Architectural Judo: Relational Techniques for Building Events

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Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis/project is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

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Abstract

Architectural Judo investigates the kinds of actions creative practices can employ when moving-with and within the spatiotemporal complexity of a forming situation, or atmosphere. It responds to the challenges for creative practices engaged with a heightened sense of interconnectedness that arises from an ‘atmospheric’ understanding of experience as an ecology of relations.

This research initially approaches atmospheres as a critical term that conflates ideas of meteorology and spatial ambience, before moving on to a turbulent ontology that lies just below the surface of everyday appearances. Creative projects are employed to reveal and work with this implicit turbulence. I develop a technique-specific approach comprised of ‘thresholding’ and ‘architectural judo.’ These techniques open up and propose a way of working at the edge between architecture and interior design by thinking of buildings as events always in formation. Across creative projects in galleries, workshops of bodily attunement, ‘studio sketches,’ installations in public spaces, experimental writing, architectural design, and an audio walk, this PhD charts a movement from an individual studio/gallery practice to the undertaking of larger collaborative project-events designed for the public realm.
Introduction: Some Turbulent Beginnings

How is atmosphere constructed? Atmosphere seems to start precisely where construction stops. It surrounds a building, clinging to the material object … Atmosphere might even be the central objective of the architect. In the end, it is the climate of ephemeral effects that envelops the inhabitant, not the building … What is experienced is the atmosphere, not the object as such.¹

If, as Mark Wigley and others² assert, atmospheres are the central objective of the architect, how might one go about working with them? How do atmospheres come into existence, how are they shifted and how do they move us? For creative practices concerned with the ‘something else’ that architecture might become, finding ways to work with atmospheres as the primary ‘non-object’ of concern presents particular challenges. Techniques for creative practices situated in the midst of atmospheres remain obscure or undeveloped.


Fig. 0.1 white out (2004). Canary Gallery, Auckland. The final studio project of my architecture degree investigated the ganzfeld-like experience of a meteorological white out in architectural terms, culminating in installation and printmaking works in a small artist run gallery space in Auckland.
Issues of atmospheres were the foreground concern when I began this PhD. Beginning with atmospheres highlighted two key concerns: Firstly, atmospheres are constituted by objects, materials and subjectivities in constant and reciprocal co-formation. Secondly, atmospheres characterise a distribution of affective–agentic power across human and non-human action, matter and ephemeral effects. Understood in these terms, atmospheres can be understood as affective situations that are in processes of constant formation. Situated just on the edge of architecture, atmospheres offer a way of understanding environments and situations as emerging complexities.

But the ubiquity and diversity of ‘atmospheres’ have led me to realise its limitations as a critical term. As Wigley already anticipated: “Atmosphere escapes the discourse about it. By definition, it lacks definition. It is precisely that which escapes analysis. Any specific proposal for constructing atmosphere, no matter how changeable or indeterminate, is no longer atmospheric”. The characteristic slipperiness of atmospheres – combined with the fact that even spaces described as ‘lacking in atmosphere’ could be argued as constituting an atmospheric category – render the term generic. The potential of ‘atmospheres’ to leverage any further critical insight is diminished.

This research lets go of ‘atmospheres’ as a critical term, and instead explores techniques for creative practice as situated within relational complexity. It is about the kinds of actions one can employ when moving with and within complexities. In doing so these actions foreground particular only-just-felt environmental qualities so they can be worked with more explicitly. I propose an action-specific, technique-specific practice that is applicable across a range of creative practice fields concerned with the complexity of an atmosphere’s ‘forming situation’. These fields are primarily architecture and interior design, but also including publicly and socially engaged art practices, and touching on consultative approaches to urban design and planning.

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3 Anderson (2009), p. 79.


5 This term is particularly useful in characterising a more general conception of spatiotemporal relations as always in flux. I adopt this term following its use by Paul Carter. See Carter (2015a), p. 15.
on an edge between architecture, art and interior design

Friends and allies that address these challenges can be found on the fringes of architectural practice – experimental practices that test out spatial propositions in sketchier (and less regulated) ways. These practices include those of Rafael Lozano-Hemmer, Malte Wagenfeld, Philippe Rahm (including earlier work in partnership with Jean-Gilles Decosterd), Roni Horn, Michaela Gleave, Lebbeus Woods, Olafur Eliasson, James Turrell and Robert Irwin. This research tentatively and provisionally groups these practices together in their shared concern with what I call ‘atmospheric thresholding’ – where practices work relationally to complicate our understanding of spatial limits and bring about a heightened experience of environmental qualities. These practices are also notable for their doubled engagement with the term ‘atmospheres’, both as a quality of spatiotemporal relation and in a meteorological sense. Many projects make explicit reference to weather phenomena such as fog, storms, fireworks, the volumetric properties of light and colour, clouds, air, pressure differentials and breath.

Practices of ‘atmospheric thresholding’ can be understood as operating in a number of specific ways. As well as working with the meteorological figures listed above, weather phenomena are used to complicate a clear separation between inside and outside, and thus question spatial limits at a range of scales. These weather phenomena also operate as a model for the constant co-formation of atmospheres and subjectivity, often conflating the model and its referents. Finally, interiors that are thought of and experienced atmospherically require a different approach to space-forming and design. These practices work discordantly with privileged concepts of spatial value, such as stability, reliability and separation, instead favouring turbulence, contingency and an ongoing sense of interconnectedness that this research develops through the technique of thresholding.6

Although few, if any, of these practitioners listed above would describe themselves as interior designers, their works epitomise qualities of temporal and spatial ephemerality that are of particular concern to the discipline.7 While not explicitly working with weather phenomena, others practices at the edge between art, architecture and interior design take up similar concerns of turbulence, contingency and interconnectedness. These range from sound, video and installation art and architecture, and include the work of Arakawa and Gins, Scott Andrew Elliott, Pipilotti Rist, Alvin Lucier, Daniel Crooks and Reiser + Umemoto. These practices, which are discussed in further detail through the course of the dissertation, re-compose spatiotemporal relations, seeking a point of only-just-in-balance in the midst of ephemeral and complex dynamics. This sense of being on the edge of something else, amidst felt – but hard to articulate – interconnections, often sits in our perceptual background as we move through the world, but projects like the ones above start to press this sense more strongly into the foreground of attention. There is a feeling-out of things, a puzzle-piece sense of the world,8 that raises questions of how creative practices can operate amidst the sense of turbulence, contingency and interconnectedness suggested by atmospheres.

Jane Rendell’s term ‘critical spatial practice’ is useful in formulating a conception of the wider context within which my research is situated. In her book Art and Architecture: A Place Between Rendell “defined a series of projects located between art and architecture as

6 This dissertation develops a detailed notion of thresholding, expanding on its passing use across a number of sources including Elliott (2014), p. 65. and Manning & Massumi (2014), p. 66. I first encountered this term in conversation with Jondi Keane. He used it to describe the operative nature of projects by Arakawa and Gins, a practice that becomes significant in the unfolding of the dissertation.

7 Including issues of temporality, perceptual contingency, a complex relationship to other design disciplines, particularly architecture and interior design as bringing into question the distinctions between interiors and exteriors. See in particular Attiwill (2013), but also Bassanelli (2012), McCarthy (2005), Attiwill (2012), Attiwill , Crespi et. al. (2015), Weinthal (Ed.) (2011), Lavin (2011)

critical spatial practice since they critiqued both the sites into which they intervened as well as the disciplinary procedures through which they operated”. In other words, they raised questions about creative practice through creative practice. Rendell describes such practices as “situated at a triple crossroads: between theory and practice, between art and architecture, and between public and private”. This triple crossroads characterises my own practice in its mingling of methodologies from architecture and fine art, and my interests in spatial ambiguity and the use of reading and writing as critical and generative practices. This triple crossroads is also symptomatic of what I call ‘thresholding’ – a state of suspension amidst a complex tension of categories and disciplinary ways of working.

My training and practice began at architecture school, but always with an interest on the margins of architectural practice. After graduating, I spent twelve years making installation projects for galleries that in various ways combined moving images, drawings, performances, structures and soundscapes. These works frequently approached concerns of atmospheres and disciplinary indeterminacy, and were always made with the spatial relationship to bodies of an audience as an explicit concern. Despite further postgraduate study in fine arts, questions of working creatively with atmospheres remained unresolved. I have undertaken this PhD by creative practice as an opportunity to work through these issues in depth and with a sense of my own practice at a crossroads: How much further could a studio/gallery practice take me in exploring issues of atmospheres? Through the course of this research I have refined my understanding of atmospheres as the spatiotemporal complexity of a forming situation. This redefinition has allowed me to develop techniques for creative practice working among these spatiotemporal complexities. As a result, my practice has been reoriented towards the discipline of interior design – understood in an expanded sense as working with not only “the inside of buildings … [but also] other practices of interior making such as events and installation art”. My practice works with a productive friction between architecture and interior design, to develop a specific approach to interior design practice that emerges from this research as ‘architectural judo’. If architecture is understood as the production of semi-autonomous systems, then this approach is a way of deflecting these systems towards new ends.


10 Ibid.

Clockwise from top left: fig. 0.5 data_cloud (2005). Phatspace ARI, Sydney. Figs. 0.6 and 0.7 Auroral Anomaly (2006). Performance at Ascension Cinema Festival, Auckland. Performance photograph by Eve Gordon. Fig. 0.8 Glacier Tracer (2010–12). Fig. 0.9 Light Masonry Construction (2009). t e n t gallery, Edinburgh. Fig. 0.10 Ward Hill (2008). Sleeper gallery, Edinburgh.
This research is motivated by the belief that, aside from the habitual ways we engage in the world, there are always other ways of proceeding, but that some gentle encouragement is often needed to help us make this step into the unknown. This is where creative practice comes in. My own practice, along with those already discussed above, aims to raise questions, creating moments where our experience and understanding are gently thrown off balance, a slight nudge or a tripping up that exposes and foregrounds our habitual processes of constructing an understanding of the world. This tripping up allows a moment of critical awareness – that habitual processes are not the only means of proceeding. These moments of critical reflection allow a deeper understanding of how we meet and move with the world around us, which I discuss through the dissertation in terms of disposition.

These are two goals of this research. The first is to develop thresholding as a technique for ‘getting inside’ the spatiotemporal complexity of a forming situation, or atmosphere. The second is to articulate ‘architectural judo’ as a set of techniques for practising among this complexity of forces that enables the trajectory of a forming situation to be bent and redirected towards new ends. These ways of moving are not rules to be followed, nor a code of conduct, but something more flexible, a series of alliances or pacts with the world around me.
dissertation structure

The thesis is organised into four sections, which move more-or-less sequentially through the creative project work undertaken, allowing me to discuss the evolution and significant shifts in my thinking. The project work is situated through an engagement with related practices and theorists. These projects begin in a studio/gallery mode, but over the course of the dissertation a shift in practice occurs, with later works collaboratively produced for the public realm.

Section One, fielding, is a short opening foray that sets the stage through four accounts of differing but related approaches to ‘atmospheric thresholding’. These suggest some particular qualities and initial questions that are pursued through my own creative practice research, discussed under the groupings of airiness, friction and fluidity in the sections to follow.

Section Two, airiness, gathers together projects concerned with atmospheres, air and breath, conceptualised as a turbulent, dynamic context. The technique of thresholding is developed and refined as a process focused on a constant back-and-forth negotiation, rather than a more static and defined sense of spaces in between.

Atmospheric—Turbulence: Kissing—Meshing—Thresholding, chapter 2.1, discusses the development of the installation Cloudsound. This project has been used to test various theoretical models of spatial complexity, including models of turbulence, Sylvia Lavin’s notion of ‘kissing’ and the mesh of Timothy Morton’s ‘ecological thought’. Through this process I have developed the notion of ‘thresholding’ as an active, engaged process involved in the apprehension of spatial boundaries. This has proven to be a critical shift towards being able to articulate and work with an understanding of interconnectedness, and a way of rethinking and approaching atmospheres as actively relational rather than an inert ambience.

Chapter 2.2, Agencies of Air, takes the interconnectedness between body and surrounding environment as its focus, through a suite of small ‘studio sketches’ collectively titled Breathing. Space. These small projects begin to reveal my dispositional tendencies as a practitioner-researcher. A discussion of one such project, Trying to be Clear About Vagueness, is used to introduce paradox as a breakdown of binary logic. In its place I introduce a logic of mutual inclusion, as developed
by Brian Massumi. Jane Bennett’s *Vibrant Matter*, where matter is understood as vibratory, oscillatory, is also discussed as a way to understand the activity and agency of non-human actants. This chapter leads to a conception of bodies understood through rhythm and, through this, an expanded idea of the sorts of assemblages that can be understood through thresholding. By refining thresholding, the notion of atmospheres is recast as a way of thinking diffusely of bodily limits and a continuum of interdependence.

A short discussion of a project-event titled *Lift Lecture* in chapter 2.3 bridges concerns of air and body in relation to architectural spaces.

Section Three, *Friction*, consists of three chapters that chart my ongoing relationship with the RMIT Design Hub building. A tension has emerged between my disposition as a practitioner and the building’s disposition. These differences and misalignments in the way we meet the world lead to a productive friction between architectural and interior design approaches.

The projects discussed in chapters 3.1, 3.2 and 3.3 address the ways in which creative practices can ‘move’ when working with and within a complexity. Building on thresholding, as a technique of suspension between states that offers ways of entering into atmospheres, I develop ‘architectural judo’ as a way of conceiving of practice working within the always-forming spatiotemporal complexity of atmospheres. Architectural judo is underpinned by the techniques of amplification, leverage, discordant feedback and destabilisation. This practice is founded on a logic of mutual inclusion, as developed through Brian Massumi’s analysis of playfighting in *What Animals Teach Us About Politics*. The destabilisation of architecture is understood as questioning assumptions of stability and re-conceiving the building as an event in constant formation. This understanding is developed with reference to Arakawa and Gins’ concepts of the ‘architectural body’ and ‘procedural architecture’ and Henri Lefebvre’s techniques of rhythmanalysis. I discuss these projects as ‘speaking back’ to the Design Hub as a form of immanent critique – which, in its raising questions of practice from within practice, extends the value of thresholding and architectural judo as techniques of critical reflection.
The final part, fluidity brings together ideas of listening and speaking through the rhythms of an other, through the project With Fluidity. This project for the city of Christchurch, New Zealand, has emerged from a mutually inclusive model of city and river as dynamic and always in turbulent, eventful co-formation, in much the same way as bodies and buildings have been characterised in the preceding sections. As an audio walk, With Fluidity atmospherically combines environmental sounds and recorded stories of the city and river, and invites participants to re-imagine the city’s past and future by entering into the state of suspension opened up by thresholding. Following Paul Carter’s notion of ‘choreotopography’, the project uses techniques of architectural judo and an expanded idea of conversation to advocate for an alternative approach to the new city masterplan, described as ‘minor planning’.

A concluding chapter summarises the arc of the research. What emerges from this tracing is a way of approaching interior design practice that borrows from both my architectural and studio/gallery installation backgrounds, and uses thresholding to conceive of design contexts as always in event – as continually forming situations or atmospheres. An event-oriented approach to interior design is developed, where projects are formed and emerge from an inflection of relational complexities, rather than the production and imposition of new systems. Architectural judo offers techniques to compose with and within these relational complexities, such that habitually backgrounded environmental qualities are shifted and brought vividly into the foreground of experience. Environment and experience become reciprocally enmeshed and reappraised as mutually conditioning processes. I unpack two different approaches to ‘building events’ and also return to the significance of disposition. With these concepts, I point to possibilities for further research.
Fig. 1.1 Arakawa & Gins. Study for a Baseball Field for the Architectural Body (1991–92).
1.0 FIELDING

This short section acts as a fielding: A fielding of questions, concerns and related practices providing a context for my creative research practice, which is unpacked through the later parts airiness, friction and fluidity. Fielding describes a research field that is in the process of emerging and cannot quite be pinned down and neatly contained. In the context of this research, fielding describes a dynamic tension just at the edge of “where architecture gets close to turning into something else”.1 Seemingly only just the slightest of steps away from architecture is a space occupied by ‘atmospheres’, a term that gathers together a discourse spanning architecture and interior design,2 geography3 anthropology4 and philosophy5.

But despite this substantial body of scholarship, atmospheres remain difficult to get hold of. The following four studies draw on examples from sound art, contemporary critical theory, architectural installation and moving image to outline some initial approaches to a thresholding of atmospheres. In their own different ways, each example raises questions and suggests ways of thinking and working that open up an understanding of spatiotemporal complexity and interconnectedness. If I played cricket or baseball, fielding might involve standing at some particular location, occasionally trying to catch things that whizz by. If I was a farmer, it might involve the tending of crops and processes of cultivation. Both of these metaphors might have some mileage and I might borrow or adopt some of these strategies, but my game is neither of these. I’m playing at something different.


3 Anderson (2009), Edensor (2012)

4 Ingold (2010, 2012)

1: I am sitting in a room different from the one you are in now

‘I am sitting in a room different from the one you are in now.’ So said Alvin Lucier in 1969, over and over again. A refrain. Thirty-two times in succession, until all that was left were the resonant frequencies of the room in which he was sitting, activated by the rhythm of his speech. After language, resonance and rhythm are all that remain.

I am sitting in a room different from the one you are in now. I am tapping the keys of my laptop keyboard, reading the words as they appear onscreen before me. I am going to do this again and again until these words build into sentences, then paragraphs, which come into resonance, their rhythms reinforcing one another. What you will read, then, is a result of the resonant frequencies of these material activities, articulated through my own pacings through them. I regard this activity not so much as an explication of the creative works contained within, but more as a way to productively attend to the irregularities present in the background of lived activity.

Chances are, you are sitting in a room different from the one I am in now. Reading this in a room. Inside. And chances are that if you are in a room, it is in a building that you spend a significant amount of time with. A significant other. An intimate relationship, but not on terms that we might typically recognise. How can ideas of rhythm and resonance develop an understanding of the ways we relate and work among these significant others? How might we listen into and participate in these relationships?

6 "I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but more as a way to smooth out any irregularities my speech might have." Lucier (1981)
2: a tentative, turbulent approach

Madeline Gins insists we need “More tentativeness! People are too damn sure of themselves. Too, you know, fixated on how swell they are. They should just loosen up and be more tentative”.7 Elsewhere she has insisted that “persons need to be rescued from self-certainty”.8 Jane Bennet takes up these challenges in her book Vibrant Matter.9 She declares that her book will spend little time on questions of human subjectivity, instead focusing on the “task of developing a vocabulary and syntax for, and thus a better discernment of, the active powers issuing from nonsubjects”, aiming to “highlight what is typically cast in the shadow: the material agency or effectivity of nonhuman or not-quite-human things”.10 Bennett aims to bring to light a point of view that might typically be overlooked, that a revised understanding of matter as having human-like characteristics can lead to new understandings of life, self, self interest, will and agency. To do this she suggests that “we need to cultivate a bit of anthropomorphism – the idea that human agency has some echoes in nonhuman nature – to counter the narcissism of humans in charge of the world”.11 Bennett describes agency as being distributed mosaic-like across assemblages of human and non-human things, and offers the example of riding a bicycle on a gravel road as a way of understanding the strivings of human agency: “One can throw one’s weight this way or that, inflect the bike in one direction or towards one trajectory of motion. But the rider is but one actant operative in the moving whole.”12 Following Bennett, I understand human agency as an exertion that inflects movement amidst other environmental forces, with an accompanying sense of control held tentatively at the edge of balance.

This reappraisal of the status of agency as existing across a diverse and distributed field of actants, rather than exclusively in the human domain, is a current tendency in critical and cultural theory. Movements of thought such as new materialisms, object-orientated ontology, non-representational theory, actor–network theory, relational aesthetics, radical empiricism and other ecological and relational understandings of the world13 can be usefully grouped under Manuel De Landa's term 'flat ontologies'.14 These ontologies do not privilege or prioritise the human and, by extension to the case of

7 Arakawa & Gins, Interview with Prohm (2006)
9 Bennett (2010)
10 Ibid., p. ix.
11 Ibid., p. xvi.
12 Ibid., p. 38.
creative practice research, certainly not a single human as sole design author who exerts complete control over a design process towards a predetermined outcome. Instead, these writers and the creative practices already mentioned align with these concerns, drawing attention to a closely interconnected and relational mesh where all constituents are able to flex their own idiosyncratic tendencies, subtly (and sometimes not so subtly) reshaping their neighbouring nodes. Conceived in this way, identities and objects are not stable, fixed or inert and instead – like atmospheres – come into being through turbulent processes of co-formation, temporary couplings where to impress one’s intention onto another results in a reciprocal pressing back. Bennett suggests that thinking of ‘things’ as having person-like characteristics or behavioural tendencies can help overcome the too-damn-sure-of-themselves syndrome\textsuperscript{15} prevalent in anthropocentric conceptions of the world.

Ideas of certainty and stability cannot be abandoned entirely. Otherwise, the complexity of comprehending this interconnected mesh would be overwhelming. But tuning into this highly contingent version of things is important to the degree that it raises important challenges for action. As Timothy Morton writes: “Knowing more about interconnectedness results in more uncertainty. Staying with uncertainty is difficult.”\textsuperscript{16} The key question that this research addresses is: How can creative practice research approach the challenges and instabilities that arise from knowing more about interconnectedness suggested by atmospheres?

One approach is to work with paradox, a theme that Morton’s writing continually returns to. He brings seemingly irreconcilable positions together, finding ways of thinking and working through them that lead to a radically open approach to understanding and engaging with our vibrantly interconnected surrounds. A paradox points to a breakdown in logic, categorisation or conceptual framework. These breakdowns suggest that other ways of thinking and moving are needed. Rather than a logic of binary pairs, a both–and logic of mutual inclusion allows relational complexity to remain in play. In fact, play provides clues as to how action can navigate the counterintuitive insights provided by paradox. Creating with and among complexity and paradox requires that we learn from play, stay attentive to qualities of tentativeness and stop being so damn sure of ourselves.

\textsuperscript{15} Arakawa & Gins, Interview with Prohm (2006)

\textsuperscript{16} Morton (2010), p. 59.
3: storms
The concern for turbulent processes of co-formation emerged from my experience of several storms. Storms are turbulent processes. They amplify forces, creating vibrations, sometimes pushing situations with a resonance that can throw the whole system off balance. Storms have the power to undo what was previously understood as ordered and shift relations into new logics.

Storms can also be allegorical. In the gallery space of the Cooper Union: a series of painted wooden props, all of them leaning in slightly different directions, but with an overall sense of definite trajectory. Between these props run steel cables, meshing them together. Into this mesh smaller struts are inserted, increasing the tension of the steel cables to their limits. A tension field of increasing intensity. Backdropping this, a large-scale drawing wraps around two walls.

Called *The Storm*, this installation by Lebbeus Woods was exhibited in New York in early 2002. It allegorises an imminent forceful change through architectural construction. A paradoxical dynamic, given architecture’s usually assumed stability, but a reading that was inescapable in the context of the city so recently reconfigured by the events of September 11, 2001. As Woods notes in his sketchbook from the process of developing the project:

**THE STORM IS COMING – IT IS NOT HERE YET.**

When it comes, what form will it take? Will its form be familiar, or, an order so new that we will not know it for what it is? For it will surely reshape the landscape we inhabit, have known, have controlled. It will cast us into new worlds. When it comes, what will it teach us? About new worlds? About how to live – in the terrifying ever-newness of the world? But, perhaps, we will be able to reduce the new to the familiar … The STORM is a friend. It is progress, in another GUISE, our comforting mentor that has helped us weather many a storm before. By LEARNING, by accommodating the symbols of convulsion into a form of knowledge. But. When it comes what form will the STORM take? Will it leave anything standing, anything at all? Anything? – that we can recognize?17

Woods’ storm is metaphorical, polemical, allegorical. He is not simply writing and making with weather. He harnesses the power of the storm as a way of understanding the brewing of political power and an impending change in world order – still playing out fifteen years later.

Lebbeus Woods died on 30 October 2012, at the same time that a huge storm\(^\text{18}\) swept the eastern seaboard of the United States, ravaging his home city of New York. Others\(^\text{19}\) have noted the seemingly prophetic relationship between Woods’ own architectural work and the effects of the storm that coincided with his death. This confluence of events – in conjunction with my viewing of a speculative depiction of life in New Orleans post–Hurricane Katrina in the film \textit{Beasts of the Southern Wild}\(^\text{20}\) – crystallised a series of resonances and interconnections from which this research was beginning to emerge. Across these co-occurrences my concerns with architecture, its lived experiencing and poetic connections to air, atmosphere and weather were destabilised and brought into turbulent relation.

\(^{18}\) Hurricane Sandy

\(^{19}\) Manaugh (2012), Wainwright (2012)

\(^{20}\) Zeitlin (2012). A crucial scene in the film sees the protagonist’s father go outside in the middle of a huge deluge and attempt to fight the storm, firing his shotgun into the thunderclouds and yelling “I’m coming to get you storm!”

Fig. 1.5 Fernanda Viégas & Martin Wattenberg. \textit{Wind Map} (30 October 2012). Fig. 1.6 Behn Zeitlin (director). \textit{Beasts of the Southern Wild}. Film still.
4: onwards backwards

I am writing this in 2016 and just yesterday I saw Daniel Crooks talk about his work *Train no. 10 (onwards backwards)*\(^{21}\) at the Australian Centre for the Moving Image. Crooks’ practice re-works digital video footage to present alternative perceptions of space and time, using a technique that he calls ‘timeslicing’.\(^{22}\) This involves various manipulations of a single pixel width column within a moving image, resulting in forms being distorted as they move through the reconfigured spacetimes of his artworks. He speaks of this process as making a slight tweak to reality, and the need to seek a balance between alternative and conventional views of the world – anything too radical loses its potential to cause us to re-evaluate what we think we know about how we perceive our surroundings. Crooks considers his projects successful if there remains a thread that ties his work back to the already known. *Onwards backwards* reworks footage filmed from the front of a driverless train in Tokyo, stretching time across the picture plane of the moving image. The centre of the frame is set as the present moment, while the extreme right is 20 seconds ahead and the extreme left 20 seconds in the past, all while preserving their spatial relations. The resulting moving image is continuous but a sinuous whole. Instead of smooth arcs of train track, railings, overpasses and fences, these forms ripple with liquid-like looseness. It is not quite the world as we assume it to be. Everything is slipping in and out of alignment, wobbling and shimmering precariously on the edge of some other understanding.

\(^{21}\) A copy of this work is viewable on the artist’s vimeo channel. See https://vimeo.com/77843619 (last accessed 24 February 2016.)

\(^{22}\) Paton (2008), p. 10.

Fig. 1.7 Daniel Crooks. *Train no. 10 (onwards backwards)* (2012). Stills from moving image work. Courtesy of the artist, Anna Schwartz Gallery and Starkwhite.
Among the destabilising dynamics sketched in the vignettes above, some consistencies begin to emerge: a fascination with complex relational systems positioned just on the edge of turning into something else, a degree of uncertainty that can be discerned at the edges and limits of seemingly stable things, and ways of thinking and practising that carefully tread a line between balance and instability. These issues recur through the course of the dissertation.

As already suggested, this first section acts as a fielding – providing a range of examples that can be thought of as representative of the wider spectrum of practice and theory that I see as aligned with my own research. It has gradually brought into focus two key concerns: Firstly, the idea of turbulence – where diverse forces gather together to create a moment of disruption – as a model for conceptualising spatial relations. And secondly, creative practice as a means for working among these turbulent relations to seek moments of metastability – points of coherence that are always just on the edge of slipping out of control, suggesting new realms of possibility. In states of turbulence relational complexity becomes more palpable, calling for a more tentative engagement with our surroundings. Through tentativeness a reappraisal of the status of human agency occurs – how do we then conceive of our role in shaping the relational complexity of a forming situation, and how can creative practice influence and inflect this complex of forces? The next three parts of the dissertation directly address these issues through a discussion of creative practice research projects that I have undertaken both independently and collaboratively. The projects are presented in more or less chronological order, but are best understood as forming a cumulative argument. Earlier projects are able to be reappraised in terms of the conceptual and practice-based frameworks developed over the course of the research.
These next chapters concentrate on a diffuse sense of spatial boundaries explored through notions of atmospheres, air and breath. This leads to the development of thresholding as a way of discerning and holding open relational complexity – a kind of being on-edge and at-the-edge that gives way to an understanding of contingent interconnectedness. Thresholding implies that objects, environments and even our own subjectivities are metastable entities that emerge from a background flux of instability and turbulence.

