentary however is the ownership the participants have over this space and the processes taking place within it. As Reilly suggests, relaxing the normal rules, and allowing participants to take control of the ground in which they are operating, fosters a sense of autonomy.[90]

At the end of the workshop a place and time are provided for peer-dialogue on the workshop activity, notably on the issues raised, the possibilities revealed, and further questions raised by it. This discussion provides opportunity for shared critical reflection to transform the knowledge for further transformation. This idea is similar to how Hans-Georg Gadamer describes interpretation as something which is not definitive but always is in a state of becoming, and thereby impossible from which to derive 'correct' outcomes. He proposes the removal of a singular understanding and the production of a dynamic situation in order to reveal actions.[91]

[88] Boal (1979).

[89] Clark Abt, Serious Games (Viking Press, 1970); de Bono (1970).

[90] Reilly (1974a).

[91] Hans-Georg Gadamer, Truth and Method (London: Sheed and Ward, 1999 [2nd ed.]).

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The workshop is a framework that can encourage creative thinking, but the design workshop is only as successful as the student's response to the process. Again, by increasing the student's sense of efficacy the tutor can encourage the student to experiment with their own ideas. The preconceptions students bring to the design workshop initially define limits and these preconceptions influence the way they see and the questions they ask themselves and others. The workshop is a catalyst where those preconceptions are opened up to their own (and other's) (re)consideration. The outcomes of the workshop by default are defined by the student's own criteria and although the tutor may have a supportive and co-ordinating role as moderator, the student is aware that they are responsible for the outcomes. Through this recognition of responsibility is engendered a sense of achievement and associated sense of efficacy, setting the scene for further exploration and reflection. For the students, who in the past have been inculcated into thinking that it is not possible to deviate from the status quo, this space of play reassures them that it is acceptable to do so, and encourages them to make time for this in their own design process. The creative play within the workshop therefore forms an act of critical resistance to the hegemony instilled within the student through past educational experiences and any preconceived beliefs, ideas and practices.

While prompted initially by questions posed by the tutor, the workshop provides students with an opportunity to elucidate their own questions and provides a framework within which to pursue these questions. The students thus set the agenda within a live situation and the tutor supports them academically in their own inquiry, thereby 'helping the student to recognise themselves as the architects of their own cognition process.'[92] The generic structure of the workshop prevents any sense of initial panic, and is flexible enough to allow the student to stretch the framework in their own development and 're-cognition.'[93] This approach extends the student's ability to re-think, question, deconstruct and then reconstruct their own knowledge 'heuristically' in the interest of their own emancipation.

This emancipation is evidenced in the change which can occur in students' thinking, not necessarily within any one workshop, but rather from one workshop to the next and during the duration of the design studio across the academic calendar. Initial workshop exercises provide a way of drawing out students' existing attitudes and ways of working; these are increasingly challenged in later workshops as new approaches are introduced. Throughout, communal dialogue acts as a recurrent prompt for critical reflection by the students. The liberatory effects of this pedagogy are illustrated in the participants' reflections on this experience. As one student noted, 'the workshops really helped to progress the initial thoughts that I have at the early stages of my design inception. The sessions prompted me to question the proposal in a group atmosphere and

[92] Friere (1998), p. 112.

[93] James Corner, 'A Discourse on Theory I: Sounding the Depths – Origins, Theory and Representation', Landscape Journal, Vol. 9 No. 2 (1991), pp. 115 - 133.

through detailed analysis.' A more common refrain from the students is that the 'workshops really opened my eyes to new ways of thinking'¸ and that 'the workshops allowed us to explore new methods of thinking about producing buildings.' Such commentaries remind us of one of the purposes of education; i.e., to enable students to think critically, and creatively, on their own practice.

Conclusion

Perhaps some of this is obvious. We hope (and recognise) that the pedagogy we have posited is something with which other educators are engaging. The nature of still-present discourse however, and continuing critiques from students within architectural education, suggests that problems of the perpetuation of and indoctrination into existing practices and values still exist. Although practice is telling academia that it needs to do a better job, it is encouraging that it is not engaging in worn-out diatribes that architectural education does not prepare students to practice, as evidenced in the combative debate back in the 90s over what the aims and content of education should be. This time around there seems to be a consensus – a need to foster and support the development of creative thinkers who are able to respond to a dramatically and rapidly changing context.

The challenge is to develop mechanisms to make this happen. Within both practice and education we need to acknowledge that our habitus can delimit our capacity to adapt to new conditions, and even to question our existing ways of thinking and learning. In this text we have proposed one way of breaking free from such constraints. Through a pedagogy of play, grounded in an supportive environment in which ideas and ways of working are open to (re)consideration, students are enabled to explore and test both new and their existing ideas, ways of thinking and forms of practice. What we are calling for in education is a figurative space in which a liberatory pedagogy can grow. This must however remain an environment in which all constructs and practice are open to question. It is only within such a ground that students will be able to take on the changing nature and challenges of practice both now and in their future.

[94] Marion Milner, On Not Being Able to Paint, (London: Heinemann Education Books, 1950), p. 126.

'I now found I had worked through to some sort of intellectual formulation of what to believe in, in living not a finished statement but a marking out of directions and belief.'[94]

[95] De Bono (1970) p. 38.

One may play around with experiments, with models, with notation, with ideas...I am looking but I don't know what I am looking for until I have found it.'[95]

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