2.0 AIRINESS
In this chapter I use the making of an installation project, *Cloudsound*, to work through and test out a series of theoretical models for understanding spatial and relational complexity. In developing *Cloudsound* a series of creative experiments and discoveries raised a cascade of questions. A fundamental concern of the installation project is the elision of boundaries, and models that address this concern are discussed. These include the critical term ‘atmospheres’, Sylvia Lavin’s notion of ‘kissing architecture’ and ideas of turbulence including my own notion of ‘interior turbulence’.

Through the making of the project, shortcomings and similarities across aspects of these models are revealed. These are discussed and worked through, leading to an ontology of turbulence that closely aligns with the interdependent mesh of Timothy Morton’s ‘ecological thought’. I propose ‘thresholding’ as a way of exploring potential spatial relationships with, and approaches to, turbulence as an ontological given. Throughout the making of *Cloudsound* techniques of thresholding recur and are refined, leading to a reappraisal of atmospheres as actively relational rather than an inert ambience.
a very cloudy beginning

*Cloudsound* was developed in 2012 for an exhibition at the Bundoora Homestead Art Centre, a converted Victorian homestead now operating as a regional gallery in greater Melbourne. The installation was located in one of the former bedrooms, a high-ceilinged space of approximately four by six metres. For the period of the exhibition all furniture and furnishings were removed, leaving only the fireplace and its ornate timber surround as a key feature in an otherwise darkened space. Emanating from the fireplace (where a computer screen displayed an image of networked lines) was a whistling sound suggestive of wind passing through the room. On closer inspection, the computer image revealed numbers and graphic objects whose values were erratically shifting, suggesting the sound’s responsiveness to unseen qualities or forces. The windows were blacked out but featured a small, lensed oculus, turning the darkened room into a large ‘camera obscura’ that projected an upside-down image of the homestead’s garden and neighbouring suburban development across the interior. Incongruously inverted across the walls and decorative plaster mouldings were poplar and macrocarpa trees, a rose garden, roof tiles, a garden path, an unused bus stop, suburban rooftops and the Yarra Ranges beyond the limits of the city. Capturing this outside world in real time, the projected image was subtly but constantly shifting in response to atmospheric states beyond – clouds drifting and reforming, trees swaying in the breeze, a small wind generator on a suburban rooftop that could be seen responsively spinning, at one moment an unintelligible blur, other times slowing almost to a standstill as the wind died. Similarly, an upside-down person might be glimpsed walking along the garden path, or cars looping periodically up a wall, over the ceiling and down the opposite side.

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2 Camera obscura are discussed in relation to practices of interior design in Terpak (2001) and Gaston (1998) both collected in Weinthal (Ed.) (2014)
Malte Wagenfeld invited me to develop the work that became *Cloudsound* at the beginning of the research process. The curatorial intent for the show, developed by Malte and co-curator Cara-Ann Simpson, was to explore intangible forms of sensation and to potentially speculate on the building’s past, acting “as a site-specific interpretation of the time-shifting experiences at Bundoora Homestead”. The invited artists were encouraged to think about how our works could offer “new ways of seeing – often not with the eyes – perceiving the building, its location and history”. As such, the invitation provided an opportunity to work through the initial concerns of the research, which revolved around the difficulties of working with the critical term ‘atmospheres’ and its attendant concerns of spatial ambiguity, representational capture and lived complexity. Whether through critical or creative practice approaches, one encounters paradoxes – as already quoted in the introduction, Mark Wigley has quipped that “atmosphere escapes the discourse about it. By definition it lacks definition” – and the project was seen as a chance to think and work through these seeming inconsistencies.

1 I was invited to make work for this exhibition along with Jason Parmington and Georgina Cue. Curators Malte Wagenfeld and Cara-Ann Simpson also both exhibited new works.


5 Wigley (1998), p. 27.
some problems with atmospheric ambiguity

Wigley alludes to the difficulties in the definition of ‘atmospheres’ as both pragmatic and conceptual. These difficulties are at least partially attributable to the fact that atmospheres can be understood in at least two different ways: As Derek McCormack summarises, both “in a meteorological sense: atmosphere as a turbulent zone of gaseous matter surrounding the Earth and … in an affective sense: something distributed yet palpable, a quality of environmental immersion that registers in and through sensing bodies while also remaining diffuse, in the air, ethereal”.

The word ‘atmosphere’ conflates both these possibilities, but in either case it suggests an in-between state. Meteorologically it is a layer of gases between the surface of the Earth and space, and in its affective sense it is a state that Ben Anderson describes as “between presence and absence, between subject and object/subject and between the definite and indefinite”.

Anderson also characterises atmospheres as always incomplete, involved in a process of emerging and transforming as they are “taken up and reworked in lived experience – becoming part of feelings and emotions that may themselves become elements within other atmospheres”. The various entities and forces that constitute them are continually reformulating each other. We are implicated and actively involved in the production of atmospheres. They condense spatial and temporal relations, implicating us in a moment of immediate possibility. An atmosphere’s affective potential lies in the ways in which these relational intensities press in on us and how we make sense of the world in and through these irruptions.

Key to this understanding of atmospheres is the recognition that the relationships between entities are always in negotiation, that a degree of turbulence, rather than static arrangement, defines relationality. Nothing is fixed or stable and everything is contingent on everything else. Sustaining this uncertainty, keeping things unfixed and in play and suspending the process of rigid definitions, are parts of an active process of ‘thresholding’ that has become key to understanding my practice and which began development through the thinking-making process of Cloudsound.

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6 McCormack (2008), p. 413.
7 Anderson (2009), p. 77.
8 Ibid., p. 79.
pressing questions

In working with this affective notion of atmospheres, an early approach was to think in terms of pressure in a poetic sense of pressing upon, as well as more prosaically as barometric pressure, a literal measuring of the weight of the air at a given point. As a designer I found pressure difficult to work with, but as a thinking tool it provides a way to conceive of a continuum between scales of the very large and very small. Both weather and sound are modulations of atmospheric pressure, just on radically different scales. Somewhere along this continuum lies the phenomenon of infrasound – a modulation of pressure that is almost fast enough to be considered sound but lies below the range of human hearing, perceptible instead as a movement of air that sets up vibrations of other materials and which is felt through our bodies. Some of my own experiments with high-intensity, low-frequency sound connected back to the difficulties that Wigley alludes to – infrasound is by definition sound that we cannot hear, raising difficulties in its design and perceptual reception.

The continuum thinking suggested by pressure proved more fruitful and led to the development of a project that brought categories of inside and outside into continual relation, rather than a binary opposition of mutual exclusion. Could an installation create an affective experience of spatial continuity, an atmosphere of being both ‘inside’ and ‘outside’ at the same time? How could the critical term ‘atmospheres’ be worked in such a way that its doubled meanings of weather and ambience were brought into play? How might these categories of outside and inside, weather and ambience, intermix and how might this mixing be understood?

9 A more detailed discussion of these issues can be found in Derek McCormack’s discussion of Salomon August Andrée’s pioneering hot-air balloon flight. See McCormack (2008).

10 Though one possible approach is suggested in Impasse by Beaubois, Denis, McClure, William & Stein, Jeff. (2012). Installation at Arts House, 19 – 28 October 2012, Melbourne. Dense foam rubber blocks completely fill the space, aside from a small slit through which you push yourself through to enter (you have to turn your body side on because it is so narrow. It is physically very confronting and hard physical work to move through). Once inside there are a series of spaces subtracted from the rubber mass, which you are able to climb over, move through and lie on. Sound, abstract digital projections and daylight activate spaces in which to pause.

11 This the medium and title of the collaborative project by Scott Arford and Randy Yau. See: www.23five.org/infrasound/manifesto.html (last accessed 17 April 2012.)

12 These issues are taken up in detail in work of anthropologist Tim Ingold. See for example Ingold (2010, 2012).
creating cloudiness

Thinking through pressure provided a way to begin working across – and creating continuity between – these categories of inside and outside, weather and ambience. The ‘sound’ part of Cloudsound was a soundscape that filled the room, transposing atmospheric pressure into acoustic phenomena, bridging the scales of weather and the domestically scaled interiors of the gallery spaces. The audio component of the work also worked to merge the exterior and interior atmospheres, converting the changing qualities of the weather beyond the climate-controlled gallery into an ‘aural cloud’ that tempered the interior.

A box containing a variety of weather sensors (pressure, humidity, temperature and light intensity) was located on the balcony outside the camera obscura, with a cable running into the computer housed within the fireplace. The computer ran a small program specifically developed to translate weather data into sound utilising fluctuating input data converted into audio signals via a process known as granular synthesis. This form of synthesis uses hundreds of very small audio samples of between 20 and 100 milliseconds, whose density, tone and duration were controlled by the software program responding to the inputs of weather data. In this case granular synthesis produced a cloud-like sound structure that emphasised texture and pitch, rather than a linear, representational sound recording.

This component of the project translated air pressure at the macro scale of weather into finer-grain disturbances in air pressure within the gallery’s interior. As such, atmospheric pressure became a way of providing continuity across divergent spatial and temporal scales. The slowly changing soundscape challenged the timescale of human sensitivity, for over the period of an hour or more (much longer than the likely duration of any visitor) there were only minimal changes in the overall nature of the perceivable sound. In larger contexts, micro-changes in the weather’s make-up similarly occur in ways that are beyond ordinary human perception. In such cases, the best we can typically do is catch a scent in the air that precedes the approach of rain clouds or feel a subtle, bodily sensing of the drop in air pressure as a front approaches. Within human consciousness weather is fairly stable, with slow changes in cloud cover and very few rapid changes in temperature, pressure or humidity. In the gallery’s interior, the
soundscape likewise changed across the course of the day, although in a slightly more pronounced way. The sound environment of *Cloudsound* aimed to amplify the presence of the subtle turbulence that backgrounds all experience.

This soundscape was augmented by bringing weather imagery into the interior, a literal transposition of outside in. Attracted by their indeterminacy and formlessness, I resolved to fill the room with clouds. Or, if not actual clouds, a projected image that kept their figures alive and in constant formation, alluding to the difficulties of their representational capture.\(^{13}\) One possibility would have been to set up a series of video feeds and use data projectors to cover the walls, but the provocation to think about ways of seeing and my own pre-existing interest in optics led to the choice of working with the analogue technology of the camera obscura. These devices bear similarities with the physiology of vision – a lens that captures and focuses a living visual field onto a sensing screen.\(^{14}\) Located on the upper floor of the former homestead, the gallery spaces enjoy an elevated viewpoint. Combined with the homestead’s large grounds, this provides views across the surrounding neighbourhood and a large expanse of sky. How readily could this atmosphere be brought inside? The effectiveness of the camera obscura could only be tested in the gallery itself. Given the full program of exhibitions, which generally relied on the windows being unobstructed, the only times when the room could be completely blacked out were in the short periods of changeover between exhibitions. There were two such windows of opportunity before our exhibition opened.

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\(^{13}\) Clouds serve as an emblematic figure in histories of representation. See for example Damisch (2002) where he discusses Brunelleschi’s use of a silvered mirror to incorporate clouds into a perspective drawing. Also Dorrian (2007), Kwinter (2010).

\(^{14}\) In art historical usage camera obscura were originally employed as an aid to drawing before, and then alongside, developing geometric systems that used perspective to represent the three-dimensional nature of space. For example see Kemp (1990) pp. 188–199, Gorman (2003) pp. 296–299.

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*Fig. 2.3* Sensor box (left) relaying atmospheric data from outside the gallery to Max/MSP software (right) to generate the weather-responsive soundscape.
testing times

During the first opportunity, I tested ways of blacking out the windows before experimenting with lenses of various sizes, focal lengths and combinations of lenses that would allow an image to come into focus. In this initial testing, Cloudsound was going to have a freestanding screen in the middle of the space upon which the projected image would fall. Once set up in the space, this screen felt at odds with the intentions of the project. The screen, which had to be freestanding due to the heritage status of the homestead, sat as an inert thing, a heavy object at odds with the lightness and airiness of a sound and projected-light work. The screen effectively shadowed out one fragment of the light field. By removing it, the light field was spatialised across all surfaces of the interior, not just a particular wall as the original concept image had proposed. Instead the light field was stretched and distorted, pressed up against all the walls, the floor and the moulded ceilings. With the screen removed, the full volume of the space came into play. This was an unanticipated outcome of the choice of camera obscura, but one which was transformative of the project and my thinking.

This pressing of projected light onto the interior surfaces did not come with a sense of pressure’s weightiness. As the camera obscura image wrapped the room in the lightest of touches, a different kind of contact occurred, one which resonated with Sylvia Lavin’s *Kissing Architecture*, which I was reading in parallel with Cloudsound’s development.\(^{15}\)

\(^{15}\) This reading and thinking resulted in an essay analysing James Turrell’s skyspace projects in terms of Lavin’s ‘kiss’. See Cottrell (2012)

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Fig. 2.4 First installation test. Experimenting with various lenses.
Fig. 2.5 First installation test in the gallery space. The decision to remove the screen allowed the camera obscura image to fill the space.
Fig. 2.6 An early visualisation of how the project might appear. Proposal image generated in Photoshop.
kissing architecture

In her book *Kissing Architecture*, Lavin elucidates a notion of architectural surfaces which offers a particularly useful way to think about the image/surface interaction in *Cloudsound*. Lavin discusses how the works of digital video installation artists such as Pipilotti Rist and Douglas Aitken, who project directly onto architectural surfaces, transform our understanding of spatial limits and spatial relations. This occurs when the projection of video comes into temporary contact with architecture, when moving images brush up against a static volume and shifting colours apply a gentle pressure to white walls, in a metaphorical kiss. She elaborates:

> [The] kiss is the coming together of two similar but not identical surfaces, surfaces that soften, flex, and deform when in contact, a performance of temporary singularities, a union of bedazzling convergence and identification during which separation is inconceivable yet inevitable. Kissing confounds the division between two bodies, temporarily creating new definitions of threshold that operate through suction and slippage rather than delimitation and boundary.

In the installation at Bundoora Homestead this kiss was played out between suburban city landscape and Victorian interior, mediated not by video projection but, instead, through the apparatus of a camera obscura. Rather than relying on prerecording of images typical in video installation, the camera obscura is unpredictable: dependent on weather and light conditions – atmospheres understood meteorologically – for its effect on spatial ambience. Its images are fleeting and ephemeral. How do the surfaces respond to the dynamic projected image? How does each transform the other?

For Lavin, kissing is something that happens between two bodies or two disciplines, but always between one and an other. It is a way of thinking about the exchanges and affects of these interrelationships, and relies on the same relationality and affective intensity that Anderson argues are central to atmosphere. As with the phenomena formulated by *Cloudsound*, Lavin begins with instances where the site of exchange is a material surface; “Architecture’s most kissable aspect is its surface. Space is hard to get a hold on. Structure has historically been inadequately pliant. Geometry – well, who really wants to kiss a square?” She goes on to convincingly argue that the kiss

16 Lavin (2011)
17 Ibid., p. 3.
18 Ibid., p. 5.
begins to disrupt ideas of disciplinarity, opening up possibilities for differentiating concerns of the interior in relation to architecture.

For example, in order to stage this kiss between the interior and architecture, it is necessary to think of the interior as distinct from architecture, as something with a degree of autonomy, rather than an equivalent to, or a byproduct of, the architecture. This frees the interior to “seek out provisionality, changefulness, and to provide architecture with a site of experimentation”. Lavin argues that the interior’s strength lies in its capacity to bring together material surfaces in such a way that the interactions between materials are amplified and can be employed to work against each other with a sense of dynamic tension. This disrupts a simple static reading of space and creates a more provisional and relational idea of spatiality and its disciplinary authorship. To clarify, “kissing is not a collaboration between two that aims to make one unified thing; it is the intimate friction between two mediums that produces twoness – reciprocity without identity – which opens new epistemological and formal models for redefining architecture’s relation to other mediums and hence to itself.” The kiss holds these two distinct bodies together in a moment of affective intensity where they are seemingly inseparable, but always only temporarily. This transient quality of two being together as one, but simultaneously not one, still two, of oscillating between twoness and oneness, is the power and keenness of the kiss. This spatial sense of continuous and yet separable oscillation is exactly what a practice of thresholding tries to sustain.

While the types of material relationships present in Cloudsound do not offer a literal softening and flexing of surfaces, Lavin develops her idea of kissing to open up new ways of thinking about interior/architecture relations and what architecture could become. As she says, “surfaces are where architecture gets close to turning into something else and therefore exactly where it becomes vulnerable and full of potential”. Moments of suction, with one surface pulled tight against the other, and slippages of proportion, ornament and meaning occur in a kiss that melds interior surface and projected light. These slippages might begin to unsettle some commonly held assumptions of architecture.

Ibid., p. 66.

Ibid., p. 67.

Ibid., p. 64.

Ibid.

These issues are taken up in detail through the research of Jonathan Hill, In particular see Hill (2006, 2012).


interior turbulence

Through this oscillatory kiss, Cloudsound began destabilising the way I thought of architecture, prompting me to speculate on an interior design practice concerned with atmospheres as always ephemeral, spatial, diffuse and turbulent.27 As Mark Wigley writes:

Buildings have always been seen to stabilize, to secure, to produce a sense of order in a chaotic world. Architectural discourse begins with the thought that the first buildings kept turbulence outside ... Architecture produces the effect of an outside. It invents the idea of the exterior, the unruly territory that is tamed by a shelter.28

27 Lebbeus Woods’ installation, drawings and notes for The Storm discussed in chapter 1.1 also informed this thinking.

This suggests that the architectural envelope achieves more than just a filtering or tempering of contingent atmospheric states; it consolidates architecture as a practice fundamentally concerned with constructing a clear delineation between weather and interior. Characterised in this way, architecture can be thought of as avoiding turbulent limit points and, with this, the threshold where things get “close to turning into something else”.\textsuperscript{29} Cloudsound provided an opportunity to begin a loosening up of spatial design practices (including both interior design and architectural approaches) towards a practice that embraced uncertainty, provisionality and changefulness. In the process Cloudsound complicated the structural certainties of architecture and interior by turning towards an ephemeral sensory experience of atmospheres.

To help articulate this understanding of atmospheres I began to develop ‘interior turbulence’\textsuperscript{30} as my own critical term, a term with the potential to operate with several layers of concurrent meaning. It suggests a rethinking of interiors as something other than places of separation, refuge and stability. Inhabiting these interiors means coexisting with contingency, an existence that might create an uneasy sense of turbulence within ourselves. Although a degree of turbulence is inherent to all situations, life is only manageable because we smooth over any moments of implicit turbulence. It is easier, and generally more productive, to navigate the world on the macro-scale stability of defined categories, knowable objects and predictable events. But instability and turbulence always lie below the surface of these appearances, and indeed everyday life is a constant improvisation with, in and because of these uncertainties. Brian Massumi asserts that what appears as “stability is always actually metastability, a controlled state of volatility”.\textsuperscript{31} Or as John Dewey writes: “Form is arrived at whenever a stable, even though moving, equilibrium is reached. Changes interlock and sustain one another … Order is not imposed from without but is made out of the relations of harmonious interactions that energies bear to one another.”\textsuperscript{32} These writers suggest that turbulence and instability are an ontological given, a line of thought also pursued by Michel Serres’ re-reading of Lucretian atomism in \textit{The Birth of Physics}.\textsuperscript{33} Turbulence is governed by processes of ‘positive’ feedback, where internal processes self-accelerate, leading to an increase in instability.

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{29} Lavin (2011), p. 26.
  \item \textsuperscript{30} I developed this in a paper written in the course of PhD study. See Cottrell (2014).
  \item \textsuperscript{31} Massumi (1992), p. 64.
  \item \textsuperscript{32} Dewey (1980), p. 14.
  \item \textsuperscript{33} Serres (2000). Italo Calvino (whose writing on lightness will be discussed in chapter 2.2) also cites Lucretius’ \textit{De Rerum Natura} as the “first great work of poetry in which knowledge of the world tends to dissolve the solidity of the world, leading to a perception of all that is infinitely minute, light, and mobile.” Calvino (1993), p. 6.
\end{itemize}
\end{footnotesize}
Manuel De Landa follows the work of Magoroh Maruyana to describe this phenomenon, comparing the negative feedback of a thermostat with the positive feedback of an explosion.\footnote{De Landa (1997), pp. 67–68.} The thermostat uses a process of negative feedback to limit and control the range of expression in a system – if temperature falls below a given range, a heating system lifts it back up into a comfort zone; if it gets too warm, the heating system is switched off. Negative feedback is ‘deviation-counteracting’; it leads towards homogeneity. Positive feedback describes how relations are coupled together in a causal loop. In the case of an explosion, this occurs between the explosive substance and its temperature. The speed of an explosion is a function of its temperature, “but because the explosion itself generates heat, the process is self-accelerating”\footnote{Ibid., p. 68.} and the positive feedback of the explosion forces temperature to accelerate out of control. Positive feedback is ‘deviation-amplifying’, a destabilising force that increases heterogeneity and pushes systems into states of turbulence.

What happens when creative practice tunes in to the turbulent qualities of all things, such as atmospheres rather than ‘rooms’? How does a designer do anything other than intuit atmospheres? Can this vague and elusive phenomenon be tackled to the ground in the sense of becoming approachable or workable via particular techniques? With these questions in mind (or at least a palpable intuition of the issues at stake) the project continued with this expanded research agenda, to begin developing thresholding as a technique for design research practice to work within a turbulent ontology.

\textit{Cloudsound} placed into question the typical distinctions between exterior and interior, weather and ambience, organism and environment. More specifically, this questioning relation enacted thresholding, a technique that creates a middle ground of a continual renegotiation where it might be possible to come to terms with Timothy Morton’s assertion that “although there is no absolute, definite ‘inside’ or ‘outside’ of beings, we cannot get along without these concepts either”\footnote{Morton (2010), p. 38.}. 
further testing times
As well as these bigger-picture issues, there were technical variables to contend with in making *Cloudsound*. What was the experiential relationship between aperture size, the brightness of the image relative to the darkening of the room, and how might an image be focused across such a large volume? Getting a focused image on the wall opposite the windows would not be possible without a very complex array of lenses, and this would mean a very fuzzy image everywhere else. Instead, a simple lens allowed the light field to come into focus midway through the space at a distance of four metres from the lens. The second iteration of testing explored this slipping in and out of focus more directly, leading to a moment that revealed limitations in the model of relational complexity offered by Lavin’s kiss as I had interpreted it.

With the room blacked out (a process that was much quicker and more effective on a second attempt), once again the room was transformed into a camera obscura, with its white-plastered surfaces splayed with a slowly shifting array of sky blues, the red of roofing tiles and the various greens and browns of the surrounding gardens and suburban rooftops. I moved about the space, closely observing how the image wrapped across the room’s surfaces and gradually becoming blurrier as the light fell further and further from this zone of clarity. I realised that this zone of focus not only existed equidistantly across the walls, floor and ceiling, but also spread across

Fig. 2.8 Second installation test. Blacking out the space, refining lens options.
the intervening spatial volume. This fact became more apparent as I crossed through the space to realise that the light field landed over my body, brought into its clearest resolution across the white T-shirt I was wearing.

Through my own bodily engagement, I became aware of an immaterial threshold within the field of the installation. Once this focal plane was discovered, I marvelled at the conjunction between my body, as it moved through the space, and the focused fragment of the light field. Captivated, I became aware of a space of potential image suspended through the interior, one whose boundaries were invisible but defined by a discoverable, optical phenomenon. There was a kiss between the camera obscura and my T-shirt, but there were more than two elements at play here. In a moment of clarity I was caught in a conjunction of body, light rays from outside and the space of the focal plane, momentarily meshed together in an insubstantial but powerfully felt set of affective relations that emerged at the intersection of all these elements. I was at a threshold of complex relations, just barely held together in a moment of metastability that was always at the edge of slipping back into turbulent instability. In the fleeting moment amidst these relations, the meteorological scale of the very vast was caught up among the scale of a domestic interior.

![Fig. 2.9 Removing a static screen opened up the possibility of the image field falling into focus on mobile surfaces, such as the T-shirt I was wearing during this installation test.](image-url)
Fig. 2.10 This was not the first time that what I was wearing productively interfered in a creative process, nor would it be the last. Left image: Me standing in front of a 35mm slide projection in 2002. The image is of the Aurora Borealis, which I photographed in late 2001. Photograph by Emma Morris. Right image: Detail of camera obscura image. Photograph by Cara-Ann Simpson.
meshing together: catching a hold in the midst of turbulence

If Lavin’s idea of the kiss provides a way to begin articulating the conjunctions set up by Cloudsound, Timothy Morton’s use of the term ‘mesh’ allows for an extension of this understanding. Mesh carries with it a paradoxical sense of interconnected—but-separable similar to Lavin’s notion of kissing, but moves beyond a coming together of twoness to describe a vast continuum of interconnectedness. Morton chooses the word ‘mesh’ for a number of reasons, including its brevity. As he describes: “Mesh is short, shorter in particular than ‘the interconnectedness of all living and non-living things’.” Thinking this way provides an alternative to rigid conceptual categories and calls up the question of where anything can be thought to begin or end. Interdependence supplants any possibility of considering independence. This means “confronting the fact that all beings are related to each other negatively and differentially, in an open system without center or edge … [and that the mesh] doesn’t contain positive, really existing (independent, solid) things”. Morton warns that this should be an absolutely mind-blowing reorientation of our habitual worldview, “a radical openness to everything” which is crucial in thinking ecologically. The interconnectedness of Morton’s ‘ecological thought’ provides a model for an ontology of turbulence, a model which can cope with what Brian Massumi describes as the constantly and only-just-in-control state of volatility that lies behind apparent stability.

For me, the complex mental gymnastics required to maintain this understanding continues to generate a gently unsettling sense of ‘interior turbulence’. As I attempt to grasp at an elusive and ever-expanding network of interrelations, my way of interfacing with the world is affected. Keller Easterling’s writing on disposition becomes helpful here in understanding what is shifted. Disposition

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37 Morton’s use of mesh is related to ‘meshwork’ a term used by Manuel DeLanda and Tim Ingold. See DeLanda (1997) and Ingold (2011, 2015).
39 Ibid.
40 Ibid., p. 39.
41 Ibid.
42 Ibid., p. 15.
43 Morton is careful to distinguish ‘ecological’ from ideas of ‘green’ environmentalism. To think ecologically is to think in terms of relational interdependencies. See Morton (2010), p. 16.
44 Massumi (1992), p. 64.
precedes my ways of acting, it “locates activity, not in movement, but in relationship or relative position”. 'Interior turbulence' describes an ongoing reorientation in relation to the world around me, a heightened awareness and subtle shift in my tendencies and propensities towards action. With these thoughts tentatively held, questions arise: How it is that we are able to think of ourselves as standing out, in the foreground, distinct from an environment? Can any line be drawn between an environment and its non-environment? If the notion of the mesh is indicative of a radically open relatedness, how might we proceed?

Through the process of making Cloudsound, the technique of thresholding was developed and enacted, providing a way to begin navigating this relationally turbulent conception of the world and the categories we use to make sense of things. My attempts to question thresholds as limit points between things became a radically open sense of relational complexity that expanded ever-outwards in a mesh of heritage interiors, weather, lenses, my moving body and T-shirt.

a thresholding of atmospheres

As I outlined in the introduction, atmospheres are always present, even in spaces considered to be ‘lacking atmosphere’. But as the making of *Cloudsound* has revealed, atmospheres are not simply passive or inert. They are dynamic, relationally constituted, and we participate in reciprocal processes that mutually condition environment and experience. As a concept and technique that offers atmospheres some traction, thresholding offers a way to ‘get inside’ the turbulent processes of co-formation and catch hold of a complex mesh of relations. This requires working and thinking at the limits of tangible things, and suggests that productive sites for thinking and making can be found at the limit points of material, spatial and conceptual categories. At these edges things become unstable and with this instability is the possibility of knowing things anew. Just like attending to atmospheres, this process of thresholding requires an alertness to states of co-formation and changes in and between things. Thresholding is a particular mode of being on-edge that foregrounds a momentary togetherness of different elements and their conditions of encounter. It implies uncertainty and a certain anxiety too, which provokes an ongoing series of questions regarding the spaces and objects around us. Thresholding can be understood to comprise a space of suspended decision-making, one whose openness maintains the potential for co-forming the spatiality of experience.

Rather than relying on the ambiguousness of atmospheres, thresholding opens up new possibilities for categorisation or, even better, defers categorisation altogether, providing an opportunity to think freshly about the status and agency of matter, activity and subjectivity. *Cloudsound* played out these issues through practice. The edgeless meteorological transpositions in *Cloudsound* aimed to draw out a strange intimacy, aligned with Morton’s ‘ecological thought’ where “everything is intimate with everything else”.46 This is not in the sense of a diffuse inclusion suggested by atmospheres, however, but on the basis of a delicate mesh of contingent interconnectedness. This mesh of interdependencies is brought about by thinking of thresholds as always in co-formation in an active and dynamic process, and where categories can become momentarily merged or thrown into turbulent oscillation.

It is my hope that sensitivity to, and engagement with, the technique of thresholding brings us closer to the things around us. *Cloudsound* was a preliminary attempt to draw out the spatial, material and conceptual complexity of this becoming-closer, revealing a turbulent flux of relations, but a world all the richer for it. Like Lavin’s appeal to the in-between or thirdness of the kiss, there is, at times, value in eliding “a clear conceptual division between outside and inside”. 47

There is a tension between the indistinctness of turbulence and the together-but-separable sense of relationality implicit in Lavin’s kiss and Morton’s mesh. This tension is not readily resolved, but can be clarified. Turbulence as we encounter it in the world is an entropic merging that commingles constituents – once the milk is stirred into our tea we cannot un-stir it – but a turbulent relationality suggests many (potentially separable) forces at work where something new emerges from the spaces between. Thresholding is a technique for straddling this tension and provides an opportunity to guide these forces, gently steering them towards a moment that is both hoped-for but never-fully-knowable-in-advance.

In the discussion so far, enacting this technique of thresholding may seem abstract or obtuse. To help me better understand and work with thresholding, I began to carefully and attentively think through the interconnections implicit as I breathe in and out, exchanging air with the environment and all the other entities that contribute to its co-formation. This approach informed a collection of projects that are the basis for the next chapter. These move further away from any idea of atmospheres and instead refine thresholding as a way of thinking diffusely about bodily limits and a continuum of interdependence.

Previous page: fig. 2.12 *Cloudsound* (2012). Bundoora Homestead Art Centre, Melbourne. Detail of camera obscura image over window and wall mouldings.
2.2

Agencies of air

As has been discussed in the preceding chapter, there are occasions where it is productive and valuable to tune in to the instabilities of what otherwise appear as stable limits. In its focus on spatial limits, Cloudsound brought the boundary between inside and outside into question. I have proposed thresholding as a way to understand and engage dynamically with the relations that comprise spatial limits as always in subtle processes of reconfiguration. But as hinted at in the discussion of Cloudsound, the meshing together of my body, projected light and the camera obscura’s zone of image focus brought attention to the interdependencies at play in a creative research practice that worked among subtle, barely perceptible forces.

And while it is increasingly common to acknowledge and recognise the influences and agencies of matter—something the next chapter will extend to the more complex configurations of materials, users and legislative frameworks that come together in the ongoing event of the metastable entities we call buildings—what about less tangible affects in relation to our bodies? Practising with the technique of thresholding raises a series of questions regarding the limits of my body. How are the interdependencies between my body, various materials, contexts and forces felt? More specifically, how might the qualities of air influence and inform creative processes? How do environmental qualities become integrated with thoughts, materials and artefacts, and what agency do these environmental qualities exercise?

To explore these questions, and similar issues raised by Luce Irigaray in her book *The Forgetting of Air*, I developed a collection of smaller, quicker creative works that I call ‘studio sketches’. These small projects brought together lightweight materials, ideas and forces to work with air, breath and paradox. These projects, alongside a discussion of Arakawa and Gins’ *Ubiquitous Site House*, lead towards a more complex articulation of thresholding that makes reference to cultural geographer Kathleen Stewart’s ‘atmospheric attunement’ and Italo Calvino’s notion of ‘lightness’.

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neither here or there…

An iridescent white helium balloon hovers in space, wavering between floating up and sinking down. At the end of a metre-ish long thread of white ribbon is tied a small ziplock bag, part-filled with sand grains.

The sand grains were collected from a park I passed through on my way to the studio, the helium balloon from I Love This Shop, a party supplies store a five-minute walk away. These key ingredients were quickly assembled to create a moment of balance, achieved by slowly subtracting grains of sand from the small bag tied to the end of the balloon’s ribbon until it reached a point of equilibrium with the uplift of the helium. On the smoothed-out, everyday scale of objects this thing makes sense, but beneath this surface appearance it suggests a series of complex undercurrents. The resulting construction is delicately balanced in the air, a temporary configuration of materials attuned to the subtlest currents of warm air and of the materials to each other; there is a gradual decrease in buoyancy as the helium slowly dissipates. The balloon and sand grains have an “equilibrium [that] comes about not mechanically and inertly but out of, and because of, tension”.2 In this momentary coming together, materials are delicately balanced, a tension not only on-the-edge-between-gravity-and-levity, but between a complex of many other variables including temperature, air movement and buoyancy. It becomes an aerial sounding device, a finely tuned instrument that allows access to things usually indistinct to everyday sensibilities. The balloon allows me to perceive-with-and-through material and immaterial qualities, augmenting my understanding of subtle energies and tensions as I develop ideas and assemblages through creative practice. Understood relationally, it opens up a series of interdependencies that expand continually outwards.

The balloon–helium–sand grain assemblage provides a way to think–feel the complexity of the threshold. The hovering balloon is a mesh of interrelations momentarily in balance, always on the edge of slipping back into defined conditions: thresholding as a suspension between different states. This begins to nuance thresholding as a moment of metastability, of dynamic equilibrium, that emerges and is fleetingly sustained in the midst of complex forces. Constructions such as this balanced balloon, titled Trying to be Clear About Vagueness (Breathing. Space. #6), offer a materialisation of a complexity of entangled interrelations, bringing forces and qualities which are sometimes barely perceptible, but palpably felt, into the foreground of attention, where they can be worked with more explicitly.

**paradox power: becoming clearer about vagueness**

The impetus for this sketchy project arose from a series of readings around philosophical problems of vagueness and in particular the Sorites paradox. This paradox describes a pile of sand from which grains are removed one at a time and questions at what point the collection of sand grains ceases to be considered a ‘pile’ and how can this be determined. The paradox illustrates the instability of limit conditions in the case of collective terms. There is no precise point at which a collection of sand grains attains or loses its ‘pileness’. We might be inclined to think it is an incremental, linear and slippery slope from one state to another, but it is much blurrier than this. The limit between pile and non-pile is vague and indeterminate, qualities which also characterise air.

Instead of the two mutually exclusive categories of pile and non-pile, and as a way around this paradox, an alternative possibility is that the sand grains could be simultaneously both pile and non-pile, their quality of ‘pileness’ hovering in both states at once. The uplift of the helium balloon provides a measure of the sand pile, but in a way which allows its ‘pileness’ to stay in suspension. The very definition of ‘paradox’ is instructive: “a seemingly absurd or contradictory statement or proposition which when investigated may prove to be well founded or true”. The sand being both pile and non-pile defies our conventional logic – it infringes the principles of non-contradiction and excluded middle – and suggests that the difficulty arises with the system of categories we use to make sense of the situation.

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4 Ingold (2013) provides a related discussion. See the chapter ‘Round mound and earth sky’ and specifically his discussion of Laura Vinci’s Mãoquina do Mundo pp. 75-77.

Another logic, that of mutual inclusion, can be discerned through accepting the alternative possibility of an oscillatory superposition of states, as initially explored in the making of *Cloudsound*. This other logic runs counter to ways of thinking about things as able to be understood independently of other things and other possibilities for their thingness. Thinking of matter in this way aligns with Jane Bennett’s articulation of the myriad ways in which a vibrant materiality runs alongside, and inside, humans. She extends agency to “vibrant matter and lively things’ and refers to ‘the capacity of things ... to act as quasi agents or forces with trajectories, propensities, or tendencies of their own”. This vibrancy suggests a way of understanding things as fundamentally in oscillation, both in relation to other things and between states of being. The sand pile vibrates between pile and non-pile, lightness and weightiness.

In making the balanced balloon, my approach was to extend this counter-conventional logic by building paradox upon paradox. By approaching the Sorites paradox in a way that was simultaneously playful and studious, I attended to its contradictory qualities in ways that were seemingly contradictory. From the helium balloon operating as a countermeasure to the weight of the sand, a paradoxical sense of clarity about its emblematic vagueness emerged, in both epistemological and perceptual registers. The lesson learnt was that when faced with a complex situation, the most productive course of action might not be to sluggishly slog through it cognitively, but rather to tune into the possibilities offered by the technique of thresholding. A delicate and precise practising allows for the discovery of threshold conditions as a site to work within, rather than a finish line to reach. Like the balanced balloon, we can seek out a moment of poise, delicately balanced between a complex of conditions and states.

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Fig. 2.14 Trying to be clear about vagueness (Breathing. Space. #6) (2013). Detail of sand grains that act to balance the buoyancy of the helium balloon.
questions of air and a sketchy approach

Along with the balanced balloon of Trying to be Clear About Vagueness, a number of other projects are collected under the title Breathing. Space. These involve attunement and a developing sensitivity to the air’s forces, explored through breath and lightweight materials. Like the titles of most of my works, Breathing. Space. was chosen for its playful ambiguity and multivalency – in this case: spaces for breathing, spaces which are ‘breathing’ and this idea of a moment of pause or suspension. These projects investigate the spatiality of breathing.

Working through air and breath allowed a more directly experiential way of exploring the turbulence of continual co-formation that is characterised by atmospheres. This requires what Kathleen Stewart refers to as atmospheric attunement: “an attunement of the senses, of labors, and imaginaries to potential ways of living in or living through things. A living through that shows up in the generative precarity of ordinary sensibilities”.7 What Stewart calls ‘generative precarity’ I call turbulence. It is at the point where things become disrupted and unpredictable that novelty emerges from the interplay of relations between lived activities, material flows and processes. Turbulence also underscores that these relations are dynamic, always on the move, and that these relations sometimes invite us, but more often force us, to move with them.

An attuned and sensitive approach to air also feels necessary because, despite our absolute reliance on air to sustain life, it is frequently overlooked or taken for granted. Recent writings have begun to redress this blind spot8 and these approaches can be traced back to Luce Irigaray’s The Forgetting of Air, her highly influential re-reading of Martin Heidegger which questions the lack of attention paid to air in Western thought. In it she writes:

Air, this there, which gives itself boundlessly and without demonstration, ever unfurled-unfurling, and in which everything will come to presence and into relation, supplants, first, an absence. It replaces that absence: that which has some properties of the absence takes its place and lets itself be forgotten as much as, if not more thoroughly than, the absence does.\(^9\)

Redressing this forgetting of air is ever more poignant as issues of climate and air quality become increasingly pressing.\(^10\) Spatial design practices can contribute through the notion of ‘sustainability’, but practices such as Philippe Rahm,\(^11\) Malte Wagenfeld\(^12\) and Diller Scofidio + Renfro’s \textit{Blur} pavilion\(^13\) have value in their foregrounding of our complex relationships with air, and by considering it as a material worthy of design consideration for its experiential possibilities.

\(^9\) Irigaray (1999), p. 43.
\(^10\) See for example Ingold (2010)
\(^12\) Wagenfeld (2008, 2013)
\(^13\) Diller & Scofidio (2002)
Clockwise from left: fig. 2.16 Philippe Rahm and Jean-Gilles Décosterd *Hormonorium* (2002), Swiss Pavilion, Venice Biennale, Venice, Italy. Fig. 2.17 Malte Wagenfeld *Visualising Air* (2008). Fig. 2.18 Diller + Scofidio *Blur pavilion* (2002).
Attending to the act of breathing is a simple practice through which bodily capacities and sensitivities can be expanded. This act is a literal taking up and reworking of the air in lived experience and offers an accessible way into the less tangible concepts of affects, atmospheres and reciprocal formation, a connection also made by Teresa Brennan.\textsuperscript{14} Thinking through breathing provides a metaphorical or diagrammatic structure that can open up an understanding of these ideas and acknowledges the agency of air in our subjective formations. This suggests the subtle ways in which air’s agency plays a vital role in conditioning our sense of self. Perhaps air can be added explicitly to Jane Bennett’s description of the riding-a-bicycle-on-a-gravel-road assemblage that she uses to illustrate her model of distributed agency. The qualities of air and breath, although frequently overlooked, are worthy of close consideration. As David Abram writes:

\begin{quote}
It is easy to overlook something that’s invisible. We don’t commonly notice our breathing, though it enables all we do notice. And we don’t commonly see the air, since it’s that through which we see everything else … We rarely acknowledge the atmosphere as it swirls between two people, or two buildings. We don’t speak of the air between our body and a nearby tree, but rather the empty space between us.\textsuperscript{15}
\end{quote}

The \textit{Breathing. Space.} projects operated in a mode of practice that I call ‘studio sketches’,\textsuperscript{16} characterised by their ephemerality, modest scale and quick, simple processes of making. These characteristics open up a freedom for the works to be diverse and experimental in their various approaches. By producing a large number of small projects, diverse approaches, techniques and materials can be put to work. The sketch is a useful analogy here, with its suggestion of quickness, provisionality, contingency. An iterative drafting process: these are initial sketches that offer a chance to test out ideas, loose ends and works in progress through studio-based experimentation. These sketches can then be assessed for potential to be folded into new iterations, either as new ‘sketches’ or incorporated into more substantial projects.
Fig. 2.19 Nathan Gray *Things That Fit Together* (2014), Neon Parc gallery, Melbourne. Installation view photograph by Christo Crocker. Installation formed by the repeated act of fitting one object into another, without screws or glue. Images courtesy of the artist.
breathing. space.

The initial project of the series was simply me blowing soap bubbles – a playful, childlike activity, inspired in part by the opening of Peter Sloterdijk’s *Spheres* trilogy. Despite its apparent simplicity, this act articulates a complex understanding of breath and expanded bodily presence. Sloterdijk imagines the act like this:

The child stands enraptured on the balcony, holding its new present and watching the soap bubbles float into the sky as it blows them out of the little loop in front of his mouth. Now a swarm of bubbles erupts upwards, as chaotically vivacious as a throw of shimmering blue marbles. Then, at a subsequent attempt, a large oval balloon, filled with timid life, quivers off the loop and floats down to the street, carried along by the breeze. It is followed by the hopes of the delighted child, floating out into space in its own magic bubble as if, for a few seconds, its fate depended on that of the nervous entity. When the bubble finally bursts after a trembling, drawn-out flight, the soap bubble artist on the balcony emits a sound that is at once a sigh and a cheer. For the duration of the bubble’s life the blower was outside himself, as if the little orb’s survival depended on remaining encased in an attention that floated out with it.  

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Fig. 2.20 *Breathing. Space. #1* (2013). Photograph by Hsu Han Chiang.
Several aspects of Sloterdijk’s description are worth emphasis—the suggestion that the bubble blower’s being is somehow expanded or distributed through the act of breathing into these fragile soap bubbles, and that their fragility might somehow be dependent on or otherwise related to the attentiveness furnished on them. In the wider context of this research, the fact that the introductory passage from which the quote is drawn from is titled ‘The Allies; Or, The Breathed Commune’ is also significant. Underpinning this research are ideas of a radically open sense of commune-ity which is thought of as in alliance with my sense of self; this is discussed in more detail in chapter 4.1.

Later in the series of sketches and still under the influence of Sloterdijk’s writing, I tried to make a work that captured and recorded the idea of breath as a shared connective medium. Taking the idea of a sketch quite literally, I produced Drawings of Breath (Breathing. Space. #7), exhaling through a drinking straw into a mixture of drawing ink, water and detergent until the solution foamed up and spilled over onto a sheet of paper. Another version was a series of slow

Fig. 2.21 Drawings of breath (Breathing. Space. #7) (2013).
Fig. 2.22 Breath doodles. Inhalation exhalation drawings. Workbook sketch.
traces drawn by following the fluctuating rhythms and intensities of inhalation and exhalation (breath doodles). Other works in the series included conversations on ‘bubbleology’, participation in a several workshops that encouraged collaborative material improvisation, T-shirts with a series of related quotes on the ambiguity of body and environment relations, photographic documentation of my visible breath in cold morning air, the draping of a silvered polyurethane sheet over a floor-level air vent, and a performance lecture.

18 With Andrew Suttar. See https://twitter.com/drfroth (last accessed 13 July 2016.)

Fig. 2.23 Breathing. Space. #8 (Winter Breath) (2013). Photographs by Nic Paton.
A more developed project that explored these ideas of breath as a process of co-formation between an audience and the surrounding atmosphere is *Breath Clouds*[^19], an audio-visual installation that I produced with assistance from Jeff Hannam from the SIAL Sound program at RMIT University. This project developed from the studio sketch *Breathing. Space. #8 (Winter Breath)* and an interest in the dynamics of breathing and listening as ways of both expanding bodies and internalising the environment. What is breathed, or listened to, expands bodily limits in a reciprocal process that also internalises spatially distributed intangibles. *Breath Clouds* set up feedback loops between these two modalities. Remixing the ideas and technologies used in the aural component of *Cloudsound*, it used atmospheric sensors to manipulate a soundscape and a visualisation. A pair of earbud headphones hanging out of and alongside the sensors played the audio into the space, but deliberately quietly – a lure to encourage close audience engagement. Bringing people into close proximity with the sensors altered the qualities of sound and visualisation in response to atmospheric changes due to their breathing. This project blurred and confused the boundaries between bodies and the surrounding environment through the mediating affectivity of air. Changes in temperature, humidity and air movement due to breath were translated through the software to affect the air through microscopic changes in air pressure – perceptible as sound.

[^19]: This work was exhibited in the group exhibition Thisness at BUS Projects, Melbourne. Exhibition initiated by Ross McLeod. See [https://busprojects.org.au/2014/01/06/thisness/](https://busprojects.org.au/2014/01/06/thisness/) (last accessed 6 July 2016.)
lightly mixing the airs of living and thinking

The practice of studio sketching suggests how a modest but iterative design research practice begins to infiltrate and mix with everyday activities. In their airiness, relative spontaneity and improvisational use of materials to hand, the studio sketches of Breathing. Space. begin to mix the modalities of thought, everyday life and creative production, and to reveal my own dispositional tendencies. In this way the sketches address some of the questions raised by Irigaray, such as: “Is air thinkable? … Is a fluid truth thinkable?”\(^\text{20}\) and does “thought need an other air than the living do? More ethereal? If so, how does the living thinker make do with these two airs? Do they mix in him, or not? Is it as a living being that he thinks?”\(^\text{21}\)

The projects provide a conduit across these registers and enact moments of poise in their midst – thresholding between a complex of interrelations. From the tensions at work across and between the registers of thinking and living, a spirit of liveliness emerges and re-energises both in their intermixing.

This mixing also suggests productive strategies for working with the loss of stability inherent in turbulence. Maintaining an openness to the potentials offered by air, staying sensitised to its subtle agency and to how its materiality might direct and shift activities and thought processes, develops an attentiveness to air which Mark Jackson and Maria Fannin describe as founded “on modulation, variation, on tempering and toning down attachment to solidity”.\(^\text{22}\)

These founding principles flow through my practice, and gain further clarity and articulation in the following chapters, where projects more actively reach out to modulate, temper and destabilise their environments by recomposing with them.

Just as air and breathing form the so-intrinsic-as-to-be-taken-for-granted basis for existence, the energetic interjection that occurs in the mixing of thinking, making and living provides sustenance to my creative practice. Something as straightforward as blowing bubbles


\(^\text{21}\) Ibid., p. 6.

mixes with the complex ideas of Sloterdijk and Irigaray. Materials and actions from the everyday of lived experience are drawn into practice in acts as simple as placing a lightweight, silvered polyurethane sheet over an air duct. These mixings help to sustain creative momentum while providing opportunities to hone a dispositional attitude towards everyday life. Both become infused with a sense of lightness.

lightness

The first of Italo Calvino’s Six Memos for the Next Millennium is concerned with upholding the values of lightness. Calvino makes clear that he does not “consider the virtues of weight any less compelling” but simply that he has more to say about lightness, which he associates with “the subtraction of weight”.23 He describes his own early practice and burgeoning awareness of “the weight, the inertia, the opacity of the world … At certain moments I felt that the entire world was turning into stone: a slow petrification, more or less advanced depending on people and places but one that spared no aspect of life”.24 Calvino counteracts this by bringing lightness into his practice, thinking of it in at least three different senses, which, along with the idea of subtracting weight, provide an almost uncanny description of the processes at work in Trying to Be Clear About Vagueness. Firstly there is a lightening “whereby meaning is conveyed through a verbal texture that seems weightless”,25 followed by a concern for processes “in which subtle and imperceptible elements are at work”.26 Lastly “is a visual image of lightness that acquires emblematic value”.27 For my own practice and the technique of thresholding, the balanced balloon provides this emblem.

More generally, the approach of the studio sketches carries with it these senses of lightness, qualities that seem especially fitting when the matter of concern is air. This is not something undertaken lightly: there is a difference between a lightness of thoughtfulness and a lightness of frivolity; “in fact, thoughtful lightness can
make frivolity seem dull and heavy”. The value of lightness as a disposition in thought and action, of being simultaneously playful and serious, is most evident when Calvino recounts a story of the Florentine poet-philosopher Guido Cavalcanti as told by Giovanni Boccaccio: Cavalcanti is walking meditatively among marble tombs near a church when some rich youths approach and start to mock him, saying:

‘Guido, you refuse to be of our company; but look, when you have proved that there is no God, what will you have accomplished?’ Guido, seeing himself surrounded by them, answered quickly: ‘Gentlemen, you may say anything you wish to me in your own home.’ Then, resting his hand on one of the great tombs and being very nimble, he leaped over it and, landing on the other side, made off and rid himself of them. Calvino chooses this as an auspicious image for our current millennium:

The sudden agile leap of the poet-philosopher who raises himself above the weight of the world, showing that with all his gravity he has the secret of lightness, and that what many consider to be the vitality of the times – noisy, aggressive, revving and roaring – belongs to the realm of death, like a cemetery for rusty old cars.

attunement workshops, and another balloon in balance
A sense of lightness and a more complex mixing of the registers of thinking–feeling–making–living were brought into the social realm through a series of workshops that I participated in. These were organised by the Aæ Lab and the PPPPP research group (both at RMIT), and the Australian group working as part of the larger Immediations grant, a research project initiated by Erin Manning, Brian Massumi and the SenseLab at Concordia University in Montreal, Canada. These workshops have addressed issues such as non-verbal collaboration catalysed by material relations and questions such as ‘how do you pass on an act of listening?’ and ‘how do you amplify and expand in order to slow down?’ These were approached by working collaboratively, with materials at hand, and have been directed at an increased sensitivity to materials and subtle bodily movements.

28 Ibid., p. 10.
29 Ibid., p. 12.
30 Ibid.
31 Led by Pia Ednie-Brown. The workshop also included activities led by Jondi Keane and Lyndal Jones. See http://aelab.org/projects/ (last accessed 29 June 2016.)
32 Led by Mick Douglas, Ceri Hann and Neal Haslem. For more details see: http://ppppp.net.au/ (last accessed 8 July 2016.)
33 This is seven year funded grant that partners with a large number of academic and cultural institutions centered around three ‘hubs’, one in Canada, one in Europe and another in Australia.
Fig. 2.27 Mick Douglas, Neal Haslem and Ceri Hann PPPPP Practice Group (2013). Video stills.
My participation in these events and workshops led to an almost psychedelic vibrancy in understanding bodily and material interactions. For example, the *PPPPP Practice Group* project brought material qualities to the foreground of awareness by inviting a group of practitioners to improvise and co-compose with materials from each participant’s daily practice. Among other things, I brought a helium balloon. This co-composition took place over a shared workspace and without any verbal communication. Without the need to rationalise action or find words to articulate what was happening, I was free to observe the emergence of new material qualities and possibilities in the flow of activity, sometimes holding back, other times pressing into the mix. Or, to borrow from Kathleen Stewart, *PPPPP Practice Group* can be understood as setting up a situation that is never “an inert context, but a force field in which people find themselves. It is not an effect of other forces but a lived affect – a capacity to affect and to be affected that pushes a present into a composition, an expressivity, the sense of potentiality and event”.\(^34\) Working with this awareness suggests a practising in-formation between two reciprocal processes; as Stewart suggests, “to affect and to be affected”. These are processes of making in which air flows across thought, matter and bodily capacity to generate contingent, amorphous formations and potentialities. But there is also an affective pushing back by and through the air. Being aware of this sometimes overt, often subtle pushing back is to develop an attunement to the “forces of material-sensory somethings forming up”.\(^35\) This recursive awareness of how I meet the world (through both creative practice and everyday life) implies a deeper understanding of disposition, where a practitioner and the wider environment shape each other reciprocally as a form of feedback and conditioning that can be thought of as constituting a particular sort of atmosphere. I describe this as an ongoing process of ‘dispositioning’. For my own practice, this term highlights the significance of the ways in which I field various interrelationships and move with and within them, bending things towards a particular course. Dispositioning works against a fixed idea of location and provides another way of understanding the technique of thresholding.

A short part of one of the *Immediations* workshops resulted in a group of us standing together in a circle, eyes closed, elbows lifted slightly away from the rib cage, each with an index finger applying

\(^{34}\) Stewart (2011), p. 452.

\(^{35}\) Ibid.
the lightest possible touch to a single balloon in the centre of the group, and this balloon, rather than staying in a centralised state of equilibrium, somehow gathered momentum and took flight (images). Applying the lightest possible touch while still contributing to the holding of the balloon is an expansion of bodily capacity, achieved by attending to affects and the not-quite-seen and through developing a sensitivity to these otherwise indistinct forces and influences. Unexpectedly though, the sum total of these lightest possible touches is a movement away from equilibrium, a thresholding of a complex of forces expanded across and between many bodies, suggesting that any moment of poise or balance is necessarily ephemeral. As the discussion of *Cloudsound* in the previous chapter has shown, tuning into the coming together of forces does not lead to a stable state. This offers clues to the conditions of life as always lived in relation to context – a state of relative equilibrium that must be tended to, requiring constant adjustments in relation to conditions at hand or, in this case, fingertip. As John Dewey writes:

> The first great consideration is that life goes on in an environment; not merely in it but because of it, through interaction with it. No creature lives merely under its skin; its subcutaneous organs are means of connection with what lies beyond its bodily frame, and to which, in order to live, it must adjust itself.\(^{36}\)

One outcome revealed by this *Immediations* workshop is the tendency of things to become caught up in processes of positive feedback that increase turbulence. Situations become unbound and spiral outwards towards unpredictable and unanticipated outcomes. And while this might not immediately be the most comfortable of situations, it opens up new possibilities for living and for our engagement with the environments we co-form around us – something that the poet–artist–architect partnership Arakawa and Gins focuses on through a series of architectural works, in particular the *Ubiquitous Site House* project introduced in their book *Architectural Body*.\(^{37}\)

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\(^{37}\) Arakawa & Gins (2002)
Fig 2.29 Immediations workshop. The balloon moves away from a point of equilibrium, leading the group in unexpected trajectories.
breathing architecture

Arakawa: Here is the house we were telling you about.

Angela: I don't see any house here.

Gins: Granted this is not what in our time most people dream of coming home to.

Robert: This heap?

Gins: Yes, a low pile of material that covers a fairly vast area.

Angela: Are we at a dump? This low pile covering a vast area.

Gins: What you take to be a pile of junk ranges in height from three to eleven inches. It measures close to 2,400 square feet—or 2,900 square feet if you include the courtyard.

Robert: Courtyard?

Gins: The shining part in the middle that has a lot of green around it.

Angela: That’s hilarious. Your house is shorter than its shrubbery.

Arakawa: [Laughs] I myself find that surprising. Shall we take a walk around it?

Robert: Go around it? Why bother? I can see everything I need to from here.

Gins: Isn’t it wonderful that you can see all of it at once—as if you were looking at it in plan?\(^{38}\)

\(^{38}\) Ibid., p. 23.
Fig. 2.30 Arakawa & Gins *Ubiquitous Site House* (1994–95). © 1997 *Estate of Madeline Gins*. Reproduced with permission of the Estate of Madeline Gins.
The *Ubiquitous Site House* project is a heap of low-lying materials that seem to have been assembled randomly. In the accompanying text, they describe it as a giant doormat or shower cap, elsewhere as a “pliant, half-structured muddle”.\(^39\) Certainly at first glance it does not appear like any conventional architectural project and the visitors to the house, Robert and Angela, find its unfamiliarity highly challenging and confronting. This sense of moving beyond one’s comfort zone is increased as they enter into it: “This is scary. It keeps changing, volumes open with my every motion, with each push, it’s changing right in front of my eyes”.\(^40\)

Although the building is extremely strange, the visitors begin to develop a sense of familiarity. The building invites an attuning to its peculiarities. Edges and similarities between different parts of the house are discerned as they spend time within it: “I begin to see what is expected of us in here. First off, we need to stretch our limbs as much as possible. When I stretch my arms up as if I am about to hit a volleyball, the material rides up and … I can see a fairly large area.”\(^41\) Having reached this level of understanding of how the house responds to the gross physical movement of its occupants, Gins directs Robert’s and Angela’s attention to the relationship between breath and architectural space; “For a closer look at our effect on this house, let us each take a deep breath. The material expands and contracts as we do.”\(^42\) And in the text that accompanies drawings of the *Ubiquitous Site House*, “Living spaces form with each step taken. When no such actions are taken, there is no room to breathe.”\(^43\)

In the various guises of this project\(^44\) Arakawa and Gins refer to a heightened awareness of the act of breathing as a specific mechanism for becoming aware of the interrelationships between bodies and environments: “Sifting through chaos in search of that which can be perpetuated, residents embrace the ubiquitous site – the site of the body-person taken as being all-over-the-place, as a ubiquitous sitting – as both pal and clue.”\(^45\) The project is an ally that seeks to co-produce a new understanding of spatial relations. For them, a ubiquitous site is “all that which is in the immediate vicinity of a person” and inclusive of the person, their “power to compose a world and be in contact with it … inclusive of all contact, of whatever variety, you have with the world”.\(^46\) They develop this idea of a ubiquitous site into the notion of ‘architectural body’ – which originates and

\(^{39}\) Arakawa & Gins (1992)

\(^{40}\) Arakawa & Gins (2002), p. 25.

\(^{41}\) Ibid., p. 27.

\(^{42}\) Ibid., pp. 27–28.

\(^{43}\) Arakawa & Gins (1992)

\(^{44}\) Including the proposal board images and drawings, the installation Ubiquitous Site X, (1989–90), and the chapter Architecture as Hypothesis in Arakawa & Gins (2002), pp. 23–38.

\(^{45}\) Arakawa & Gins (1992)

joins up with the physical body, the physical body lending some of itself to the architectural surround, which in turn lends some of itself back to the physical body – but they begin with breath.

Breath allows insight into the dynamic, shifting idea of the architectural body, a dispositional thresholding of organism and environment. This is more than an understanding of the limits of architectural space as contingent. Breathing as a thresholding of body and environment occurs in cooperation with other organisms, so my body’s relationship to a larger (collective) body is mediated by its relationships between other bodies and the environment out of which we form. Our breathing environment is something that is collectively constructed, and is a way for Arakawa and Gins to explain a much more interconnected and complex way of being aware of, interacting with and always coming into formation in relation to our environments. These issues are implicit in John Dewey’s description of body–environment relations: “The rhythm of loss of integration with environment and recovery of union not only persists in man but becomes conscious with him; its conditions are material out of which he forms purposes.”47

Thinking through breathing is an accessible way to engage in an interdependently entangled understanding of our relationship to our environments. It provides a way to sense the mesh that underpins Timothy Morton’s ‘ecological thought’ and the “radical openness to everything”48 that this entails. This openness begins to unravel our learnt and conditioned habits of thought and action. The complex projects of Arakawa and Gins do something similar. Projects such as Ubiquitous Site House develop spatialities that put bodies in situations that prevent the development of habitue. They propose that becoming conscious of interdependencies between body and environment allows a sustained thresholding to occur between them, engendering a conceptual flexibility and openness to the world. These encounters have the potential to reveal the complexity of relationships with and within the world, and to make dynamic the otherwise defined categories that we use to simplify and make sense of things. Monika Bakke expands on Irigaray’s ideas, explaining this way:


Breathing goes on, as Irigaray puts it, ‘at the tempo of transformation that is too quick for reason, consciousness, and for any means man can master.’ The turbulent rush of air in and out of our body is ecstatic as it allows us to participate in something bigger than ourselves – in other turbulent flows. The air flow from breathing in and breathing out is not just a sign of life from a single organism whose breath can be heard, but rather an indication of the coexistence of many lives in various interspecies relationships. Thus, to become oneself, with each breath sustaining life, is actually to become with many – to alter with many – most of which are nonhuman. Hence, the vital necessity of breathing coincides with the most radical openness to the nonhuman realm – it is most ecstatic.

Taking breath as an entry point leads to understanding my body as always thresholding its surrounding context. It is dispositional, or perhaps better yet ‘dis-positional’ – out of position, in the wrong place or possibly out of place altogether. Breath leads to ways of questioning stable and certain categorisations. And, like the diffuse notion of atmospheres that this research began with, my understanding of surrounding contexts are hugely expanded beyond what is visible, through the highly diffuse sense of interconnectivity shared through air. A question then arises of the dynamic of this thresholding – how does it fluctuate, what rhythms are afoot?

\footnote{Bakke (2011), quoting Irigaray (1999), p. 164.}
rhythmings of the live creature

Breath has a rhythm, but this rhythm is not a deterministic one. “We tend to attribute to rhythms a mechanical overtone, brushing aside the organic aspect of rhythmmed movements.” Yet there can be “no rhythm without repetition in time and in space … there is no identical absolute repetition, indefinitely”. The rhythms of breathing fluctuate. In almost every rhythm there are ebbs and flows. Breathing is a fundamental mode of interconnection with an environment, and the quality of this interconnection has its own unfolding rhythm.

Body and environment condition one another, in much the same way that the visitors experienced the Ubiquitous Site House in the preceding section. The world that makes sense to us, that we interact with, is often only just holding form in a “moving equilibrium”. Our interactions and movements can destabilise this precarious balance. As Dewey remarks: “life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it – either through effort or by some happy chance.” Sometimes as we breathe and move our way through life, we do so against the beat of the things which surround us and, while being too far out of sync can prove fatal, our liveliness can be “enriched by the state of disparity and resistance through which it has successfully passed”. While it can make sense to try and maintain unison with the rhythms of the environment, there is value that can uncovered by relating in ways which are subtly syncopated. I can be debilitatingly out of unison with an environment, but I can also be deliberately out of phase, misattuned – a technique explored in more detail in chapter 3.3. By working in this way, new rhythms come into being and a situation can be enriched. So, while balance and harmony are attained through rhythm and equilibrium arises through tension, there is value in being off-beat, off-balance, staying syncopated before regaining a sense of integration with the environment.

Indeed, Dewey ascribes a difference in emphasis within these rhythms to the difference between an aesthetic, felt experience of a situation and an intellectual, rational understanding of one. With rhythms between creature and environment always shifting, both emphases always have a role to play: “The odd notion that an artist does not think and a scientific inquirer does nothing else is the result

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51 Ibid.
53 Ibid.
54 Ibid.
55 Ibid.
56 Ibid., p. 15.
of converting a difference of tempo and emphasis into a difference in kind."

Again an issue of balance-within-complexity arises, this time between the tempos and emphases of environmental engagement and emotional and rational intelligences. In focusing on breath, the Breathing. Space. projects revealed the importance of these differing rhythmic relations between this more complex understanding of body and environment. Thresholding amidst these tensions, and working with and through rhythm, become important aspects of my practice that are discussed in more detail in the chapters that comprise friction.

**moving air / breathing forward**

Air is easy to overlook – the very act of looking is to pass over its presence – but is a material worth paying close attention to, particularly given our vital dependence on it. Across both material and bodily registers, the Breathing. Space. experiments attended to air and breath to explore the ongoing development of a body’s capacity to actualise. This reworking of bodily capacities develops an ability for atmospheric attunement. Arakawa and Gins’ Ubiquitous Site House brings together lightweight materials and a dependence on inhabitants’breathing to explore similar issues.

This increased sensitivity brings to the foreground an awareness of the various forces and turbulent undercurrents present within lived activities and creative practices by identifying the importance of disposition. Discussed with reference to Italo Calvino’s writing, playfulness and a sense of lightness become integral to a way of
practising and engaging with the world. Working with air and breath involves the thinking-with and perceiving-with of material and immaterial qualities, and begins to reveal the negotiated, unpredictable processes of coming together that occur in air. Breathing reveals an expanded continuum of interconnectedness where the limits of my body are continually (and paradoxically) expanded and dissolved. To think through this paradoxical situation, a logic of mutual inclusion is sketched out, to be returned to in more detail in chapter 3.2 with reference to the writing of Brian Massumi. It is a dis-positional thresholding of my own body that, like atmospheres, is understood as being in constant co-formation with the environment and the other bodies which populate it.

The *Breathing. Space.* projects lead to a conception of bodies understood through rhythm as explicated by Henri Lefebvre and John Dewey. Through this emerges an expanded idea of the sorts of assemblages that could be thought of as having body-like qualities of rhythm. The rhythms of built environments change and adapt relative to activities within them, just as we adapt to and are changed by them. But how might we enter into closer conversations with the lives of buildings, and how can creative practices participate in this dialogue? What do these rhythms mean as they play out in the atmospheric interrelations of people and buildings? These are the issues which are taken up in the next chapters, with a particular focus on the RMIT Design Hub building and my ongoing relationship with it.
2.3  
Lift Lecture

Lift Lecture (breathing. space. #9)  
RMIT Design Hub Elevator no. 3.

Starting at 9.30 in the morning, as those who worked in the building began arriving for a day of work, I gave a public lecture in one of the elevators. Titled *Air–Atmospheres–Breath–Affects*, the lecture took a brief journey through the concepts of bodily capacities, beginning with ideas of affect, and connected this to breath, air and atmospheres. Interwoven with these concepts were examples from contemporary art and architectural practice, such as the work of Hans Haacke, Decosterd Rahm’s *Hormonorium* and Diller Scofidio + Renfro’s proposal for the extension of the *Hirshhorn Museum* in Washington, DC.

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**Fig. 2.31** Diller Scofidio + Renfro *Study model for Hirshhorn Museum extension* (2013).
Earlier in the morning, Scott Andrew Elliot \(^1\) and I had blacked out the elevator by covering the perforated metal ceiling (which had three fluorescent tubes mounted above it) with a large sheet of cardboard that we had cut to size. This formed a screen for projection – Scott held a data projector pointed at the ceiling for the duration of the lecture, which displayed the slides I had prepared and presented from my laptop. Like much of my way of working, the lecture was opportunistic and began from the observation of a number of quirks within the building. The first was the frustration that there are very few power outlets anywhere in the Design Hub and those that are concealed in the service floor all require a proprietary adaptor. Yet near the bottom of each elevator is a normal power outlet. This had to be useful for something! Secondly, during our extensive adventures in the elevators, we came across one whose fluorescent tubes had stopped working. Stepping into this elevator interior was like stepping into a strange dark recess of the building. In the early days of occupying the building, it felt like a literal step into the unknown. The lecture was planned to take advantage of this malfunction and lack of maintenance (although the lighting was fixed two days before the lecture was scheduled to take place, resulting in the cardboard

\(^1\) I will introduce Scott properly in the following chapter.
screen). The fact that the elevator had been blacked out already and could easily be blacked out again, the opportunity to use the power outlet to run the data projector, plus an ongoing interest in disrupting the thresholds of entering and exiting the elevator set up the parameters for the lecture to come into being.

The lecture aimed to disrupt students’ expectations of the context that could form a lecture experience: Standing in close proximity, looking upwards at the ceiling, Scott holding the projector, me with a laptop balanced on my left forearm, leaving my right hand free to navigate the presentation. As a performance lecture it aimed to enact some of the concepts being discussed, creating an intimate space where breath was shared and air was palpable. The lecture disrupted, extended or reconfigured boundaries by putting thresholding into practice in three different ways.

Firstly, it brought together a group of people in a constrained environment, where there was a continual exchange of breath through our collective inhalations and exhalations. Elevator interiors are a site of awkward intimacy. People are brought into close relationships with other people, often people unfamiliar to them. Social codes mean that interaction is often limited, even among those familiar with each other. They are public spaces, but their small size and close physical proximity confuse this. In most other spaces, to be at such close quarters with others assumes a degree of familiarity. The lecture took advantage of how the elevator pushes together the spaces of the public and the intimate, reconfiguring this boundary through the sharing of breath. To breathe in is to draw the world inwards, to take in its forces and draw sustenance from it. To breathe out is to expel something very personal into the public domain, where others may in turn draw it inwards in a constant process of exchange. At the level of the collective, breathing is also a distributed act of collective connection. There is information in the air that we are constantly absorbing, processing and reforming, an affective exchange that contributes to the construction of wider atmospheres.

The second reconfiguration of boundaries that the lecture set up occurred as other building users stepped into the lift, experiencing a chance encounter with a short fragment of the lecture as they moved between floors. Rather than being a site for passengers to passively
wait while being shuttled between floors, the space was established by the lecture as an interior of activity. This disruption was such that those entering seemed to feel as though they were intruding, interrupting. Having established the parameters to facilitate the lecture, we made no attempts to control the context. We elevated and descended through the building based on the demands of others, with people stepping in and out. Most people hesitated before stepping in, waiting for a small signal of invitation to enter, while some refused to get in at all, a subtle first marker that the proprieties of boundaries were beginning to be shifted.

Lastly, we were collectively suspended within the building, similar somehow to the balanced balloon of *Breathing. Space. #6*. This suspended situation was made vividly apparent in the contrasts of climatic conditions between the lift interior and other levels of the building, as we were shunted around subject to the whims and demands of other building users. We were travelling but not going anywhere, our collective sense of direction and destination suspended for the duration of the lecture. As the lecture unfolded the space got increasingly warm, due to the heat of our bodies and the projector bulb's fan activating and recirculating the air. When the doors opened on various levels, the differences in air quality became more and more noticeable. The air at entry level had a freshness that could be fleetingly felt before the doors closed again, the basement floors a welcome coolness. On the upper levels, the environment was more closely matched to the microclimate created by the lecture. These experiences underscored the elevator as a means of shifting parcels of air around the building, a macro-level shifting and redistribution of air, compared with the more intimate microclimate in the elevator interior.

*Lift Lecture* was part of the introduction to a collaborative teaching workshop called *Affective Environments*. The next phase involved developing a series of installations for different floors of the Design Hub, all of which would adjoin the elevator entrances. These projects and their processes of coming into being are discussed in chapter 3.1.

Facing page: fig. 2.33 Poster for the Affective Environments workshop. Main image is Scott Andrew Elliott *Push/Pull* (2010).
Affective Environments

Architecture + Interior Design elective
Workshop intensive
July 10–21 (week 0: high intensity)
July 22–26 (week 1: medium intensity)
July 27–August 13 (weeks 2+3: individual reflection, low intensity)

In this 12 credit-point intensive workshop elective students will take part in the construction of an installation project at the Design Hub developed by Chris Cottrell (RMIT), Scott Andrew Elliott (Aalto University, Finland) and Olivia Pintos-Lopez (RMIT). The course will begin with an introduction to a series of experimental art–architecture spatial practices and ways in which the construction of environments can test and probe relationships between the body and architecture.

Students will participate with the building process in creating an experimental installation, sourcing found materials, learning and developing techniques of making, engaging in team work, experiencing the challenges of collaborative, open-ended exploratory process first-hand, developing techniques for careful and intensive documentation of a process, and learning about research through the practice of making.

This course focuses on developing critical design practice by constructing experimental spaces, particularly in getting to know the hands-on practical skills for realizing a medium/large-scale collaborative project, and how this process of construction and its documentation can become integral to a research enquiry. Following the intensive period of constructing from July 10 to 22, students will be required to submit a pdf document that documents and reflects upon their own particular experience in this process.

Expressions of Interest due Friday May 31st
send a short statement to christopher.cottrell@rmit.edu.au
3.0 FRICTION

The previous chapters have concentrated on ideas of atmospheres, air and breath gathered together as airiness, and developed the idea that objects, environments and even our own dispositional tendencies are metastable entities that emerge from a background flux of instability and turbulence. Thresholding has been developed as a technique for opening up and revealing this contingent and provisional understanding of things.

These next three chapters focus on a series of projects undertaken in relation to the RMIT Design Hub building. A first suite of projects reveal a mismatch between the building’s disposition and my disposition as a practitioner, leading to moments of friction. These projects approached this mismatch by creating architectural installations that extend a sense of tentativeness, as informed by the writings of Arakawa and Gins. In the second chapter 3.2, I discuss an experimental writing project that reflected on these installations, leading to an understanding of the building not as a static entity, but as an event in formation, always on the edge, always on the way to becoming something else. I propose ‘architectural judo’ as a set of techniques for creative practice to inflect and reshape these fluxes. These techniques include selecting aspects of an environment and amplifying or repeating them with resonant difference, which is then levered back into that environment as a form of ‘positive feedback’ that increases the degree of turbulence or vibration within the environment. The final chapter 3.3 discusses a competition project that articulated architectural judo as a particular approach to interior design practice. A significant shift in the project work discussed in these chapters is the movement from an individual studio/gallery practice to larger collaborative projects in the public realm, a trajectory which continues in the final part, fluidity.
He could see the tall, peeling yellow building at the periphery of his range of vision. But something about it struck him as strange. A shimmer, an unsteadiness, as if the building faded forward into stability and then retreated into insubstantial uncertainty. An oscillation, each phase lasting a few seconds and then blurring off into its opposite, a fairly regular variability as if an organic pulsation underlay the structure. As if, he thought, it’s alive.

This chapter articulates an understanding of buildings as moments of metastability amidst an ecology that includes material processes (construction, maintenance, weathering, decay) and frequently shifting legislative frameworks. The dynamic character of buildings suggests complex interrelations between them and human inhabitants. If buildings are less reliable than they seem, how does that change the way we relate to them? How do buildings condition our actions and how can these conditionings be tested or transformed?

These questions were addressed through a series of creative works that were produced during a two-week teaching workshop. Alongside Scott Andrew Elliott and Olivia Pintos-Lopez, I led the development of these projects, titled *Building Movements*, drawing on Arakawa and Gins’ ideas of tentativeness, ‘architectural procedure’ and ‘architectural body’. We formulated our own ‘tentativeness-extending procedure’ which the projects enacted, aiming to extend and disrupt threshold conditions within the RMIT Design Hub building. The building pressed back against our projects, revealing the complex layers of bureaucracy that influence and determine how space is shaped and occupied.

The projects came into conversation with the building, a type of feedback that is understood through Henri Lefebvre’s technique of rhythmanalysis. Rhythm, as a mesh of relations between time, space and energy, is used to deepen the understanding of thresholding, broadening its relevance to a diverse range of entities and relations, opening these up for modulation through creative practice.
Fig. 3.1 Sean Godsell Architects *RMIT Design Hub* (2012). Melbourne.
getting to know

I first met RMIT’s Design Hub building¹ in October 2012, shortly after it opened to the public. Like most buildings, it took a little while to arrive, but when it did it was as a seemingly complete, monolithic, autonomous entity. It is not a casual or easygoing environment, in that it seems to take itself very seriously. I did not get the feeling that this was a building predisposed towards negotiation and easy compromise. I moved in to its new spaces to work alongside the rest of the School of Architecture and Design PhD cohort, who had all relocated from other parts of the campus. Together we started adapting to this new environment, getting used to its spaces, its dispositional idiosyncrasies. Within this student group there were plenty of negotiations – swapping desks based on who was regularly using the space, various attempts to personalise areas and demarcate spaces, amidst a general background of diverse research groups moving in and occupying parts of the building. At times this was a chaotic process in tension with the sense of ordering and control reflected in the building’s relentlessly patterned and highly repetitive spaces. This repetition was at times disconcerting. Each main floor of the building is nearly identical. New or occasional users of the building frequently get lost and cannot find their way into or out of particular spaces – most obvious at exhibition openings and public open days. Even after years as a regular user, I still need to double-check that I am where I expected to be. It was against this background of unsettlingly rational order that a subtler process of getting to know the building occurred.

In order to prompt an exploratory engagement with the Design Hub, Pia Ednie-Brown organised a workshop called Building Movements.² This involved a series of performative actions to think through the building’s affordances, the challenges and questions it posed to its inhabitants. Pia proposed that we might “also challenge the building by posing questions of our own – entering into an active dialogue”³ with it. Along with events such as my Lift Lecture described in the preceding interlude, the workshop served as the lead-in to a teaching intensive called Affective Environments,⁴ which culminated in an exhibition titled Building Movements⁵ echoing the original workshop investigations. I taught this course with Scott Andrew Elliott, Olivia Pintos-Lopez and Pia Ednie-Brown. We worked with a small group

¹ Designed by Sean Godsell Architects and completed in mid-2012. See www.seangodsell.com/rmit-design-hub (accessed 22 June 2016.)

² This was held on 17 June 2013. Along with myself, participants included Pia Ednie-Brown, Jondi Keane, Lyndal Jones, Scott Andrew Elliott, Anna Tweeddale, Adele Varcoe, Phoebe Whitman, Andrew Goodman.


⁴ This course ran 10–26 July 2013. Student participants were: Katherine Brown, Daniel Vito Colaneri, Leanne Failla, Stephanie Gleeson, Frances Gordon, Freya Robinson, Jack Ryan, Jaime Vella and Ben Warren. Olivia Pintos-Lopez ran a parallel project concerned with documenting the process of collaboration in such a way that untapped potentials remained open. See www.collectivecommons.net (accessed 26 March 2016.)

⁵ The public event for this exhibition was held at the Design Hub on 26 July 2013. Alongside the installations produced during the teaching intensive were works by James Carey, Zuzana Kovar, Nick Skepper, Pia Ednie-Brown, Jondi Keane and Adele Varcoe.
of senior students from RMIT University’s Interior Design and Architecture programs to realise a series of projects that Scott and I had begun developing. The Lift Lecture described in the previous chapter was one of the introductory exercises to the course.

Scott was an RMIT PhD candidate based in Helsinki who, save a couple of brief Skype conversations, I had never met before. We got to know each other at the same time as we were becoming familiar with the Design Hub, forming a friendship between Scott, myself and the building, while developing a series of installation works that would test the Design Hub’s aspirations to act as “a new kind of creative environment … for collaborative, inter-disciplinary interaction and education”.6 But, as new occupants of the building had quickly discovered, some commonplace design activities were not permitted in its main workspaces7 and other actions were made problematic by the conflicting needs of other users.8 Like most buildings, the Design Hub has frameworks of control, but these were in a process of being figured out and negotiated as different activities took place. Scott and I were interested in how our projects might press themselves into this process, pushing the limits of what might be expected as normal or permissible behaviour within this hub for design research.

6 http://designhub.rmit.edu.au/about/overview (last accessed 26 March 2016.)
7 For example using paint or any process that generates dust, such as sawing or sanding timber.
8 Such as working with sound, having large and/or lively meetings that generate a lot of noise, or previewing and discussing a video work.

Fig. 3.2 Building Movements exhibition invitation.
tentative questions for the design hub

The first question Scott and I faced was how to approach the building. What questions could we ask of it and how might it respond? We intended to pose these questions by making new, temporary, inhabitable spaces that might reorient building users, bringing them into new relations with the Design Hub in ways which might give them cause to rethink the building’s propositional environment. At first the building seemed to greet us with a series of blank looks. Despite all the translucence and porosity, its response could not have felt more stony. The series of repetitive, linear, machinic spaces offered very little in the way of welcome or openness to question. We decided that the most promising (and seemingly only) approach was to work directly with this dispositional lack of openness and try to exploit or disrupt its relentless repetitiveness.

We also wanted to ask questions about spatial certainty – given that the building’s reliance on repetition pushed this idea to an extreme point where things were so controlled and contained that they ceased to provide certainty, instead bringing into question a sense of precise location. Initially our focus was on questioning a person’s sense of certainty: How could the cognitively backgrounded task of moving through space be brought into the foreground of conscious thought?

To address this question Scott and I drew upon our shared interest in the ideas of Arakawa and Gins, particularly their concepts of tenativeness and ‘architectural procedure’ that sit within their larger conception of the ‘architectural body’. Arakawa and Gins inject uncertainty into architecture. They describe it as “a tentative construction towards a holding in place”.9 Architecture becomes doubly tentative — in both its construction and its orientation, that is only ever “towards a holding in place” [my emphasis] – suggesting that any reliable holding in place always remains out of reach. Such a redefinition of architecture is destabilising – not just for the practice of architecture, but for thinking about it as a concept. Their architecture is one that works against habit, against expectation, and towards an experience which challenges perceptual and conceptual norms. For Arakawa and Gins, the way we relate to architecture “should be not that of ‘This is this’ or ‘Here is this’ but instead that of ‘What’s going on?”10

10 Ibid., p. 49.
Arakawa and Gins’ projects are tuned towards developing new bodily capacities, developing new modes of what they call ‘procedural knowing’ through techniques of ‘procedural architecture’. Procedural knowing incorporates instinctual behaviours and learnt patterns of activity, which become habits. Learning new patterns involves integrating all the steps involved in performing a particular skill or activity to the point where it becomes almost automatic. Integrating complex forms of activity into procedures frees up conscious attention to be directed elsewhere.\(^\text{11}\)

To help new inductees into their way of thinking and acting, Arakawa and Gins are fond of giving slightly cryptic instructions. For example, to assist in navigating their *Bioscleave House*, they suggest that inhabitants “Try to maintain two (or more) separate tentativenesses, that is, two (or more) distinct areas of indeterminacy”.\(^\text{12}\)

Procedural architecture then involves interaction with initially challenging propositional environments so that new and more complex skills can be acquired, allowing for bodily and cognitive capacities to continue expanding ever outwards.\(^\text{13}\) Settling into a fixed set of habitual behaviours is to be avoided at all costs – according to Arakawa and Gins we die because our bodies are habituated to death – and in their always-on-the-move conception of architecture and activity they believe lies the opportunity to reverse this destiny.

These procedures offer new ways of participating in the ‘architectural body’,\(^\text{14}\) comprised of “all that which is in the immediate vicinity of a person”\(^\text{15}\) and inclusive of the person, their “power to compose a world and be in contact with it … inclusive of all contact, of whatever variety, you have with the world”.\(^\text{16}\) As I have described in chapter 2.2, the architectural body originates and joins up with the physical body, the physical body lending some of itself to the architectural surround, which in turn lends some itself back to the physical body. Arakawa and Gins’ dynamic notion of the architectural body is a mutually inclusive model that merges organism and environment. This merging occurs in conjunction with other organisms – any body’s relation to the architectural body is mediated by the myriad other relations between other bodies and the surrounding environment. Like the more amorphous idea of atmospheres, the architectural body is something that is collectively constructed, and suggests a deeply entangled relationship between our bodies, our built environments

\(^{11}\) Ibid., p. 52.

\(^{12}\) Telegraph (2014), para 7.

\(^{13}\) Arakawa and Gins give examples of the ‘disperse- to-contrast procedure’ (2002), p. 75. and the ‘tentativeness-cradling procedure’. p. 76.

\(^{14}\) A concept developed from the idea of the ‘ubiquitous site’ visited last chapter.

\(^{15}\) Arakawa & Gins (2002), p. 33.

\(^{16}\) Ibid., p. 33–34.
Fig. 3.3 Arakawa & Gins *Bioscleave House* (Lifespan Extending Villa); *Interior* (2008).
and mediating processes of perception and cognition. Arakawa and Gins’ notion of ‘procedural architecture’ provides a framework to understand and manipulate these relations, and to think of architecture as having considerable agency in imprinting patterns of activity and forming our worldview. Suggesting that these patterns and views are malleable helped to make sense of previous projects and spurred this new series of collaborative works which specifically addressed the RMIT Design Hub building.

Scott proposed the idea of a ‘tentativeness extending procedure’ – drawing an environment of uncertainty further and further out into a building that offered such a controlled environment. We aimed to engender what Arakawa and Gins describe as the tentative relationship between body and building, with the projects enacting their conception of architecture as a constant puzzling out between person and surroundings. To achieve this, our installation projects needed to be encountered as amplifications or extensions of the building’s environment, but long, continuous, open spaces and sightlines made this difficult. As we spent more and more time exploring the building, we realised that once inside, the only significant threshold was between the elevators and the adjoining corridors or ‘long room’ spaces. The building has three elevator shafts that form part of its vertical core. It was at these thresholds that we elected to site our projects, hence the choice of the elevator for the *Lift Lecture*. This, along with other preliminary exercises, provided an opportunity for students to acclimatise and attune to these spaces. Scott and I were also interested in the passivity that occurs in elevators, the expectation that by pressing a button one will be transported to wherever one wants to go, and the reduced intensity of attention that this sets up. Siting our ‘tentativeness extending procedure’ at the elevator doors provided an opportunity to nudge building users into a more attentive state.

After hours, Scott and I became expert at the elevators and their behaviours. If we wanted to ride in a particular one of the three but another one arrived first, we learnt to get into the unwanted elevator and select a faraway floor, then step out before it left, empty. We would then call the elevators again, with an increased chance of getting the desired elevator. These late-night adventures built up a more intimate relationship with the building – its inner workings
Fig. 3.4 Affective Environments preliminary workshops, including prototyping inflatable structures, and cut-up text manifestos.
and back-of-house circulation routes. Quickly we became adept at moving through the building in the ways that were smoothest for us, often disregarding the striated routes that seemed most obvious.\textsuperscript{17} At the threshold between the elevator and the long rooms, we had found a seam\textsuperscript{18} in the building to site our projects.

I used the \textit{Building Movements} projects to further develop the notion of thresholding, creating physical environments that in their bodily negotiation enacted a rethinking of thresholds as dynamic spaces which could be occupied, rather than as lines to be crossed.\textsuperscript{19} This blended with my ongoing research and thinking about air and breath – thinking of these as vital dynamic mediums and means of collaborative interconnection and exchange, as explored in the \textit{Breathing. Space.} projects – and connected some preliminary thoughts of the elevators as carrying parcels of air up and down the building that we experienced in the \textit{Lift Lecture}. With these ideas in place, a series of four physical projects were developed and constructed in parallel. This occurred over an intense ten-day period across different spaces and levels of the building and offsite facilities.\textsuperscript{20} Two projects explicitly engaged with air and two took a more directly material approach. I discuss three of these projects and their relationships with the Design Hub in the sections that follow.

\textsuperscript{17} This was early on in the building’s occupation and security card protocols were much more permissive than they later became. We had access to service elevator, server cupboards and storerooms that are now restricted to smaller user groups.

\textsuperscript{18} ‘Seam’ is Scott Andrew Elliott’s term for describing the point at which a project can interface with an existing environment. See Cottrell & Elliott (2016)

\textsuperscript{19} Scott Andrew Elliott has published on this subject. See Elliott (2014), p. 59.

\textsuperscript{20} The projects developed in response to the skills and capacities of the students we collaborated with. The complexity of and technical resolution of the works would not have been possible in such a short timeframe without the hard work and expertise of those we were lucky enough to work alongside. Particular thanks are due here to Ben Warren for making his workshop available and Kevin Mumford in the RMIT Building 8 workshop.
Building Movements #3: breathing between intimacy and apprehension

The first project to be realised was Building Movements #3, a dense field of black, glossy, lightweight threads which, on exiting the elevator, immersed one’s head and shoulders. The development and production process was led by a small group of students who experimented with various possibilities for the thread materials. We then worked collectively to mass-produce the 4,200 lengths needed to create the rectilinear volume of the project. This volume was equal to that of the elevator interior, but tipped onto its side. The dimensions of the elevator provided a template for our project, and rotating and transposing this volume allowed for the spaces of project and building to come into dialogue.

The highly repetitive, linear nature of the threads echoed the building’s metal mesh interior linings, but with a sense of shimmering softness. Once hung, the threads moved in relation to the slightest movement of air. Collisions of strands created a delicate but enveloping aural field. This sound field reinforced the project’s mesmeric and claustrophobic qualities – as people exited the elevator and moved through the field, the threads were drawn towards their bodies, sometimes suctioned up against noses and mouths during inhalations and pushed away by exhalations or other air movements.

The experience of being and breathing inside the project was both intimate and uncomfortable – breathing space was highly contained and intimate, but at times this containment pressed in with an almost threatening quality. The airs of body and building disconcertingly mixed together in the extended threshold of the project, in a continuation of the ideas of the Breathing. Space. projects discussed in the previous chapter.

21 These included cutting the silvered polyurethane sheeting used in Breathing. Space., and other sheet materials, before settling on a strip material that was already manufactured at an appropriate width – at the suggestion of Jaime Vella, we selected and worked with old video cassette tape.
Fig. 3.5 *Building Movements* #3 with Scott Andrew Elliott et. al. (2013). Detail (top) and installation view.
Building Movements #4: bhubble

The second project that explicitly dealt with the air of the Design Hub also built on the studio sketch approach of Breathing. Space. and Lift Lecture, in this case an expression of rhythmic air movement on the scale of the building. A pressurised, inflatable interior cyclically contracted and expanded as its adjoining elevator doors opened and closed. The slow processes of deflation and re-inflation mimicked the rhythms of human breathing. I nicknamed the project Bhubble – a title that playfully encapsulated both the Design Hub and the project’s air-filled membrane.

The origins of this project were based on numerous observations of the force of air and air pressure throughout the building – pressure differences prevent enormous heavy doors from closing and noticeable, audible shifts in air movement and intensity occur through the building’s daily cycles. These observations were made readily recognisable through the processes of atmospheric attunement undertaken via the Breathing. Space. projects.

Unlike the difficulties of working with pressure experienced in the development of Cloudsound, where it was either too subtle (in the case of weather systems) or more readily understood through hearing (in the sensor–audio network part of the project), Bhubble was a space contingent on air pressure and made this dependence visible. Stepping out of the elevator was to step into a space undergoing a slow-motion collapse. The project caused unsuspecting elevator users to move into a space of uncertainty, tentatively stepping into a space that gradually reasserted its very evident metastability only once the elevator doors had cut off any other course of action.

In the process of designing and making Bhubble, Olivia Pintos-Lopez and two of the students realised that the dimensions of the sheet material would constrain the size of the ‘bubble’ we could make. Working by folding a full sheet of material would minimise joins, but an additional width of material would be needed to make the space large enough for people to comfortably stand up in. The seamless sense of space we hoped to create would be upset by this additional join and so we discussed strategies to conceal it. We decided the best way to conceal this unwanted join was to hide it among other joins and make these a decorative feature. Using an appliqué technique to add

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22 Leanne Failla and Jaime Vella.
Fig. 3.6 Building Movements #4 (Bhubble) with Scott Andrew Elliott et. al. (2013). Looking out from the Bhubble interior with the Design Hub façade beyond (top) and installation view.
a layer of patterning increased the number of joins, such that this one structural join would become hidden. Given Bhubble’s translucence, Olivia’s suggestion to replicate the translucent glass circles that clad the Design Hub’s exterior façade made immediate sense to all of us. We discovered that the signage discs in the building’s interior are the same dimensions as the glass discs of the façade. Two of these were temporarily demounted for use in cutting out the polythene circles which patterned the inflatable, concealing the structural join. In this moment, parts of the building pressed their way explicitly into the project. The building became the template for the inflatable structure.

When looking out from the interior of Bhubble, its patterning of translucent polythene circles appear to be overlaid with the glass circles of the building’s façade. This layering of surfaces creates a visual flattening, a blurring of distinctions and spatial relations. Bhubble’s pressure-dependent relationship to the lift interior creates a threshold that is dynamic and avoids a clear sense of delimitation or boundary. In its extension into the air of the Design Hub, there is a moment of together-but-separable-ness. Façade patternings are flattened together through their translucence and can be understood as a single visual surface, while also being separable into their constituent layers. As with Cloudsound, there is a friction in the collapsing between depth and surface that offers a dynamic way of making sense of spaces and our relationships to them – pressed up close to our bodies or extending away from them.

Fig. 3.7 Plastic discs ready for heat bonding to main surface of Bhubble. The discs were added to disguise joins in the main surface.
Building Movements #2: collapsing depth

A third, more materially tangible project picked up on the disorientating and eye-straining effects created by prolonged periods of time in the Design Hub’s interiors, lined as they are with gridded metal mesh and arrays of circular cut-outs. These optical qualities were extended in an installation that overlaid a series of perforated metal layers and insisted on a building user’s physical participation.

Any straightforward exit from the elevator was blocked by a perforated metal box the same dimensions as the elevator interior. A circular label identical to those found throughout the rest of the building simply read ‘Push’. When this box (which was housed inside a second perforated metal box) was moved aside, a narrow exit corridor opened up. This physical relationship inverted the passive-user/active-building dynamic present within the lift interior, and the motion of these perforated screens created a series of dazzling and disorientating moiré effects, which in turn were overlaid on the gridded circles of the building facade. The moiré emerged from a reconfiguration of the building’s patternings, inducing a sense of vertigo. The moiré’s power to create a disconcertingly dynamic sense of space was later taken up in the competition entry A/6 discussed in chapter 3.3.

Each in their own way, these three projects exaggerated the building’s environmental effects in ways such that they ceased to provide a sense of spatial certainty. The uncertain situations set up by the larger project required bodily participation (through breath, movement and physical exertion) in order to navigate and make sense of what was going on. The projects worked with and within the visual and lived rhythms of the building in action. Rhythm is intrinsic to the unfolding liveliness of the building: the interplay across the registers of its surrounding environment, the projects we situated within it and the people who, through their activities, constantly reshape and rethink what and how a building might be. This interplay can be thought of as a sort of conversation, where the projects enter into a dialogue with the dispositional tendencies of the building and ‘speak back’ to it – sometimes in a spirit of friendly like-mindedness and at other times generating friction.

23 The fourth project was a series of stairs that led up and then down into a half-sized waiting and reception room. This was sort of an outlier project in that it didn’t take up specifically environmental qualities, but was intended as a critique of the building’s lack of a first point of contact.
Fig. 3.8 Building Movements #2 with Scott Andrew Elliott et. al. (2013). Exterior view (left) and view of perforated metal surface that prevents an immediate exit from the elevator interior.
Fig. 3.9 *Building Movements #2* with Scott Andrew Elliott et. al. (2013). Details of moiré effects experienced as one moves through the installation.
conversations with the design hub

Engaging a building in conversation through the making of creative projects can be productively understood through the practice of ‘rhythmanalysis’. This is Henri Lefebvre’s term for an approach to non-verbal interaction that is both qualitative and analytical. Rhythmanalysis integrates an inwardly directed attention to bodily rhythms (beginning with heartbeat, breath and other cyclical occurrences like hunger and wakefulness) outward towards rhythms of the environment. For Lefebvre, rhythms occur “everywhere where there is interaction between a place, a time and an expenditure of energy”. The techniques of rhythmanalysis allows a practitioner to develop an attunement to these subtle movements of energy, similar to Kathleen Stewart’s ‘atmospheric attunements’ discussed in the previous chapter.

In Lefebvre’s propositional ‘previsionary portrait’ of the rhythmanalyst he emphasises the carefully attentive listening that must be practised in order to attune to the subtleties of rhythm: “He will be attentive … He will listen to the world, and above all to what are disdainfully called noises, which are said without meaning, and to murmurs [rumeurs] full of meaning and finally he will listen to silences.”

Here listening is used in an expanded or metaphorical sense; it is not just a literal close-listening exercise as might occur in a practice of acoustic ecology, but a more speculative, transversal attending to environmental energies and relations. Rhythmanalysis suggests an animistic conception of things, of objects possessing behavioural tendencies. It projects an understanding of interconnectedness that anticipates Timothy Morton’s concept of ecological thought. This becomes apparent when Lefebvre describes the ways a rhythmanalyst might relate to the surrounding environment:


25 Lefebvre (2013), p. 29. Lefebvre assumes male protagonist in his writings, but please proceed with an understanding that both female and male humans (and non-humans too! – surely cats and bees also) can act as rhythmanalysts.

26 For example see Schafer (1994) or the ‘deep listening’ practice of Pauline Oliveros. See http://paulineoliveros.us/about.html (last accessed 13 July 2016.)

27 These ideas are currently taken up in the social sciences and cultural geography, See Edensor (2010) and Massey (1994, 2005) where she works towards a definition of space as open and connected.
The rhythm analyst will not be obliged to jump from the inside to the outside of observed bodies; he should come to listen to them as a whole and unify them by taking his own rhythms as a reference: by integrating the outside with the inside and vice versa. For him, nothing is immobile. He hears the wind, the rain, storms; but if he considers a stone, a wall, a trunk, he understands their slowness, their interminable rhythm. This object is not inert; time is not set aside for the subject. It is only slow in relation to our time, to our body, the measure of rhythms. An apparently immobile object, the forest, moves in multiple ways: the combined movements of the soil, the earth, the sun. Or the movements of the molecules and atoms that compose it (the object, the forest).

We could easily think of buildings in place of Lefebvre’s examples of a stone or forest. Buildings also tend to move slowly in relation to our human conception of time. Rhythmanalysis provides a way to tune into the multiple ways in which buildings move, and their tendencies towards and influences on action – that is, their dispositions. It also opens up ways of thinking and practising relationally. In the dynamic unification that occurs through integrating insides and outsides of bodies and buildings, rhythmanalysis shares strong similarities with the mesh Timothy Morton uses to conceptualise his ecological thought. Like rhythmanalysis’ implicit elision of distance, thinking ecologically “involves dissolving the barrier between ‘over here’ and ‘over there,’ and more fundamentally, the metaphysical illusion of rigid, narrow boundaries between inside and outside”.

Evacuating distance, dissolving barriers and working instead within a continuum of interconnectivity links rhythmanalysis, ecological thought and the practice of thresholding developed in the preceding chapters.

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Rhythmanalysis provides a deeper understanding of thresholding and articulates how putting this technique into action opens up ways of perceiving the dynamic qualities present in seemingly inert objects and environments. Directing attention to these less familiar modes of intercommunication opens up the possibilities for new understandings and ways of interacting with our built environments. Following Lefebvre, rhythms can be understood as a mesh of relations between time, space and energy. Thresholding, then, is a sensitivity to and understanding of the continual negotiations and exchanges rhythmically taking place within this mesh. What is suggested through this focus on rhythm is the diversity of entities and relations that thresholding can open up, thus enabling them to be modulated through creative practice. The development of ‘architectural judo’ in the following chapter offers a more nuanced understanding of modulation, and the discussion of AJ6 in chapter 3.3 returns to this and develops it in greater detail in terms of rhythmic misattunement.
Fig. 3.10 Izzy Huang *The Displaced Guide* (2014). Huang’s Interior Design Honours project explores notions of rhythm analysis. A series of small objects act as mediators between the realms of human and building. Huang’s projects propose a way of interacting with the latent layers of communication that lie below the surface of everyday modes of communication. Images courtesy of the designer.
Fig. 3.11 Guests exploring the various *Building Movements* installations at the public exhibition-event. Facing page: fig. 3.12 Adele Varcoe *Bikini Party* (2013). Varcoe’s contribution to the *Building Movements* public event injected life, colour and activity into the otherwise subdued interiors. A group of bikini-clad actors travelled up and down the elevators singing and dancing to a battery-powered stereo system.
getting to no: bodies in negotiation

Despite having the support of the building’s curatorial team, and numerous enthusiastic conversations with other building users informing them of our intentions, our testing of the Design Hub’s capacities as home for creative practice research still generated significant friction and brought almost crippling opposition from unexpected and invisible constituents of the building’s complex assemblage. Throughout the processes of making the projects we had negotiated with the building, finding ways to work with, around and against the possibilities it allowed. And at each step along the way we had negotiated with other users of the building and those who were acting as its custodians. Rather than design research being about open-ended experimentation that necessitates the taking of risks, making the projects public became an exercise in risk management.

Our first challenges were posed by the Occupational Health and Safety advisors, who were anxious about the challenges our projects posed towards the building. They suggested a series of increasingly elaborate scenarios in an attempt to uncover moments where our projects would constitute a hazard for an imagined building user. We tried to mitigate this by making made several compromises over the locations of projects, and explained that to pre-emptively announce what was to happen would significantly undermine the issues at stake in the research, particularly in the movement from a state of relative inattention in the lift interior into a surprising and unexpected context. In response we devised management and invigilation strategies, and provided assurances that we could cope with an imaginary unaccompanied visitor who was mobility- and vision-impaired and also possibly claustrophobic and a victim of past trauma. This involved limiting our interventions to one elevator, rather than across all three. Just hours after this meeting, this one elevator ceased operation. This was a week before the exhibition opened to the public. When the elevator repair staff came to reactivate the elevator in question, they saw what was happening on the various floors and decided that as a private company they had a legal obligation to maintain safe egress from all of the elevators at all times, and promptly shut down the elevator that connected to our projects. This was the day before the public launch. Through a series of increasingly intense negotiations, the elevator was eventually put back into operation just one hour before the exhibition opened. Guests arrived and for a few hours the building seemed to enter into a new register of life.
A day and a half later, it was time to pack up the exhibition. As with any journey, getting back to where you started always seems quicker than going there. Perhaps this is because we already know the ground to be travelled and have an understanding of what things will look like when we arrive. Certainly we could never have anticipated all the obstacles and challenges we encountered in setting out to build a series of tentativeness-extending devices. The projects which had taken hundreds of hours to produce were gone within a single day – a Sunday of skip bins, hammers, vacuum cleaners and students eager for free materials. By Monday there was almost no visible trace that the projects had ever existed but, like a challenging moment in any relationship, imprints were left. For those closely involved, things were indelibly shifted. Scott and I bonded through the adversity of making these projects, and a certain bonding emerged between us and the Design Hub as well. By the end of these projects, I was left more aware of and closely connected to its quirks and tendencies. The strong identity of the building and its intended use as a site of experimentation had made our projects possible, but it seemed we had overstepped the limits in terms of the kind of experimentation it anticipated or would be inclined to permit. I could not characterise the building as either friend or foe, it was both: a friendly foe.

The Building Movements projects drew on Arakawa and Gins’ notions of tentativeness, ‘architectural procedure’ and ‘architectural body’ as developed in their writing and in projects such as Bioscleave House. Our installations enacted our own ‘architectural procedure’ of ‘tentativeness-extending’ that disrupted the experience of threshold conditions within the RMIT Design Hub building. This approach brought the projects into a co-forming relationship with the building, allowing a more complex articulation of thresholding as a type of environmental modulation and feedback that can be understood through Henri Lefebvre’s technique of rhythmanalysis.

Two days after packing up the installations, Scott returned to Helsinki. There were still unresolved questions of what had so fleetingly and yet so intensely occurred. We kept talking about the project and began to devise a way to reflect on what had happened through writing. We were insistent that this reflection had to be done in a way that stayed true to the ideas we were working with: tentativeness-extension and conversational collaboration. This reflective writing project became Writing Writing Movements Tentatively, which is discussed in the next chapter.
3.2 Writing Writing Movements Tentatively and the Emergence of Architectural Judo

‘Architectural judo’ is a notion I developed through a creative practice approach to writing in which Scott Andrew Elliott and myself extended the ideas at work in the *Building Movements* projects. The technique we developed for this writing project took the ‘tentativeness-extending procedure’ from the *Building Movements* installations and transposed it into our writing process as a response to the complexities of co-authored writing. This approach proved effective for collaborative work in that it enabled the writing to move beyond the individual voices of each collaborator and allowed for a ‘third voice’ to emerge – increasing the degree of tentativeness at work through a thresholding of the writing process. This third voice generated new ways of conceptualising the *Building Movements* projects and challenged me to develop the concept of architectural judo. This concept is further developed in relation to Brian Massumi’s discussion of playfghting and his insistence on the way it enacts a ‘logic of mutual inclusion’. Existing practices that make use of architectural judo are discussed, including those of Rem Koolhaas/OMA, Reiser + Umemoto and Rafael Lozano-Hemmer.

Architectural judo consists of a set of what Erin Manning and Brian Massumi call ‘techniques of relation’ and offers ways of moving within the complex interrelations of an unfolding event. Reconceiving the RMIT Design Hub building as an event, rather than a static entity, marked a significant shift in the research and became an important concept to retrospectively make sense of the dynamic relations at work in the *Building Movements* projects. The techniques of architectural judo were taken into a more deliberate and sustained engagement through the project *AJ6*, which is discussed in the subsequent chapter.
reflections: on no

Once the dust had settled on the Building Movements projects, with Scott Andrew Elliott back in Helsinki and me remaining in Melbourne, we began to devise a way to make sense of what had happened in making these projects and how our thinking had been transformed as a result. We continued our collaboration into a piece of co-authored writing which came to be called Writing Writing Movements Tentatively.¹ Our aim was to extend into a writing practice the tentativeness-extending procedure we had worked with in the built projects, where the constructions came into conversation with the Design Hub and the building’s agency interjected into our making processes. We devised techniques for creating moments of thresholding in the writing process where a third voice could emerge between our writings, disrupting and increasing the degree of turbulence in an already mediated and complex process of co-authored writing.

Neither of us was sure what this technique would be, but we both agreed that it would operate as a third author which would creatively interject its own voice into the writing process. To begin developing this technique, we tried writing simultaneously into a shared online file, writing one word at a time or one sentence at a time. These processes definitely enacted tentativeness – neither of us knew with any certainty where things were going – but the results lacked any sense of excitement or discovery. The few constraints led to an overwhelming complexity that was impossible to hold onto. Trying to simultaneously maintain two threads of thought was exhausting. We had overstepped the line between balance and instability. In increasing the degree of turbulence between our writing processes, we reached a point where any attempt at thresholding was impossible.

We needed to define stricter parameters around the process. The next series of techniques were drawn from the Oulipo collective² and included their ‘n+7 technique’³ of transposing nouns and a brief flirtation with a non-linear mode of navigating a series of written fragments based on the ‘knight’s tour’.⁴

Our next experiment was based on Scott’s suggestion to work with a cut-up technique adapted by William S. Burroughs from Brion Gysin.⁵ After agreeing on a topic, word length and deadline, we each

¹ See Cottrell & Elliott (2016). The full title Writing Writing Movements Tentatively: towards procedures in expanded co-authorship, conversation and collaboration was formed through the same ‘cut-up’ technique as used to produce the essay. This technique is described in more detail in the text that follows.

² This collective was founded by Raymond Queneau and François Le Lionnais in Paris in 1960. Oulipo is a contraction of ‘Ouvroir de littérature potentielle’, which translates approximately as ‘Workshop of Potential Literature’. A comprehensive discussion of the group and its working methods is provided by Motte (1986).

³ This involves replacing every noun in a text with the seventh noun down in a dictionary.

⁴ This technique involves arranging textual elements in an eight by eight grid and then navigating them based on the moves of the knight chess piece.

⁵ This process was devised by Brion Gysin and developed in the writing of William S. Burroughs. There are many varieties of cut-up methods as well as fold-in methods also used by Burroughs. See Burroughs, Grauerholz, & Silverberg (1998) pp. xxiv–xxv and p. 297.
Breathing is a process inextricably meshed with liveliness, a process that sustains life, and as a consequence might typically be considered a good thing. But when this usually positive process is disrupted it reveals the delicate inter-relationships that exist between our lived experience and our surroundings. Inhaling airborne polymer chains into my lungs sets up a series of physiological responses that influence the qualities of blood circulating in my body, and these qualities in turn affect my neural systems. I am chemically altered by my environment, and this is always the case. This is constantly occurring in lived experience, though usually much more subtly. What I breathe in forms me.

And what I exhale is taken up by others and contributes to their formation. This ongoing process of reciprocal exchange connects across scales without distinction from the very intimate to the largest collectives. This process is a way of exploring and seeking out affective experiences created within an architectural construction that offers a point of delicate balance enacted the technique of thresholding between sense and nonsense. This tentativeness is perhaps one way of looking at the practice as a whole, and has served as a method of research, in our analysis of the site of intervention as well as in the process of designing and building.

The exterior of the building is covered in a sheath of 16000 sand-blasted glass circles, offering a translucent connection between interior and exterior, thus being at once connected and disconnected, or offering a kind of mediated connection between in and outside. Inside, on the first level, BhuBle was installed immediately adjacent to the lift doors on level five of the Design Hub. The lift doors opening caused a drop in the air pressure supporting its form, and the interior slightly deflated as people stepped out into the corridor which led to a drop in the air pressure re-stabilises and the interior re-inflates back to its maximum.

How to determine unexpressed affordances?
Discussion of process of examination, way of exploring and seeking out affective responses that influence the qualities of blood circulating in my body, and these qualities in turn affect my neural systems. I am chemically altered by my environment, and this is always the case. This is constantly occurring in lived experience, though usually much more subtly. What I breathe in forms me. And what I exhale is taken up by others and contributes to their formation. This ongoing process of reciprocal exchange connects across scales without distinction from the very intimate to the largest collectives. This process is a way of exploring and seeking out affective experiences created within an architectural construction that offers a point of delicate balance enacted the technique of thresholding between sense and nonsense. This tentativeness is perhaps one way of looking at the practice as a whole, and has served as a method of research, in our analysis of the site of intervention as well as in the process of designing and building.

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Fig. 3.13 Early experiment using a four-column layout to automate a ‘cut-up’ process.

wrote from our own perspective. These two texts were then combined by putting them into multi-column documents that alternated between Scott’s and my own writing. Two-column and four-column layouts produced very different results. Four columns became fragmented and garbled. Much of the problem was to do with the visual arrangement of the columns, so we adjusted their widths and used two columns only. This produced paragraphs and sentences that were at the edge of legibility6 and seemed to speaking in a new way while preserving just enough of our individual voices for them to be recognisable. We made slight edits to the raw cut-up text to fine-tune the intelligibility, always with the intention of treading the line between sense and nonsense. This process of negotiation towards a point of delicate balance enacted the technique of thresholding among the different impulses of our individual writing. At this dynamic borderline we discovered new phrases that offered potential re-readings of the topic and the larger project more generally. The following extract details our initial encounters with the building:

6 Not unlike the balance sought by Daniel Crooks in his video editing ‘cut-ups’ discussed in chapter 1.1.
Breathing is a process inextricably meshed. It is perhaps one way of looking at our practice with liveliness, a process that sustains life, and as a whole has served as a method of consequence and might typically be considered a good thing. But when this intervention, in the process of positive process, is disrupted, it reveals the designing and building. Delicate inter-relationships that exist between the exterior of the building are covered in our lived experience and are our surroundings. A sheath of 16,000 sand-blasted glass circles.

Inhaling airborne polymer chains into my lungs offering a translucent connection between sets up a series of physiological responses interior and exterior, thus being both at once. This influences the qualities of blood circulating, connected and disconnected, or offering a kind of body, and these qualities in turn affect a mediated connection between and inside my neural system. I feel not quite right, light-outside. Inside, on most levels, the building is headed off-balance. I am chemically altered, split in two, separated into a long room and by the surrounding environment, and this warehouse space. As many levels of lived experience are usually much more subtle. What I breathe in forms me, and what I experience of the building is effected. As exhale is taken up by others and contributes to a result, we felt that some disorientation came from their formation. This ongoing process comes about, as it was difficult to discern which level their formation was on. Walls and ceilings on most levels are without distinction. The very intimate too were sheathed in a heavy metal mesh; the largest collectives.
The cut-up technique successfully operated as a third author. This first piece of text by this third writer proposed an alternative reading of what impact the installation projects had made – neither mine nor Scott’s readings. It was a voice that somehow exceeded the texts from which it was formed. The writing was a collaboration between Scott and myself and in this collaboration a third voice was created. There was Scott’s writing, my writing and the ‘included middle’ of their mutual influence that emerged through a thresholding of the cut-up writing technique. In laying our texts side by side and then blending them together by re-reading across them, our writings, side by side, coalesced in what Brian Massumi describes as a “zone of indiscernibility … where differences come actively together”. To us the cut-up felt like the work of another writer who suggested new ways of understanding the Building Movements projects. It interjected itself into the conversation of our writing processes, extending the tentativeness of co-authoring a reflective essay.

the building is headed off-balance

A significant shift in my understanding was triggered by one key phrase in particular:

*I feel not quite right, light-outside. Inside, on most levels, the building is headed off-balance.*

This phrase – a blending of my description of light-headedness resulting from a DIY plastic-welding process with Scott’s description of the building’s disorienting sameness – spoke back strongly to both Scott and me. Aside from the enjoyable sequencing of ‘right, light, outside, inside’, the suggestion that the building was ‘headed off-balance’ caught us both by surprise. In the lead-in to *Building Movements* we had spoken a lot about destabilising experiences, about extending tentativeness and how the projects we developed might effect this for an audience. We never considered that these projects might begin to destabilise the building. But this was exactly what the cut-up writing process suggested and allowed us to realise – a much more radical understanding of what was going on. Our ‘third author’ had produced a generative turbulence within our writing process that in turn pointed back to ideas of instability as an ontological given that lurks below the surface of metastable appearances – as first detected in the making of *Cloudsound*. But the *Building Movements* installations went further than the ‘kiss’ of projected image suctioned up against moulded architectural surfaces that suggestively softened the limit point of architectural enclosure. Instead, our third author proposed that the Design Hub as a built entity could be thought of as moving out of equilibrium in response to our installations.

Our habitual grasp of solid, seemingly certain things had been disrupted. I responded to this third writer’s discoveries through a series of questions: “How do the small and relatively insignificant projects that we inserted into the Design Hub begin to move an entire ten-storey building? What do they do differently from conventional architectural practices that allows them to perform a sort of ‘architectural judo’ – redirecting the weight and force of the other to gently throw it off balance?” It was in this response that I first used the phrase ‘architectural judo’ – a concept that was full of potential and in need of further elaboration.

*See the section Headed off-balance in Cottrell & Elliott (2016)*
the practice of architectural judo

‘Architectural judo’ appropriates the Japanese martial arts practice and imagines what might happen if its concepts and techniques were put to work in understanding the dynamics of creative practice research in relation to architecture. Literally translated, ‘judo’ means ‘gentle way’.

It is not a practice of aggression or the forceful imposition of will. In judo, a practitioner works to amplify the forces of the other in order to destabilise them. If your opponent goes to push you, you pull them. Working with leverage, the objective is to use the force and weight of the other to throw them off balance.

In the first instance I used ‘architectural judo’ to respond to the notion of a building ‘headed off-balance’ posed by the ‘included middle’ of our collaborative writing. But on further reflection this didn’t accurately describe what had occurred. What was thrown off-balance by our projects was not the building as an object, but rather the event in which the Design Hub building was but one constituent. In light of this event-oriented understanding, architectural judo can be productively understood as a ‘technique of relation’. This is Brian Massumi and Erin Manning’s term to describe “devices for catalyzing and modulating interaction” which form “part of a practice of event-design, [and] as part of a larger ‘ethics of engagement’”. Techniques of relation have structure in that they are tailored to specifics of the event in question, but also flexibility, which provides room for improvisational movement that allows the various constituents to actively collude in the event’s unfolding.

This proved a crucial turning point in the larger Building Movements project and in my understanding of my PhD research more generally. My focus shifted from the intention to reconfigure an experience of an environment, in projects like Cloudsound and Building Movements, to a deeper understanding of Building Movements (and subsequent projects) as events that can be catalysed and modulated through the relational techniques of architectural judo. Understood this way, these event-projects participate in a feedback loop in which both experience and environment are always conditioning one another. An awareness of these dynamics is revealed through a thresholding of atmospheric co-formation, as discussed in the earlier chapters.

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10 As Jigoro Kano, the founder of Judo, wrote: “adjusting to and evading your opponent’s attack will cause him to lose his balance, his power will be reduced, and you will defeat him. This can apply whatever the relative values of power”. Kano (2013) pp. 39–40.


12 Ibid., p. 92.

13 Ibid.
on airiness. Architectural judo is a set of ‘techniques of relation’ that provides ways to modulate interaction through the reciprocal relations of an event.

Thinking of architectural judo in these terms and following the principles of judo outlined above suggest a number of techniques that can be employed in creative practice research to work within an event’s complex of relations, namely: amplification and leverage of environmental qualities already at play, which are then deliberately redirected and fed back into that environment to create moments of destabilisation that reveal a situation’s underlying metastable fragility. These techniques push a building-event towards something else, a new register of potential. These techniques will be elaborated on through a reappraisal of the Building Movements installations later in this chapter and the discussion of AJ6 in the following chapter. Before that, it is necessary to develop an understanding of how the techniques of architectural judo made possible an off-balancing of the Building Movements event, by turning to Brian Massumi’s theorisation of playfighting in What Animals Teach Us About Politics.

\[\text{\textsuperscript{14} Ibid.}\]

\[\text{\textsuperscript{15} The distillation of these techniques allows them to be understood and used independently of the framework suggested by martial arts practice. This goes some way to addressing questions that arise regarding how far this metaphor can be stretched, the difficulties of appropriating another tradition for my own ends, and whether something is lost by relying on the metaphor of judo to carry my conception of practice.}\]
the paradoxes of playfighting
To playfight with another, you need a mutual understanding of the type of engagement taking place. If there is a failure to recognise this sense of playfulness, the engagement can quickly tip into actual antagonistic combat. In his 2014 book *What Animals Teach Us About Politics*, Brian Massumi builds on Gregory Bateson’s analysis of play\(^\text{16}\) to explore the multivalent complexities of action that exist in playfighting. Massumi unpacks the relationships that exist in the difference between the bite and the nip – a question of style that opens up the difference between combat and play.

The difference between a fight bite and a play bite is not just the intensity of the act in the quantitative sense: how hard the teeth clamp down. The difference is qualitative. The ludic gesture is performed with a mischievous air, with an impish exaggeration or misdirection, or on the more nuanced end of the spectrum, a flourish, or even a certain understated grace modestly calling attention to the spirit in which the gesture is proffered … It is combatesque: like in combat, but with a little something different, a little something more. With a surplus: an excess of energy or spirit.\(^\text{17}\)

These qualitative differences of mischievous exaggeration provide an insightful way to characterise the engagement between our *Building Movements* installations and the Design Hub. The installations were like the building, but with a little something more that pushed the situation into a different register of meaning and engagement. Extending and paraphrasing Massumi’s language, I describe them as ‘buildingesque’.

Massumi identifies how the “logics of fighting and play embrace each other, in their difference”.\(^\text{18}\) In the performance of the play bite, the logics of both fighting and play are simultaneously present. A “currently occurring action finds itself inhabited by actions belonging to a different existential arena, whose actions are effectively felt to be present, but in potential, held in suspense”.\(^\text{19}\) This moment of suspension is a thresholding of action, opened up through the multivalency of gesture. The gestures of fight-biting and the nip of the play fight modulate and catalyse each other, like Massumi and Manning’s ‘techniques of relation’. Action modulates and is modulated by the arena of activity. The logic of fighting gives shape


\(^{18}\) Ibid., p. 6.

\(^{19}\) Ibid.
to the course of play, while the gestures of combat are “slightly deformed by the stylism of the play and its own ludic logic”. In this reciprocal reshaping, they become “performatively fused, without becoming confused”. This fusion violates the law of the excluded middle. Instead, Massumi asserts the logic of playfighting is that of mutual inclusion: “Two different logics are packed into the situation. Both remain present in their difference and cross-participate in their performative zone of indiscernibility. Combat and play come together – and their coming-together makes three. There is one, and the other – and the included middle of their mutual influence” [emphasis in the original].

This ‘included middle’ “does not observe the sanctity of the separation of categories, nor respect the rigid segregation of arenas of activity” Massumi’s logic of mutual inclusion is an interconnectedness of relations performatively brought together. It is a logic of action. This differentiates it from the category-eschewing interconnectedness of Timothy Morton’s ‘ecological thought’, which is about a relational opening up of boundaries. As Morton notes, “although there is no absolute, definite ‘inside’ or ‘outside’ of beings, we cannot get along without these concepts either”. The ecological thought brings into question the definition and stability of the threshold, suggesting the possibility of thresholding. Massumi’s logic of mutual inclusion articulates the performative power of thresholding.

Architectural judo is thresholding in action. Its techniques enact a logic of mutual inclusion and suggest ways of moving within the relational complexity of an event. These movements are both shaped by the event and have the potential to reshape it from within. Architectural judo opens up an analogical difference to architecture as we know it. By drawing architecture into a game of imaginative possibility, it plays a game of what architecture could be – it modulates building-events such that they become buildingesque. As Massumi and others note, play is not completely conditioned by the register of everyday action, it doesn’t seek to imitate; rather, play relies on improvisation within these structures to open up novel ways of practising. New ways of moving and practising are not always easy to get accustomed to, particularly in cases of mutual inclusion such as occur in moments of serious play. To perform architectural judo is to enact paradox, something that is both of architectural practice and
yet somehow different. Architectural judo is a kind of playfighting with architecture.

By working with a playful spirit, architectural judo’s buildingesque qualities gather together two logics of action – they are both suggestive of architectural possibility, while at the same time these mischievous exaggerations of architectural qualities offer a critique of this very same trajectory. For Massumi, this charges “the situation with possibilities that surpass it. The ludic gesture embodies this complexity [and] activates paradox”.26 Humans typically experience “paradoxes of mutual inclusion as a breakdown of their capacity to think, and are agitated by it”.27 These are moments in which we can learn from animalistic behaviour – rather than being agitated by paradoxes of mutual inclusion, we can be activated by them. Playing actively affirms paradox and offers us ways to move beyond moments of cognitive breakdown. Massumi suggests that for humans and animals alike, practices of play have the potential to augment our capacities in at least two ways:

On the one hand, animals learn through play (to the extent that a playfight is preparation for the real combat engagements that may be necessary in the future). On the other hand, the purview of its mental powers expands. In play, the animal elevates itself to the metacommunicational level, where it gains the capacity to mobilize the possible. Its powers of abstraction rise a notch. Its powers of thought are augmented. Its life capacities more fully deploy, if abstractly. Its forces of vitality are intensified accordingly. The ludic gesture is a vital gesture.28

Two parallels can be drawn here with the practice of architectural judo. The first is that its actions have metacommunicational, or critical, potential and, secondly, that through this an event’s liveliness is intensified. I will deal with these two issues in turn.

27 Ibid.
28 Ibid., pp. 7-8.
Firstly, the potential to critique action through action can also be understood as a practice of immanent critique. Brian Massumi and Erin Manning describe this as seeking “to energize new modes of activity, already in germ, that seem to offer a potential to escape or overspill ready-made channelings into the dominant value system”.\textsuperscript{29} Immanent critique works from within “the thick of the tensions – creative, institutional, urban, economic – and build[s] out from them”.\textsuperscript{30} Like architectural judo, immanent critique opens up the latent potential of an event. It is a way of thinking in action that energises open-ended possibility. The techniques of architectural judo constantly test the edge of what can be thought of as being properly ‘inside’ architecture. By activating the ‘included middle’ of bodies and buildings, architectural judo stirs up trouble for categorisation. This might agitate our habitual thinking, but rather than seeing this as a breakdown of cognitive powers, Massumi suggests that the mutually inclusive logic of playful action offers a way of moving beyond what seems to be counterintuitive.

Secondly, architectural judo offers techniques to bring a situation into a heightened moment of encounter, where a sense of liveliness is foregrounded and intensified in both the environment and our own capacities. This is valuable particularly in relation to what Hal Foster describes as how overdesign can ‘kill’ a design outcome, exhausting it of possibility.\textsuperscript{31} Rather than shutting down or eliminating potential, architectural judo – poised as a kind of playfighting – can infuse a situation with an energetic spirit, opening it to new and unanticipated modes of expression. This articulation of architectural judo allows a much deeper understanding of the Building Movements projects and their eventful relationship with the Design Hub.

\textsuperscript{29} Manning & Massumi (2014) p. 87.
\textsuperscript{30} Ibid.
\textsuperscript{31} Foster (2003) p. 15.
As already discussed, the techniques of architectural judo are techniques of relation. These techniques – amplification, leverage and discordant feedback – work in the midst of an environment, event or atmosphere to “catalyze and modulate interaction”, leading to a moment of destabilisation. They work collectively, but with a particular arc of operation. In the Building Movements installations, spatial certainty was upset through a process of selecting aspects of the Design Hub’s environment and amplifying them in ways that involved repetition, but with a little something extra. These aspects were re-inserted into the environment, but with a twist of difference that created resonance with the building while simultaneously working frictionally against it, causing the wider event to become unsettled. These were techniques of increasing turbulence, where the discordant feeding back of environmental qualities heightened an event’s instability.

The practice of architectural judo proceeds by identifying and working with the forces, energies and movements that constitute an environment, modulating and amplifying their effects before discordantly feeding them back into the environment such that the qualities of their encounter are disrupted and reshaped. The Building Movements installations worked with the air movement, volumes, qualities of translucence and repetitive patterning of the Design Hub. The building’s highly patterned and repetitive surfaces of metal mesh, translucent glass discs and perforated metal were amplified and transformed through the leverage of play. Metal grids were counterposed with a shimmering softness of black, glossy threads of magnetic tape. Volumes of spaces were repeated, but rotated. The hard glass discs of the exterior façade were seen through the flimsiness of a patterned and pressurised plastic construction. The eye-straining effects of the building’s patternings were heightened through the creation of moiré effects.

The Building Movements projects were a form of feedback that worked with and within the visual and lived rhythms of the building in action. These counterposes were made possible through play. The connection between play and leverage can be seen in the etymological line that links leverage and levity. Both are concerned with qualities...
of lightness – which, as previously seen in Italo Calvino’s writings on lightness, refers to both material qualities and a disposition of gentle, playful humour – also present in the *Breathing. Space.* projects discussed in chapter 2.2. Here, extrapolated to the context of an architectural practice, this attitude of levity becomes the lever allowing architectural judo to become a technique for working with and within an environment-event in such a way that things are tipped into a new realm of possibility. The new elements suggested by this playful engagement with the environment-event are both familiar to it but also work against it, a quality of misattunement that will be taken up in the following chapter. As a result the event, which is mutually inclusive of environment and experience, becomes amplified, brimming with an “excess of energy or spirit”.33 The *Building Movements* exhibition event catalysed just such a moment. The projects throughout the Design Hub brought the building-event momentarily into a new register of life. At the time of exhibition, this moment of excess was a vaguely felt but overwhelming awareness of something shifting and transforming. The collaborative writing project of *Writing Writing Movements Tentatively* has allowed me to articulate this shift as a destabilising realisation of how these larger environments operate and emerge in relation to things within them; in other words, a practice-oriented understanding of atmospheric co-formation and operation. Also implicit in this excess are the values of immanent critique, the possibility of new modes of engagement that “offer a potential to escape or overspill ready-made channelings into the dominant value system”.34 Maybe this was what all the fuss with Occupational Health and Safety was about. In all its strangeness, *Building Movements* suggested something other than architecture as it is conventionally encountered.

The earlier discussions of turbulence, the understanding of buildings as events always in formation and the tentative approach to architecture taken up by Arakawa and Gins all challenge the idea that buildings, and the practice of architecture in particular, can be regarded as an epitome of stability and certainty – a place of assumed stability and certainty from which other assumptions and habits are formed. As Mark Wigley wrote regarding the relationship between architecture and turbulence, and previously quoted in chapter 2.1, to doubt the stability of architecture is to begin a process of undermining.


34 Manning & Massumi (2014) p. 87.
a system considered fundamental to the way we bring structure to the things around us. As a result conventional architectural practices tend towards more conservative expressions. Architect and educator Lebbeus Woods observes:

Architects rarely work anywhere near the edge. They usually operate well within the boundaries of what they comfortably know and what others know, too. We expect architecture to be stable and sure, indeed with just enough frills and pretensions to make it a little, but not too, different from what we have known perhaps many times before.

Architectural practice tends to deal with known properties and techniques of material assembly to produce buildings and spaces, resulting in buildings which are novel, but within a zone of comfortable familiarity. As Scott and I experienced in making the Building Movements projects, construction and occupation frequently become concerned with the reduction and management of risk, for designers as well as occupants. Yet despite these efforts, buildings are complex, volatile formations where the unexpected, the unanticipated, is never far away. How then might we characterise a practice concerned with “a literal architecture of instability” such as that of Arakawa and Gins or indeed the suggestion that Building Movements was an event also moving in this direction? What happens when architectural practices actively encourage an engagement with uncertainty and risk?

Fig. 3.14 Scott Andrew Elliott sawing timber over a toilet in the Design Hub. We developed this way of working late one night in order to avoid the need to travel five or six floors to the building’s workshop spaces, while still respecting the requirement to minimise dust production, which could interfere with the in-floor passive ventilation systems.

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35 Wigley (2006)


To begin to answer these questions is to articulate another sort of architectural practice outside of assumed notions of stability. Scott and I worked with only a minimum of regard for conventional regulations, more frequently asking ourselves ‘Why not?’ rather than ‘Can we?’ We operated as what Jonathan Hill calls ‘illegal architects’: a “different type of architectural producer, one unrestrained by professionalism”. An illegal architecture “questions and subverts the conventions, codes and ‘laws’ of architecture”. It responds to creative unpredictability brought about through use and works with the “profusion of ambiguities and interpretations [that] inhabit the gap between designing and using”. To practise in this way, one needs to be “aware of, and indeed use, the limitations of architectural practice”. By working experimentally and with an event-oriented agenda beyond the production of functional spaces, the Building Movements projects offered carefully tuned feedback into the Design Hub. These instances of feedback did not conform to conventional architectural practice, and were inspired by use and occupation of the building’s environment. Inserting our installations amplified the environmental qualities already present and resulted in a destabilisation of the larger event of which the building was part.

related practitioners of architectural judo

The techniques of architectural judo can also be seen as operating within existing architectural practices. For example, issues of rhythm and the reconfiguring of forces occur in the practice of Reiser + Umemoto. Although their work is predominantly unbuilt, it can be understood in terms of its concern for architectural issues of composition, form, structure and ornament. Reiser + Umemoto take up these concerns through a practice that operates with ideas of movement, agility and poise – body-like concerns of stance – and the bringing together of dynamic energies in their generation of architectural form. Sanford Kwinter’s foreword to their monograph Atlas of Novel Tectonics, ‘The Judo of Cold Combustion’, makes an explicit reference to judo in its title, although it only implicitly addresses the ideas of judo in the essay that follows.

Another example is the work of Rem Koolhaas/OMA, described by Anna Klingmann as using “a kind of judo technique of architectural intervention, in which he takes commercial and cultural typologies and expands them into dynamic public-event spaces”. According to Klingmann, Koolhaas proceeds by analysing the commercial interests at work and subverts “these forces in order to put forth an implicit critique”. Klingmann argues that the strength of Koolhaas’ practice “derives from this very suspension between critical avant-garde architecture and commercial architecture. Flirting with each side, Koolhaas destabilized the status quo between both”. These ideas of working among a dynamic and complex array of forces, and calling into question the status quo could equally be used to describe the judo-like techniques with which the Building Movements installations approached the RMIT Design Hub.

While not described in terms of judo, the ‘relational architecture’ of Rafael Lozano-Hemmer is also of relevance here. Lozano-Hemmer makes participatory works for both galleries and public spaces. Works of relational architecture are “large-scale interactive installations that create opportunities for buildings to decline their established roles in their particular social performance”. These works foreground relations between the public and the spaces of the work, allowing the interactions of the public to reshape a shared environment. Techniques of dematerialisation and amplification are
frequently at work, as environments are dissolved and the action of participants are exaggerated on an urban scale.

Architectural judo is not only about the techniques of an architectural practitioner. It is also suggestive of a particular way in which bodies move through spaces. In this way architectural judo connects back to Arakawa and Gins and their concept of the ‘architectural body’. If the architectural body is a way of understanding an interconnected co-formation of person and environment, architectural judo suggests ways of manoeuvring within this co-formation. The work of Arakawa and Gins emphasises the relations between humans, objects and spaces as active and open to disruption. They posit that environments can be crafted to provoke new ways of relating and thereby the capacities of human-ness can be expanded. Architectural judo suggests techniques for playfully moving within the relations of the architectural body to actively shape the ongoing event of formation.

Fig. 3.16 Rafael Lozano-Hemmer, *Solar Equation - Relational Architecture 16* (2010). Federation Square, The Light in Winter Festival, Melbourne, Australia. Photo by: Julie Renouf.
techniques for a building-event

Scott’s and my collaboration with the building was extended through the writing of *Writing Writing Movements Tentatively*, a process which led to the articulation of architectural judo as a way of making sense of the installation works of *Building Movements*. The cut-up texts drew of the techniques of Brion Gysin and raised a cascade of questions to test and re-examine the *Building Movements* projects and their co-forming relationship with the surrounding context. Our projects were based on explorations of spatial ambiguity and the ways in which this ambiguity and complexity brought lived activities into relation with the architectural spaces of the Design Hub building. Both the cut-up texts and our installation projects were unconstrained by conventions, which imbued them with the freedom to assert that these relations are not relative to our surroundings, but constitute it. Our works took the form of play, understood in terms of Brian Massumi’s analysis of playfighting, but here extended to a particular approach to architectural practice, where our ideas, installations and the building all participated in improvisational processes of co-formation as an event. This changed the way we thought of the building. As another piece of cut-up writing phrased it: *The building? This wasn’t physical. These functional processes of the pushing off-balance of the concrete-building, mostly invisible, were points of steel-glass framework.* The projects and writings we constructed reconceptualised the building as one participant of a larger event, which was amplified and destabilised to a point that it was ‘headed off-balance’.

Architectural judo encapsulates a set of ‘techniques of relation’ – amplification, leverage, discordant feedback, destabilisation – with which creative practices can operate in the midst of the relational complexity of an event or the atmosphere of a forming situation. In the previous chapter I came to understand the RMIT Design Hub building as an event always in formation through Henri Lefebvre’s rhythmanalysis. Here Erin Manning and Brian Massumi’s notion of ‘techniques of relation’ are used to articulate the ways a practice of architectural judo can catalyse and modulate such events. These techniques take thresholding into action. Through the analogy of playfighting, architectural judo includes two logics of action simultaneously and in suspension, resulting in works that are like
architecture, but excessively animated. Extending Brian Massumi’s use of ‘esqueness’ in his discussion of gesture and playfighting, they are buildingesque. This buildingesqueness can also be seen at work in other existing art and design practices, including Arakawa and Gins, Lebbeus Woods, Reiser + Umemoto, Rem Koolhaas/OMA and Rafael Lozano-Hemmer.

By articulating ways to create moments of excess from within the thick of creative and institutional tensions, architectural judo can be seen as a practice of immanent critique. These became important concepts for making sense of how the Building Movements projects related to the Design Hub. The closely related ideas of misattunement and the ‘minor’ as modes of working from within the complexity of the context informed Aj6 – a subsequent project that took the techniques of architectural judo into a more deliberate and sustained engagement, and which is discussed in the following chapter.
3.3

**AJ6: moving with architectural judo in intentional action**

This chapter describes how a design competition for a meeting pavilion provided an opportunity to re-engage with the RMIT Design Hub building. The project, titled AJ6, made deliberate use of rhythmic interactions and the techniques of architectural judo which were implicit in the *Building Movements* installations and became articulated through *Writing Writing Movements Tentatively*.

Rhythmic misattunement was developed as a productive strategy for moving with rhythms within the tensions present in complex or contradictory collections of forces, in this case the demands of the competition brief and the building’s interior environment. AJ6 was developed through practices of deliberate misattunement, resulting in a design proposition that responded to and subverted the parameters of the competition brief. Returning to Sylvia Lavin’s notion of the kiss to understand the relationship between architecture and interiors, architectural judo is articulated as a specific approach to interior design that works to recompose and rephrase the architectural environment, which has parallels with a ‘minor’ mode of practice, as articulated by Simon O'Sullivan.
a competition

A year after initiating the Writing Writing Movements Tentatively writing project with Scott Andrew Elliott, I was spending less time with the RMIT Design Hub building, but then an opportunity to re-engage was presented in the form of a design competition. An email was sent out calling “for expressions of interest to design and construct two freestanding, internal Meeting Pavilions (MeetPavs), to be located within RMIT buildings”\(^1\) with the intended site being the Design Hub. The pavilions needed to enclose 16m\(^2\) of usable floor space and accommodate seating for 8–10 people. Given the open-plan spaces of the Design Hub and the use of this space for meetings, acoustic privacy was highlighted as an important consideration.

I invited Freya Robinson\(^2\) to work with me on a proposal for this competition, as an opportunity to continue the project-based conversation with the Design Hub that we had begun through the Building Movements exhibition. The competition was to be in two stages, a first-round entry followed by a shortlisting process, then further development of these shortlisted projects leading to presentations to a design jury. At the end of this process, two designs would be selected to go into construction. With some thought regarding the

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\(^1\) Email attachment “d___ Lab. MeetPav - Competition Call” issued 9 April 2015.

\(^2\) Freya was a recent graduate of the RMIT Interior Design program who had worked on the Building Movements exhibition, and whose honours project I had supervised.
amount of time we wanted to commit to the project, and reluctance to get too caught up in issues of construction, our goal was to produce a proposal that was provocative and compelling enough to be taken somewhat seriously, but which would result in us coming third, thus avoiding the complexities of construction. This gave us the freedom to think of our design as a provocation or subversion of the competition brief. As revealed through the Building Movements projects, the Design Hub is not always well disposed towards the sorts of activities that take place within it. Frictions exist. The fact that a competition was being run to provide a series of private meeting spaces in what is an unapologetically open-plan building only reinforced this feeling. Our project aimed to take advantage of this situation and offer a project that helped solve the problem, but with a slightly knowing sense of humour.\

With this somewhat mischievous attitude explicitly established, Freya and I began work on our entry. Having discarded as impractical\(^3\) and awkward an initial idea of an inflatable meeting space based on a refinement of the Bhubble (Building Movements #4) project, we began to experiment with ideas of using textiles to create a sense of enclosure. To move things further along, I suggested to Freya that we title the project AJ6 – an abbreviation of ‘architectural judo #6’ – as it was retrospectively understood as the sixth project in which the techniques of architectural judo were at play, and besides, all good competition entries need a title. We explicitly took up the thinking behind the practice of architectural judo that I had begun developing in Writing Writing Movements Tentatively. Working with these ideas enabled us to conceive of our project as a character entering into a dynamic relationship with the Design Hub building. Our interpretation of ‘meeting’ was expanded to include not only the gathering together of building users, but also the coming together of our project, the building and its users. As a propositional structure, AJ6 would probe and provoke the Design Hub, picking up on its environmental effects, and amplifying and discordantly feeding these back so that the event of this meeting became unsettled. We looked more closely at the martial arts practice of judo and its highly choreographed sequences of movement, and carried this into the development of our proposal’s form through ideas of scripting space and our own imaginary choreographies.

\(^3\) Extending the project’s interests in Japanese culture, we looked to and enjoyed the ‘uneuseless’ inventions of Chindogu as conceived by Kenji Kawakami: “The creation of Chindogu is fundamentally a problem-solving activity. Humor is simply the by-product of finding an elaborate or unconventional solution to a problem.” Kawakami (1995) p.9.

\(^4\) Using a pneumatic structure would create pragmatic issues such as acoustic separation, pinning up drawings or prints, and structural difficulties for mounting equipment such as lighting or data projectors.
a moiré emerges

We saw the relentless grids of the Design Hub’s interior and exterior surfaces as imposing a measured metric on movement, and worked with Henri Lefebvre’s techniques of rhythmanalysis to introduce a more fluid dynamic to proceedings. We worked with rhythmanalysis to understand the movements of bodies in relation to the building, and moments of movement implicit in the building itself – flows of air, energy, alignments and misalignments. Freya and I also considered bodies in movement compared with bodies sitting still. How might our proposal work to shift the attention of someone as they moved past, moved into or worked within our meeting pavilion? How could AJ6 participate in a choreographic shaping of space and activity? Following the building’s disorienting optical qualities, we proposed a moiré effect as an organising principle, an explicit reference to the Building Movements #2 installation, where layers of perforated metal were deployed to create a dazzling effect. We resolved to use the moiré as both a visual effect brought to life through motion and a metaphor for meeting, where novelty emerged in the gathering together of similar but not quite identical points of view.

In AJ6 we proposed that this moiré effect would be created by a two-layered, gridded textile in a patterning that was sympathetic to the larger building, but made a material substitution with the potential to cause some antagonism – the textile’s soft, drapey, open, formless and lightweight qualities put it in direct tension with the Design Hub’s rigidly clutched sense of order. Moiré effects are emergent conditions, dependent on dynamic relations between materials and people on the move. The moiré mediates between notions of friction and fluidity. In the superimposition of two gridded surfaces, slightly

Fig. 3.19 Digital sketches of moiré effect created by distorting and overlaying gridded surfaces.
Fig. 3.20 AJ6 interior. Competition entry image with Freya Robinson and Nick Rebstadt. The word ‘judo’ is rendered in Katakana.
out of alignment, a rippling third figure emerges, unsettling a sense of depth perception as one moves by. This disorienting effect also suggested the potential for the moiré to produce a dynamic sense of privacy within the meeting space as other building users moved past.

We also used the moiré as a metaphor for conversation and collaboration, the very activities that the pavilion was intended to house. New ideas come into being from the gathering together of creative practitioners working towards a common goal, much like the figure of moiré emerges in the bringing together of misaligned perforated surfaces. Moiré effects and collaborative working both operate through a merging of boundaries. In this they share qualities with the new notions of threshold created through Sylvia Lavin’s ‘kiss’. As quoted in chapter 2.1 both the moiré and kiss are “a performance of temporary singularities, a union of bedazzling convergence and identification … [that] confounds the division between two bodies, temporarily creating new definitions of threshold that operate … [counter to] delimitation and boundary”.\(^5\) The moiré differs from the kiss, however. Lavin’s ‘kiss’ describes the pressed-up closeness of image projection on architectural surface. The moiré is reliant on relational distance – it is an interstitial space that is visually collapsed, causing a disorienting flattening of depth perception as one moves by.

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With layers of lightweight textile creating moiré effects and a porous sense of enclosure, our next issue regarded the form of the overall proposal. This was generated by again ‘listening’ to the building through rhythmanalysis. The grids of structure and surface patterning provided our reference, as we made simple scale models of the repeated steel frames that encase the Design Hub’s interior glazing. We arrayed seven of these frames and then torqued each of them such that they came into a new spatial configuration that could begin to accommodate the brief for a meeting pavilion. Giving these grids a gentle nudge resulted in a form based on visual rhythms of the building, but somehow at odds with it. This gave a sense of organisation and structure to the project, and the plan form suggested a radial relation to the existing building grid. Freya and I submitted our proposal and waited. When we heard that AJ6 was successful in being invited into the second stage of the competition, we expanded our team to include two recent graduates from the Interior Design program, Vivienne La and Nick Rebstadt, as well as Dan Griffin from Marshall Day Acoustics as an acoustics consultant.

Fig. 3.22 Detail of textile prototype. Video still from competition entry with Vivienne La and Freya Robinson. Facing page: fig. 3.23 Plan of AJ6 showing relationship of distorted frames to the layered glazing of the Design Hub façade.
KEY
1 TWO LAYERS OF MESH TEXTILE
2 ELECTROMAGNETIC SHIELDING TEXTILE
3 ALUMINIUM FRAME
4 SPEAKER ARRAY AFFIXED TO FRAME
5 ACOUSTIC/BLACK-OUT CURTAIN
6 ACOUSTIC REFLECTOR OVERHEAD
7 PROJECTOR MOUNT OVERHEAD
8 FOLDED STEEL BASE PLATES WITH MOUNTING SLEEVES

PLAN 1:20  FLOOR AREA = 18.5M²
misattunement: redirecting rhythm

The techniques of architectural judo were used to disrupt and heighten the rhythms at play between the Design Hub and our project. We aimed for AJ6 to disrupt the building’s gridded and linear environments – a destabilisation that would take the amplification of rhythmic forces already at play and move them into new registers of action. I understand these disruptions of rhythmic interaction as occurring through deliberate ‘misattunement’ – a term I adapt and borrow from Pia Ednie-Brown.

Rhythmic misattunement differs from simply in-phase or out-of-phase alignments of rhythm. Tuned alignments of rhythms – where the resonant feedback amplifies effect – could only take the project so far: the double-bounce of a trampolinist exaggerates the height to which they jump, but without transforming the action of jumping itself. Likewise, the interjection of completely untuned and unrelated impulses would be so far out of phase that creating traction with the building’s existing environments would be impossible.

Instead, rhythmic misattunement loops provocatively out of phase. It involves working within the rhythms of an environment, “but with enough mismatch for [these rhythms] to become more covertly coercive, or more actively redirecting or bending the flow of activity without entirely departing from it”.

Rhythmic misattunement offers a modality of engagement related to Lefebvre’s practice of rhythmanalysis, introduced at the end of chapter 3.1, where I have noted that Lefebvre acknowledges that rhythmic interactions can be mutually enhancing, or eurhythmic, but also that moments of friction occur when relations are not in sync. The complexity of interrelations can be polyrhythmic or have a negative connotation in the case of what he describes as arrhythmic interactions. Rhythmic misattunement suggests there is also potential for new value to

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emerge from actions that might appear arrhythmic but are in fact carefully calibrated through practice, enabling them to work towards specific ends. AJ6 could be understood as a deliberately designed character that would come into misattuned relation with the Design Hub’s disposition.

Based on our earlier experiences and explorations, such as studying and working in the building and making the installations of Building Movements, Freya and I already had a sense of how designing with this sense of deliberate misattunement could play out with the building’s environment. To work with rhythms in this misattuned manner offered the potential to alter the course of movement towards unexpected ends, all while retaining the familiar echo of habitual expectation. In this way Lefebvre’s definition of rhythm as an “interaction between a place, a time and an expenditure of energy”\(^9\) can be understood as at the crux of this practice. For Erin Manning, rhythm is also central to an eventful understanding of experience: “To posit rhythm as extra or external to experience is to misunderstand how rhythms make up events. Rhythm gives affective tonality to experience, making experience this and not that.”\(^10\)

The relational techniques of architectural judo work with rhythm to reshape experience by ‘getting inside’ action and modulating or catalysing activity in ways that recast the situation towards new ends. And working with rhythm is not the same as a measured metric imposed on movement. As Manning describes, we do not move to a rhythm, “we move rhythm … the very becoming of the movement is rhythmic. Rhythm takes two. Moving the relation is a rhythmic encounter with a shifting interval”\(^11\). The inextricable connection between rhythm and movement situates the misattuned moving of movement as another instance of a mutually inclusive logic. Practising with rhythmic misattunement is a dynamic of simultaneously both/and: Both sufficiently in sync to catch hold of action, and just off-beat enough to push this action towards new ends. By operating in ways that oscillate both in and out of phase, rhythmic misattunement catches hold of the always-on-the-move nature of rhythm. Thinking through these ideas helped us begin to articulate how AJ6 could use the techniques of architectural judo to interject new movements into the Design Hub, and the sorts of rhythmic relations that might result in an unsettling of the building’s apparently rigid certainty.

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\(^9\)Ibid., p. 25.


\(^11\)Ibid., pp. 34–35.
renegotiating the edges of architecture and interior design

Our competition entry looked like a meeting space as asked for in the brief, but in developing the project we concentrated on experiential qualities not easily reducible to visual representation – acoustic experience, movement, optical effects, duration and forms of wireless electronic communication. Following Brian Massumi’s discussion of playfighting in the previous chapter, AJ6 could also be described as ‘buildingesque’ – it was like a building “but with a little something different, a little something more”. These qualities of ‘esque-ness’ came about through our design approach’s consideration of the dynamics of activity and interaction – formation through scripting and choreography – rather than object-focused concerns of sculptural form. AJ6 worked explicitly with the environmental conditions of the Design Hub, taking the surrounding material configurations, movements and activities and modulating them into new imagined formations. This differentiated our approach from a more conventional architectural practice, which might have aimed to deliver an entirely new architectural language into the building’s environment, as was indeed the case with many of the other entries. If practices of architecture are concerned with the production of semi-autonomous systems, then practising with architectural judo offers an approach that inlets these systems towards new ends, rather than proposing a new, independent system. AJ6 took the language of the Design Hub and ‘rephrased’ it, producing something that was almost of the architecture, but with a strangeness or excessiveness that distinguished it from, and pointed back to, the quirks of its surrounding environment.


13 There are strong parallels here with what the artist Robert Irwin describes as ‘site conditioned’ or ‘site determined’ works of art. In these instances “the sculptural response draws all of its cues (reasons for being) from its surroundings. This requires the process to begin with an intimate, hands-on reading of the site. This means sitting, watching, and walking through the site, the surrounding areas … [and attending to] the site’s relation to applied and implied schemes of organization and systems of order, relation, architecture, uses, distances, sense of scale.” See Irwin & Weschler (1985), p. 27.
Fig. 3.24 Section through AJ6 (top) and 'choreographing attention' diagram with Nick Rebstadt, showing ways that the project could influence and participate in the activity of meeting.
This approach could be accounted for through our identification as interior designers rather than architects, and as such we were concerned with a form of cultural production that required ‘becoming a stranger’ within a dominant culture.\(^\text{14}\) Like Sylvia Lavin, we characterised interiors as having a quasi-autonomous relationship with architecture. Even if the interior “relies on and is even often isomorphic with architecture, [it] remains distinct from architecture’s identification with building”.\(^\text{15}\) This quasi-autonomy frees the interior for design consideration as differentiated from the architecture and, coupled with the techniques of architectural judo, provides it with the power to ‘push back’ against the semi-autonomous systems of architecture. The value in this differentiation is that the interior is, in Lavin’s words, freed to “seek out provisionality, changefulness, and to provide architecture with a site of experimentation”.\(^\text{16}\) Approaching design with this interior orientation also provided the opportunity to think of various materials and forces as being drawn into “sufficient proximity to one another to amplify each other’s effects”\(^\text{17}\) – as suggested in the theoretical elaboration of architectural judo in the previous chapter. By amplifying material and spatial relations, AJ6 aimed to increase the complexity of the context. It created frictions, stirred up turbulence and drew the apparently static building into an unfolding event where relations were rephrased such that new movements could begin to stir from within.

This working from within to rephrase or reconfigure an existing relational system is suggestive of an explicitly ‘minor’ relationship between our project and the Design Hub. Simon O’Sullivan describes Deleuze and Guattari’s notion of the minor as something that “does not occur ‘elsewhere’ or ‘apart from’ a dominant value system, “but on the contrary operates from within, using the same elements as it were, but in a different manner”.\(^\text{18}\) In taking up and reworking environmental qualities, AJ6, and the techniques of architectural judo that we used to develop it, operated in exactly this way. AJ6 can be seen as resulting from a practice of ‘becoming minor’ in the sense of producing movement from ‘within’ the major\(^\text{20}\) or dominant culture – in this case architecture. As I have stated in the previous chapter, architectural judo is a thresholding in action – that is to say, it is a thresholding of practice. It oscillates across the quasi-autonomous and mutually conditioning relationships between architecture

\(^{14}\) O’Sullivan (2005), introductory section, para 1.

\(^{15}\) Lavin (2011), p. 64.

\(^{16}\) Ibid.

\(^{17}\) Ibid.


\(^{19}\) Ibid.

\(^{20}\) Ibid.
and interior design. In this ‘both–and’ movement, architectural environments are drawn into playful engagement through the levity of architectural judo, leading to events that are excessively energised and hint at trajectories for further exploration. Architectural judo can then be understood as a specific type of interior design practice that works with an environment’s existing systems of relations, recomposing them such that their underlying instabilities are heightened and new possibilities are opened up.

We successfully managed to not win the competition, but at the time of writing work on AJ6 continues. The competition jury was sufficiently intrigued by our proposal to award us further funding to develop the project towards construction. We are currently prototyping woven textile designs and systems in collaboration with Amy Carr-Bottomley from the RMIT School of Fashion and Textiles, and, if these developments suggest a viable strategy for construction, AJ6 might get built after all.

Fig. 3.25 Screen-printed textile prototypes for AJ6. These confuse depth perception and create dynamic effects as one walks past.
a building as a friendly foe

Through the performative *Lift Lecture* and the installation projects of *Building Movements*, and Scott Andrew Elliott’s and my collaborative writing project *Writing Writing Movements Tentatively*, the competition entry *AJ6* and a sustained everyday engagement, I have developed a close relationship with the RMIT Design Hub building. In this relationship I have come to understand this particular building (and buildings more generally) as possessing dispositional qualities, which make themselves felt in the unfolding events in which they participate. The Design Hub has a rigid and forceful personality and is not a structure which compromises readily. Practising creatively with and within this building is for me to work among forces of friction that result from the misattunements between our respective dispositions. As my various creative projects sought to engage with the building, its rigid disposition pushed back into the shaping of the projects. As I noted at the end of chapter 3.1, I think of it as a friendly foe.

Our lives and actions enter into a dialogue with these lively building-events, and through techniques such as Lefebvre’s rhythmanalysis it is possible to attune to the subtle ways in which our environments and actions are mutually conditioned. Rhythmanalysis allows us to understand the dynamics and closely meshed relations among the forces, energies and movements at play in the forming situation of a creative project or event. With this understanding of complexity, the various techniques of architectural judo – as a kind of thresholding of action – offer ways of stepping into and moving-with architectural environments, but in ways that bring aspects of the environment into vibrantly felt expression. Resulting projects feed back environmental qualities into their surrounding contexts, ‘speaking back’ to their environments through an expanded idea of conversation. Amplification, the light touch of leverage, a deliberate misattunement to rhythms, all provide ways to shift the architectural event slightly
off-balance, into a state of excess and possibility. As articulated above with reference to Sylvia Lavin and Simon O’Sullivan, an interior-oriented approach that renegotiates the edges of architectural design practices opens up new possibilities for architecture, understood not as ‘this is there’ but propositionally as a question of “what’s going on?”

Rhythmanalysis and the buildingesque qualities of architectural judo operate with Massumi’s logic of mutual inclusion, where paradoxes are affirmed through action, rather than rationally resolved. They are techniques for moving within the complexity of a forming situation, keeping its complexity open, but with the potential of playfully subverting the structure of the situation from inside. As such, these techniques can be understood as facilitating a practice of immanent critique – raising questions of systemic logic from within these very same systems that operates in a ‘minor’ mode.

If these projects have revealed a building’s disposition as highly significant in the shaping of events, what happens when we increase the scale of seemingly inert collectives to that of the city? Issues of choreography and the scripting of space and attention were at play in another collaborative project that I was working on in parallel, an audio-based public artwork in Christchurch, New Zealand, called With Fluidity. The final chapter of project work describes the processes of making this work, leading to an expanded understanding of event-building and a discussion of ‘minor planning’.

The choreographic trajectories of architectural judo, *Aj6* and the slippery optical effects of the moiré begin to articulate how a practice of fluidity can emerge from the frictions present in the RMIT Design Hub building. This trajectory is developed and affirmed through a collaborative project-event for public space that involves a loose choreography of listening, walking and imagining. This extends my approach to interior design practice beyond the confines of interiors as dependent on and ‘inside’ architecture. Fluidity extrapolates the event design techniques of architectural judo into the public realm.

**4.0 FLUIDITY**
The projects discussed in the previous three chapters have shaped an understanding of buildings as dynamic event-entities that we relate to through rhythm, where my particular approach to interior design allows creative works to enter into a conversation with the semi-autonomous systems of architecture. How might these ideas and approaches change the way we think about cities? Does an interior-oriented way of thinking about cities lead to different ways of making creative projects for urban contexts? How might this play out?

This final chapter of project work brings together conversational ideas of listening and speaking through rhythms of an other in the project *With Fluidity*, a public artwork in Christchurch, New Zealand, that I made with Susie Pratt. This project takes ideas of listening and speaking quite literally, adapting Janet Cardiff’s framework of the audio walk to put environmental recordings, manipulated sounds and speaking voices into flexible choreographic relation with the rhythms of people moving through the city. Thresholding is understood through an expanded idea of conversation developed with reference to Jane Bennett’s *Vibrant Matter*.

I proposed the idea of ‘confluence’ as a key organising principle for the project, which emerged from a mutually inclusive model of river and city as dynamic and always in co-formation, in much the same way as bodies and buildings have been characterised in the preceding chapters. The techniques of amplification, leverage and discordant feedback that characterise architectural judo were drawn upon in producing the work. As an audio walk that asks participants to reimagine the city, *With Fluidity* was thought of as a kind of ‘minor planning’ aligned with the work and thinking of Paul Carter.
Fig. 4.1 A bridge railing reflected and disrupted by the river surface.
a city by the river

Architecture’s instabilities and interdependencies can be readily seen in my home city of Christchurch, New Zealand. The city has undergone a heightened state of continuous change in the wake of a series of large earthquakes in 2010 and 2011, as well as several thousand aftershocks which, though greatly reduced by 2015, continued to agitate city and residents alike. These earthquakes have made the eventful nature of the city explicit and it has been promoted as both a tourist destination and a host for a series of Festivals of Transitional Architecture and other citizen-initiated events. Historically the central city was founded on the banks of the Ōtākaro/Avon River and the river is closely bound up with the city’s identity, providing a sense of continuity while the city is rethought and rebuilt. However, it is also the close integration of city and river that caused buildings to be undermined. The earthquakes agitated the ground, causing liquefaction whereby the city’s foundations became liquid and unstable.

This sense of close integration between city and river, especially as foregrounded by the earthquakes, is reinforced in the introduction to the book Once in a Lifetime: City-building after Disaster in Christchurch: “There is no clear dividing line between the disaster and the subsequent plans, actions and developments. The city’s character is saturated with the disaster; the earthquake remains an inescapable daily presence and topic of conversation.” The interrelationships between diverse political, social, historical and economic considerations have led to a post quake tangle in which every issue has become thornier.

The closely knotted complexity of this context has led to an official response that evades ambiguity and contingency. Instead, the city is now being rebuilt according to a tightly scripted urban masterplan that defines a series of neatly delineated ‘precincts’ of activity; for retail, health, performing arts, justice and emergency services, innovation and so on. This plan, prepared by the Christchurch Earthquake Recovery Agency (CERA) and Christchurch Central Development Unit (CCDU), conceptualises the city as functional, its activities predictable and able to be contained. Suggesting that urban development and future activity can be partitioned in this way clutches tightly to the idea that stability and separation are

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4 It forms one half of the Christchurch City Council logo, its stylised form winding its way underneath a silhouette of the iconic, but now severely damaged, Christchurch Cathedral.

5 Bennett, Dann, Johnson, & Reynolds (2014), p. 22.

6 Ibid., p. 21.

7 [https://ccdu.govt.nz/the-plan](https://ccdu.govt.nz/the-plan) (last accessed 11 April 2016.)
preferable, and indeed achievable. In the immediate aftermath of two large earthquakes and several thousand aftershocks, this seemed to me a shocking assertion.⁸

To respond to this situation, Susie Pratt⁹ and I proposed the audio walk and artists’ book project *With Fluidity*.¹⁰ We wanted to explore how a relational approach that acknowledged and intimately shared the close connections between river and city could focus attention on post-quake entanglements of politics, social practice, histories and urban planning. Rather than the deterministic approach adopted by the CCDU, our project took the Ōtākaro/Avon River as a model for alternative ways of thinking about and inhabiting Christchurch city. We embraced ideas of fluidity and its attendant concerns of temporality, contingency and turbulence, drawing on and extending the techniques at play in my projects in the RMIT Design Hub building. This allowed us an opportunity to test a lightweight, playful and open approach to urban design and consultation processes, and to practise with architectural judo as a set of techniques for working within complex environmental relations beyond the visual and spatial qualities of a very particular architectural context. The audio composition we produced guided listeners on a route through the city, treading a fine line between the edge of the river and the reconstruction taking place in the city’s central business district. We designed the audio in such way that choreographic space and ambiguity were left, an invitation for participants to formulate their own thoughts and responses to the situation at hand. In these ways, our approach and techniques of making shared an emerging concern with the ‘urban interior’ – where interior design strategies of relational closeness inform approaches to explorations, interventions and occupations of urban public spaces.¹¹

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⁸ A more detailed discussion of the city context is provided by Garrie (2017), where she also gives a thorough and insightful reading of our project.

⁹ A friend, collaborator and fellow PhD by practice candidate, in her case at University of New South Wales, Sydney. We had previously worked together on a touring group show and publication project in 2005–06.

¹⁰ The audio of the project is available to listen as you read at: http://physicsroom.org.nz/events/with-fluidity (last accessed 14 April 2016.)

¹¹ For examples of the diversity of work in this area see Hinkel (Ed.) (2011) and Attiwill, Crespi et. al. (Eds.) (2015)
what turns is the city making?

In October of 2014 Susie and I began conversations about undertaking a residency project in Christchurch. Our original proposal, for a residency at North Projects, was titled *Atmospheric Attunements* and intended to deal with several questions (which in hindsight are somewhat vague): For example, ‘How can we make sense of the complexities and immensities that exist in the background of individual experience? What signals can we attune ourselves to in order to make sense of the forces that inform, influence and affect our experience of the world?’ In the process of putting the application together, we sought a letter of support from The Physics Room gallery director, Melanie Oliver. On hearing that our North Projects proposal had been unsuccessful, Melanie invited us to clarify and refine the proposal as an off-site project that would be supported by The Physics Room. A series of further conversations between Susie and me, and the two of us with Melanie led to *Field Guiding*, a proposal for an audio walk that would lead listeners along a route in the city. Melanie encouraged us to explore the edge of the CBD along the Ōtākaro/Avon River and we began developing the intent for the project around the concept of confluence – a term used to describe the point where two flows join together into a single stream. Rather than the possibility of separation and isolation, we adopted the idea of confluence as emblematic of the both–and logic of mutual inclusion – a way of working with both this stream and that together, both the city and the river simultaneously.

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12 A then recently established Artists’ Run Initiative founded by Grace Ryder, Sophie Davis and Sophie Bannan. See: http://northprojects.co.nz/ (last accessed 25 July 2016.)

13 Based on the article by Katleen Stewart of the same name, and as quoted previously in chapter 2.2.

14 A Creative New Zealand funded public gallery, formerly housed in the old physics building of the University of Canterbury’s original site in the central city.

15 This is Janet Cardiff’s term to describe a genre of works she has made including *The Missing Voice*, which is discussed below.

16 A turbulent process of coming together where things become mixed in such a way that they can’t then be separated.

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Fig. 4.2 Images of Christchurch city in 2015, four years after the major earthquakes. The Christchurch Cathedral (right) is badly damaged, having lost its entire spire and tower.
As a preliminary statement for *Field Guiding* described it:

The project takes the Ōtākaro/Avon River as a starting point to discuss ways in which a city is shaped by the imaginations of its occupants. The notion of confluence will be used to explore not only historical ways of living and seeing that have shaped the river, but also the influence of future imaginaries of the value of the river. Confluence is used not only in the conventional sense – where two flows of water join and combine in a linear manner – but as the turbulent flowing together of distances and times.¹⁷

This intermixing of temporal and spatial relations was thought about through the river as a conduit that connects to upstream parts of the city, a pathway for environmental flows and a repository for stories. As a consequence of the earthquakes, the river is now subject to future speculations, new stories of how it might find its place in Christchurch.

With Susie in Sydney, Melanie in Christchurch and myself in Melbourne, text and conversation became the basis of exchange in these preliminary stages. Text and conversation would continue as the primary way of understanding the collaboration between Susie and me, and the relations between us, the city and the river. It was through these discussions and textual workings that the project found itself a new name … *With Fluidity*. This came from some etymological digging and a pinch of poetic licence. The central concept of confluence – literally ‘to flow together’ – has Latin roots of *con* and *fluere*.¹⁸ The new title came about by re-rendering *con* as ‘with’ (rather than ‘together’) and moving *fluere* from ‘flow’ to ‘fluidity’. This title fit the project’s interest in a particular quality of thought and movement and provided an imperative for how the project might move forward – thinking of the project (and in turn the spaces of the city and river) as constructing a sort of loose choreography, an event that could never be entirely scripted but still with a definite trajectory.

Having grown up in Christchurch I had a degree of familiarity with its urban spaces and structures, but due to the pace of change in the central city and Susie’s limited experiences of the city¹⁹ there was a limit to how much we could develop the project in advance. We decided it was important for the project to evolve through field research in Christchurch, but in the meantime we could hone our conceptual approach.

¹⁷ Personal correspondence with Susie Pratt and Melanie Oliver, 18 June 2015.


¹⁹ Susie’s only previous visit to Christchurch was in 2006 when we exhibited together at the artist-run space High Street Project.
With Fluidity became focused on the reciprocal actions of river and city, the ways they choreograph each other and in turn choreograph the movements of Christchurch’s residents and visitors. The audio work we produced mixed an additional choreographic stream into these flows, gently directing listeners’ movements and imaginations. We brought these thoughts, feelings and observations into refining our intent for the project. The title acted as a writing constraint, a point the text needed to reach. But first it needed to declare the work’s relation to city, river, narrative, and ask a series of questions intended to provoke a listener-reader’s imagination as they moved through the work:

The artist Roni Horn has also worked closely with the stories associated with a particular river. In this project Horn takes stories of River Thames in London, particularly relating to the river’s dark past. The work consists as a series of photographs on the river’s surface dotted with tiny numbers. These tiny numbers act as footnotes, referring to a block of text below each image. A closer reading reveals strange and uncomfortable intimacies with the River Thames, as Horn ruminates on the sensuous blackness of its water, and the river as site of numerous drownings and suicides. The project also exists as artist book, and a spoken monologue. See https://www.youtube.com/watch?v=flkvoe7s1NVg
Ōtākaro/Avon River is a confluence for stories – anecdotes, personal histories and historic accounts. Like the river, narratives have shaped the city, structuring, collapsing and remaking it. Across Christchurch signs are being posted at different spatial and temporal intersections, marking future directions for the city. What are the stories being told now? How is the city being choreographed? What turns is the city making? As the city and the river come together, choreographing each other, they bend, soften, and contort, creating narrative thresholds that function not through separation, but with fluidity.

Susie and I discussed how the audio walk, a framework for creative practice developed and utilised by Janet Cardiff, provided clues for how we could work towards our conceptual interests. Cardiff has used the audio-walk framework for many projects, including *The Missing Voice (Case Study B)*, which begins in a library in the London suburb of Whitechapel and uses spoken narrative, directives and binaural recordings to create a layer of seemingly fictitious experience for listeners as they are guided through the city. In walking along with *The Missing Voice* one experiences a melding together of environmental sounds both lived and prerecorded – a strange flattening of the lived present and prerecorded past – and one’s own movements and imagination with the movements and stories of Cardiff’s narration. The result is disorienting, displacing, but with an overwhelming sense of care and craftiness in the unfolding of both the story and the listener’s movement. Listening back to this work, we observed the economical use of instruction and the narrative urgency of Cardiff’s project. Her use of binaural recordings of environmental sounds created a spatial experience on the edge between lived reality and imagination. These became important techniques for us, and Susie and I experimented with making our own recordings in Sydney and Melbourne respectively, prior to travelling to Christchurch to make the project.

20 Cover text for the artists’ book Susie and I produced with Alice Bush, discussed in the section Vibrant Conversations.

21 Susie and I were both familiar with Cardiff’s work, having both seen her exhibition with George Bures-Miller at the Fruitmarket Gallery for the 2008 Edinburgh International Festival.

22 Another project I became aware of after work on *With Fluidity* had finished was *Words Drawn In Water* from 2005, where Cardiff works with “water as a metaphor for the fluidity of time and for connecting political ideas and people.” See: www.cardiffmiller.com/artworks/walks/wordsdrawn.html (last accessed 13 May 2016.)

**tuning in: listening to the city**

On arriving in Christchurch and equipped with backpacks full of microphones, we began by trying to get a river’s-eye (and ear) understanding of the city. Renting two kayaks, we paddled upstream and down, under bridges, past willow trees, a hospital, ducks and construction sites. Getting into the kayaks was a precarious business, but with bodies and recording equipment negotiated aboard, we acclimatised to a new environment and new ways of moving. Once underway, so close to the river we could trail our fingers in it, we watched swirls of water created by our paddles, the wakes of our kayaks trailing behind paddling ducks and reflections of bridges shimmering in the rippling river. Our senses of hearing were also enhanced. We had wedged a pair of directional microphones in front of the seat of each kayak. My vessel had an additional contact microphone attached inside the hull, just the width of its fibreglass shell away from the river below. Wearing headphones to monitor these inputs, environmental sounds were amplified as we paddled and drifted along. Events came into our aural fields before they came into sight, even the tiniest sounds were made vividly present and the acoustic properties of paddling under bridges became dramatically apparent.

Gernot Böhme describes listening as habitually object-oriented. We hear things that produce sounds: “This kind of listening is useful and convincing; it serves to identify objects and locate them in space. But to a certain extent, in listening this way, one stops listening to listening itself”.24 Wearing headphones to monitor our recordings as we moved through the space enacted a highly conscious sense of listening. The headphones insulated us from our ‘natural’ hearing abilities, while the microphones removed our bodily ability to locate sounds in space and gave us an increased sense of acoustic detail. By listening in this way, sounds have the potential to develop their own autonomy. Böhme notes that “human beings who listen in this way are dangerously open; they release themselves into the world”.25 Thought of in this way, listening becomes “a being-beside-yourself”,26 a “radical openness”,27 a practice of thresholding.

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25 Ibid., p. 18.

26 Ibid.

While only a few of these initial recordings made their way into the finished work, the real value of this exploration of the river was as an attunement exercise. Physical closeness, material connection and amplified sensory engagement drew us closer to the river. This closeness was not just in a physical sense, but also generated a feeling of empathetic connection – releasing ourselves into the world to begin thinking and feeling in the way the river might think and feel. An obvious objection is that a river is incapable of thought, feeling or emotion. But the viewpoints of Brian Massumi, Madeline Gins and Jane Bennett provide a moment to pause and reconsider. What is at stake in reasserting thought (and by extension agency) as an exclusively human characteristic and what shifts by softening this stance? How does the river feel about the city and the way urban development has reshaped it? And what of the earthquakes and their effects on city and river, both in that present moment and in their future unfoldings? Can we tune in and listen to the conversations between river and city, and how might creative practice mediate an expanded conversation between the different ‘actants’, non-human and otherwise, who make up the city? How can these diverse entities be productively brought together into a vibrant situation, in ways such that their differences both dissolve but also sharpen each other’s specificities? How might these experiences and foregrounding of the river’s fluidity disrupt the deterministic approach to space planning advocated in the CCDU masterplan?

28 See his development of a logic of mutual inclusion that complicates any assumed hierarchical distinction between humans and other animals in Massumi (2014).

29 Particularly her claim that people are “too damn sure of themselves” quoted in chapter 1.1.


Fig. 4.5 Paddling on the Ōtākaro/Avon River with kayaks filled with sound recording equipment. Pair of shotgun microphones plugged into digital recorder (left) and Susie Pratt on the river.
speaking back: in conversation with the city

To address these challenges, we drew on our experiences of moving through the city by kayak and conceived of our audio walk as consisting of three components: a series of environmental recordings which formed a bedding track for Susie’s and my voices; spoken instructions that guided listeners on a route along the river; and a series of narrative fragments based on different historical, geographical and personal accounts of the river and city. We thought of these different elements as mixing together, just as streams of water join together to make up the river, with our different voices and registers of speech forming a layered conversation with the background recordings, listener-walkers and unpredictable sounds of the urban environment.

Gathering and making the field recordings – that is, recordings of the environment as it is – was a complex process which involved a range of different sites. We used parts of the recordings we made on our original kayak-based explorations. We woke up before dawn to record birdsong in a native bush reserve. We travelled to a horse-riding school to make recordings of horses breathing – a two-hour trip for a few seconds of barely audible audio, but all the more satisfying for its subtlety, intimacy and attention to detail. We recorded a street busker as we walked through the city; serendipitously, the song he was singing was *Only Our Rivers are Free*, a Northern Irish protest song from the 1970s. Listening back to these various recordings, we made selections and loosely arranged them. But in this arrangement we sensed a spatial flatness and separation of discrete recordings – the sounds were too familiar, limiting their capacity to shift or provoke thought. Many of the recordings were subsequently processed through a piece of Max/MSP software which I had written and used variations of in previous projects. This sometimes shifted the pitch of sounds and added reverberation and echo. While also adding an unavoidable digital ‘coolness’ to the character of the recordings, these effects exaggerated the vibrancy of the sounds with the potential to shift the listener into new registers of sense-making – birdsong became almost alien, splashes of water multiplied or pitched down so as to seem submerged, elements expanded across the stereo field creating a richer and more dynamic sense of space. Susie and I thought of these manipulations as the ‘fluorescent orange-ing’ of these sounds, rendering them non-naturalistic while still staying tethered

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33 In reference to the non-naturalistic use of colour in the artists’ book, discussed below.
to a version of reality. As with the projects previously discussed, we sought a point of balance just on the edge of the familiar.

Drawing back to the work of Janet Cardiff, the spoken instructions were relatively easy to develop. We worked through a few versions of how this voice would address the listener – as a friendly companion that meant the use of collective pronouns ‘us’, ‘we’ etc. and that asked questions of the listener, before finding a balance with a more detached, purely instructive voice that still brought listeners into the mood of the project: “Take a seat on the bench. Feel the curve of the timber against your back.”

The narrative fragments were more complex. We researched stories of the river, making use of historic accounts from online archives, reading plaques along the route, re-imagining historic events as stories. Through writing we distilled these so they shifted from facts presented objectively and were opened up to creative ambiguity and imaginative re-interpretation by listeners. Rather than the factual “The river’s colonial name was given by John Deans after another Avon River which ran through his family’s farm in Ayrshire, Scotland”, we preferred the anonymity and vagueness of “A Scottish man named this river after a river that flowed through his grandfather’s land”. Other fragments hinted at the river’s less than benign history, but again without any specificity: “The river is a dangerous place. A young man and his horse were swept away. And drowned.” The vocal recordings for both the instructional voice and narrative fragments were made in the middle of the night, when background noise was

![Fig. 4.6 With Fluidity begins from a bench on a bridge over the river, near the Christchurch Town Hall.](image)


at a minimum, Susie recording me, then me recording her, script in hand, microphone up close to the speaker’s mouth, voice vividly present in headphones over the ears of the recordist.

These recordings were arranged in multi-track audio software, sequenced and mixed together to form the audio work. But a constant challenge was fitting the time of the audio piece to the space of the city. We walked and re-walked the route, testing the choreographic interplay between our public artwork and the public spaces it layered over. Listening to early drafts of the audio piece, we checked timings, usually making a parallel recording with spoken notes of edits needed for the next iteration. Our footsteps provided a tracing of the route, its speeds, pacings, its timings, spacing. They provided rhythm and ‘measure’ to the texture of the fluid spatiotemporal crossings we were creating.36

Fig. 4.7 Composing the multi-track audio file that became *With Fluidity.*
‘Measure’ is not a word chosen by accident. Its significance lies within its mutual inclusion of both quantifiable spatial dimension and qualitative understanding of rhythm as enactively experienced. Both Erin Manning and Henri Lefebvre are particularly sensitive to the issues of measure and its relation to rhythm – understood as emerging from within action, not something that predetermines action. Remember: rhythm doesn’t move us, we move rhythm.\(^{37}\)

For Lefebvre this creates “a further paradox: rhythm seems natural, spontaneous, with no law other than its unfurling. Yet rhythm, always particular, (music, poetry, dance, gymnastics, work, etc.) always implies a measure”.\(^{38}\) Understood this way, measure is necessarily idiosyncratic, particular to the uniqueness of a situation at hand. It is something that must be felt from within, not externally imposed. Walking through a space generates a particular type of knowledge, which “differs not only from that offered by the road atlas but also from that gained just from looking at the landscape”.\(^{39}\) Or, as Frederica Gatta and Maria Palumbo argue, “moving on a terrain is a first step towards interrogating the context of a transforming place\(^{40}\) … the urban walker is not just experiencing the transformation of a concrete process that modifies spaces, but also a continuous re-articulation of an image of the city’s future”.\(^{41}\)

Unlike the more rigidly regulated and therefore more predictable spaces of the gallery, studio or building such as RMIT’s Design Hub, the complexity of public space in the city makes it inherently unpredictable and compellingly understood through the multivalency of measure. In the mismatched coupling of scripted and listening-walking measures, of metric and paced space, between anticipated and contingent timings, misattunements are created, resulting in moments of slippage, ghostings, doublings and rhythmic inconsistencies. These became moments that could be designed and understood though the notion of confluence.

\(^{37}\) Manning (2009), p. 34.

\(^{38}\) Lefebvre (2013), p. 18/38


\(^{41}\) Ibid., p. 260.
confluences of time and space

These confluences were designed in several ways and directed to different ends. Most poetic was the arrangement of Susie’s and my voices. Sometimes we spoke together, drifting in and out of sync, our voices panned hard left and right into the two headphone channels: “The river splits into several streams…” At other times we overlaid two different takes of the same recordings, letting their differences actively come into play: “Past the big rocks. One. Two. Three. Four … You’re across/You’re on the other side…”

More prosaically, tram sounds were recorded and placed so as to loosely synchronise with moments of walking past tram lines – both those presently in use and ones which have long been abandoned. At times these recorded sounds would be doubled by happenings in reality, at other times they acted as aural ghostings of what might have happened or what might happen again in the future. While not always in alignment, these recordings provided a useful jolt out of the soundscape of the project and back towards an everyday reality where trams were a very real hazard to pedestrian safety.

Fig. 4.8 Moments along the route of With Fluidity. Crossing a tram track with the badly damaged cathedral behing (left) and the cross-sectional outline of a demolished building.
Temporal slippages were also introduced by the uncertainties present within the city’s existing choreographies, in particular traffic flows and the crossings of roads. To deal with these moments of uncertainty, our script needed to loosen up. Sometimes this was achieved by inviting the listener-walker to pause while our voices made an observation or recollection. At other times we used the doublings and triplings already present in the space. The instruction ‘Take a seat’ occurs midway through the walk along a stretch of the river where there are several benches. Any one will do, but its timing in relation to walking the route gives the illusion of virtuosity and cohesiveness. Time spent on the bench takes up some of the slack in the listener-walker’s timeline, bringing them back more closely into alignment with our measuring of the city.

Our narrative voices extended the idea of fluidity beyond the river to thinking about the large-scale rebuilding of the city in terms of flows of materials, people, sounds and stories. In this way the project emphasised the city’s temporal qualities and sought conditions where these qualities flowed together, turbulently mixing, to create dynamic and new understandings of city and place. Our project proposed movement and activity to undermine and disrupt the CCDU masterplan, which has already been noted as having a particularly rigid and deterministic attitude. This working-from-within, on-the-ground, behaviourally emergent approach to working with public space has been described as a ‘minor planning’, the value of which is worth discussing in some detail.

minor moves

Just months after the *With Fluidity* project was launched, the urban designer and writer Paul Carter gave a lecture\(^43\) at the *Design for Impact* symposium that described the creative template as a flexible approach to his practice of place-making. This prefigured ideas that are further developed in his book *Places Made After Their Stories*, published at the very end of 2015. This book builds on Carter’s recent examination of turbulence\(^44\) and revolves around a series of projects in order to establish practices of ‘choreotopography’, which “proposes an intersection between the formal language of locomotion (choreography) and the physical characteristics of location (topography)”.\(^45\) Carter continues: “a choreotopographical approach to place-making equips planners to think differently about their responsibilities: a minor planning sensibility would allow processes of complexification associated with the turbulence of human communication to shape public space.”\(^46\)

Carter’s careful and thorough development of choreotopography formalises a series of values and techniques that Susie and I worked with instinctively, intuitively, improvisationally. Our approaches bear striking similarities in conceptual orientation, specific language (flows, turbulence, minor planning) and analogical figures (water, river). For both Carter and ourselves, water is not only a theme but a thinking tool: “The behaviour of flowing water, its aesthetic appeal and its human associations communicate the idea of thinking and acting fluidly, or going with the flow. In this book, the intelligence of water is recommended as a model of improved social awareness and interrelatedness.”\(^47\) But unlike Carter’s choreotopography, *With Fluidity* aimed not just at equipping planners with new tools and sensibilities, but directly amplifying the sense of interrelatedness between the actants that make up the city itself. *With Fluidity* had an explicitly subversive agenda. It actively sought to stir up turbulence between times, spaces and flows of materials, creating confluences that invited listener-walkers into a state of questioning openness with the potential to effect political change.

In these closely related but differing approaches, both our project and Carter’s choreotopography advocate for minor planning, an approach to urban design that draws on the characteristics of ‘minor science’ as explained by philosophers of science Paulo and Alexandra

\(^43\) Carter (2015b)

\(^44\) Carter (2014, 2015c)

\(^45\) Carter (2015a), p. 15.

\(^46\) Ibid., p. 16.

\(^47\) Ibid., pp. 15–16.
Correa: “Its object is not static – nor is it beings or their apparent or illusory constancy – but the constant transformation or alteration of beings, their becomings, transitions and heterogeneities, the dynamic of processes”.\(^{48}\) Carter describes minor planning as based on these principles, where it trades “in processes, events, interactions, rates of flow; and its non-linearist interests in ‘hybrid objects’ extends to its conception of space as vortical rather than linear”.\(^{49}\) Rather than impose form on activity, minor planning works to stir “flows into more complex and turbulent conformations”.\(^{50}\)

In my conception of these ideas, these non-linearist interests might not only be “predicated on a recognition of movement forms”\(^{51}\) to design public spaces that harbour social potential, but also comprise a flexible scripting of new movements and points of view, aimed at opening up a critical position from within the complexity of the particular situation at hand. *With Fluidity* can be thought of as using the ideas of choreotopography to generate particular movements within the spatial and political complexity of post-earthquake Christchurch.

This is more than turbulence for turbulence’s sake. *With Fluidity* deliberately stirred up and amplified qualities of instability and turbulence to bring these qualities into contrast with the reductive functionalist approach of the CCDU master plan. It did this by drawing on the techniques of thresholding to understand the interdependencies between city and river, and the amplification, leverage, discordant feedback and destabilisation that characterise architectural judo. The audio walk heightened the complexity of city–river interrelations to shift understanding. It took listener-walkers along a route on the edge between river and city, leading towards the proposition that “maybe the city and river are more alike than they first appear. Maybe the boundaries between them can’t be clearly defined.” Gently implicit in these propositions is a call for a more open, and open-ended, approach to the rethinking of what the city of Christchurch and the Ōtākaro/Avon River might become together. *With Fluidity* levers imagination and an expanded idea of conversation as ways in which seemingly minor actants can have influence on these complex metastable structures.


\(^{49}\) Carter (2015b), section 4, para 2.

\(^{50}\) Carter (2015a), p. 15.

\(^{51}\) Carter (2015b), section 5, para 1.
Fig. 4.9 Turbulence on the river surface.
These dynamics and the expanded idea of conversation became a useful way to understand the processes at work in the production of the artists’ book. Given the highly ephemeral nature of the audio walk – an experience of walking in a particular place while listening to an internet-streamed (or downloaded) audio work, Susie and I also wanted the project to include a physical component and so chose to make a small edition of artists’ books. This can operate as a standalone publication or accompany the walk without leading or explaining it. In fact, apart from project details on the map insert, the book ended up having no text other than the earlier quoted project statement that wrapped across its front and back cover.

To provide designerly input and to assist with producing the artists’ book, Melanie Oliver introduced us to Alice Bush, a fine arts student at the University of Canterbury and frequent volunteer for The Physics Room gallery. Alice’s interests are in zine and publication design, and we invited her to collaborate with us, contributing her skills to both its design and production. The fine arts school had a risograph printer – a sort of hybrid between photocopier and automated screenprinting process – which Alice was familiar with in terms of workflow and operation. We were excited to work with the risograph, as its process of layering inks held the possibility for slippages, ghostings, doublings and mis-registration – consistent with our ideas of confluence at play in the audio work.

Fig. 4.10 Copies of the artists’ book produced with Susie Pratt and Alice Bush.
As well as the cover text and a rough idea of how this could wrap across the front and back covers, Susie and I developed a concept for the book’s inner pages. Photographs of material flows and turbulent patternings that we had observed in the city would be overprinted with a two-layered linear motif, which created a moiré-like effect. (This project was happening in parallel with *AJ6*, discussed in the previous chapter, and I used concepts and techniques fairly freely between both projects, with ideas of sound design flowing back from *With Fluidity* into *AJ6*.) The book provided another way to enter into the project’s river-inflected ways of thinking, seeing, listening and moving through the city.

Inserted into the hand-binding of each book was a folded twosided insert which functioned as a standalone piece. One side had a schematic map of the walking route, the other a collage that extended the visual language we had established for the book’s inner pages. When we first met with Alice we didn’t have a clear idea of the form this collage would take, but as Alice got to know Susie and me some patterns started to emerge. This was due to a confluence of factors, some incidental, some material, some temporal. For most of the project I had been wearing a sweatshirt with a bright blue terrazzo print, fragments of rock floating in space, including during our initial meeting with Alice. In a subsequent meeting Alice warned us that the turquoise ink we had originally planned to use for printing had been temperamental of late, and on printing day proved uncooperative. We had to quickly rethink the colour decisions we

![Fig. 4.11 A concept mock-up for the artists' book's inner pages.](image-url)
had made initially. Rather than the subdued and vaguely naturalistic combination of turquoise and grey, we chose to move in the opposite direction, selecting an almost fluorescent orange-pink$^{52}$ that set up a colour vibration with a royal blue. Another motivation in choosing this fluorescent peach colour was to counteract the easy association of water with blue ink. Alice had worked on the book’s inner pages by picking out particular elements in each image in the secondary colour. And in making the map we had a tracing of the river’s route through the CBD. Alice had combined these elements to create a field of floating blue stones along with an image that Susie had taken of structures distorted in the river’s surface, overprinted with a repeated vector tracing in fluorescent peach that I had made of the river’s course. I was wearing that same terrazzo sweatshirt on the day the three of us made test prints, and as the first one came off the risograph I commented to Alice that the image appealed to me – pointing to the graphic similarities between image and sweatshirt. Alice jokingly acknowledged that she had thought I would like it, citing the sweatshirt as an influence on her graphic approach, and we noted its friendly affinity with the family of graphic elements that constituted the poster.

These various factors flowed and mixed, finally coming together in an image taken an hour before the public launch of me holding up the collage poster, with its fragments of floating blue rocks, while wearing the sweatshirt that had subliminally made its way from being something that kept me warm while working to something

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52 Here connections could be drawn with another notable river-based project-event that has resonances with our project: Olafur Eliasson’s ongoing Green River project. See facing page.
that infused its way into the work. Just like thinking of the river as having character and influence on its surroundings, things as simple and everyday as printing inks and sweatshirts can help to shift things in their own minor ways. Minor in that it takes on the conventions of a situation “in order to subvert it from the inside”. In ways similar to my white T-shirt in *Cloudsound*, through its recurring presence my sweatshirt made its way transformatively into the flow of the project, starting out as being merely incidental, to contingent, to vibrantly influential – a part of the flow that generates new configurations. I think Jane Bennett would see this as an example of ‘thing-power’, which gestures “toward the strange ability of ordinary, man-made items to exceed their status as objects and to manifest traces of independence or aliveness”.

The analogy of conversation becomes useful for me here, when expanded to give ‘voices’ to all the various actants at play in a situation – a chorus of negotiation and deliberation towards a temporary moment of balance and resolution. Thresholding offers a technique to tune into and participate in this conversation, and begins to address some of Bennett’s questions regarding a more horizontal (but still differentiated) relationship between humans and non-humans: “Can we theorize more closely the various forms of such communicative energies? How can humans learn to hear or enhance our receptivity for ‘propositions’ not expressed in words? How to translate between them?” To do so, we need to take some of our sense of self out of the equation, become more thing-like in our engagement with other things and forces. Thresholding provides an ideal vehicle for this, as design can already be considered “as a conversation with the materials of the situation”. Carter alludes to something similar when he says “As soon as we reconceive the human subject relationally – not as something acted upon but instead dialogically constituted – then the vortex merely describes the ordinary dynamics of everyday life, the endless process of emergence precipitated by human interaction, and which finds its simplest manifestation in conversation”. In utilising thresholding as a technique for creative practice lies the opportunity to tune into the turbulent dynamics already at play and recognise their potential, as we enter in and start to move with them. In *With Fluidity* Susie and I produced a project that deliberately created room to manoeuvre.

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54 Bennett (2010), p. xvi.

55 Tim Ingold describes something similar with his use of material correspondence, a back and forth dialogue between maker and material. See Ingold, (2013) p. 31 and pp. 105–108.

56 As Bennett describes: “The political goal of a vital materialism is not the perfect equality of actants, but a polity with more channels of communication between members.” Bennett (2010), p. 104.

57 Ibid.


Fig. 4.15 People walking *With Fluidity* during the public event. The bright pink-orange printing ink we used resonated with the various hazard signage dotted throughout the central city.
reflections on the river (ripples)

The public event to launch *With Fluidity* was held on 12 July 2015. The gallery, Susie and I invited people to meet us in Victoria Square at the start of the route, where they could walk the route either using their own devices or borrowing a media player and headphones from us. The public launch was also an opportunity for peer feedback, particularly from two other artists who were also undertaking residency projects through The Physics Room gallery. Nathan Gray and Mark Shorter both discussed our work and made several observations. Sometimes they stated something obvious to them but previously overlooked by us. Nathan in particular was kind enough to put his comments in an email after the event. He noted that although the project was called *With Fluidity*, the path of the walk was actually against the flow of the river – a contradiction to be sure and not something we had done deliberately, but this hints at something more complex bubbling just under the surface of the project. What would it mean for a project called *With Fluidity* to be working against the flow of the river, against gravity? As Nathan observed, “we are heading upstream, back in time? Against the flow? Into the central city? We are not going with the water but against it. Its speed is amplified as we move in the opposite direction”. These inconsistencies invite another level of interpretation. Although the ideas of architectural judo were in my mind as we worked, I tended to be thinking in terms of of the fluid nature of the city and how this could be reoriented. Nathan discerned principles of amplification and misattunement at work in the project in ways that were not consciously intentional.

Rivers flow downhill. This is a commonplace observation, but this incline is not always immediately obvious. By working upstream against the flow of the river, the project worked against gravity. This suggests a different type of fluidity at work, one that upholds lightness to generate tension with the seemingly irresistible force of gravity. *With Fluidity* worked among forces but was not passively determined by them; instead it inflected things into a new course. Moments such as this suggest that moving with fluidity is at its most powerful when it injects another trajectory into the flows of a situation, creating friction and stirring up turbulence.

60 Personal correspondence with Nathan Gray, 14 July 2015.
Fig. 4.16 Ongoing works in the city made the carefully measured route of *With Fluidity* un-walkable in May 2016.
In May of 2016 I revisited Christchurch and tried to let the audio work once more carry me along the fringe of the CBD. But aside from the constant background of earthquakes, much had changed in the past ten months. It was no longer possible to follow the route that Susie and I had traced and retraced, meticulously measuring during the making of With Fluidity. The bench where the walk began was fenced off, the bridge and neighbouring town hall all undergoing significant restoration. Further along the route, pedestrian paths had been temporarily redirected away from the banks of the river while these were upgraded with new seating. Markers such as the six or seven large stones that cordoned off a street and which we used to help pace people’s walking had disappeared. Sight-lines to the cathedral were still open, but maybe not for much longer. Scaffolding had gone up alongside a peach-coloured building, beginning to obscure the ghosted outline of a demolished building that the project drew attention to. It was also autumn and the presence of leaves gusting along the ground gave an additional dynamic in terms of both sound and motion.

Susie and I had anticipated that the city would change relatively quickly and noticeably as the post-earthquake reconstruction gathered momentum, and for the moment these changes are pushing back against the work we made. But I can imagine a point not too far in the future when these construction works are finished and our work can be re-walked. The project-event lies latent, a marker of a moment in time, another current in the intertwined flow of river and city, another story of where they are going and what they might become.

With Fluidity extended the relational techniques of architectural judo from a single building-as-event to a larger urban context, rife with spatial, social and political instabilities. Janet Cardiff’s framework of the audio walk provided a template for exaggerating and overlaying the sounds of the city both past and present in relation to a walking route along the river that both heightened and distorted environmental relations. Susie and I exploited the highly spatial nature of our sense of hearing, using headphones to record these source sounds and for listener-walkers to experience the resulting audio walk, creating doublings and misalignments between our composition and the ever-changing soundscape that unfolds along the project’s path.

61 The previous day saw another aftershock of magnitude 4.7, significant in most contexts, but in Christchurch no-one paid it much attention. Information on this quake and others can be found at www.geonet.org.nz/quakes/region/newzealand/2016p355041 (last accessed 15 May 2015.)
Our interests in flows and a turbulent understanding of the city bears similarities to Paul Carter’s notion of ‘choreotopography’ where qualities of both movement and the physical environment inform a creative stirring up of times, spaces, and material flows. *With Fluidity’s* watery narratives connect with the work of Roni Horn, and in the production of the audio walk and artists’ book there occur moments of ‘fluorescent-orange-ing’ that bring to mind Olafur Eliasson’s *Green River* project. The many and various actants at play in the making of *With Fluidity* helped conceive of creative practice as occurring through an expanded notion of conversation, drawing on the theoretical work of Bruno Latour, Jane Bennett, Tim Ingold and Paul Carter.

Working in this way, the project expands the possibilities for a practice of architectural judo to operate in more diffuse environments leading to the formation of interior experiences in spaces unbound by building. By drawing temporal and spatial relations into such proximity that their effects are amplified, *With Fluidity* advocated for a ‘minor planning’ approach to urban design, predicated on flows and turbulent formations in stark contrast to the reductive master plan proposed by the Christchurch Central Development Unit.
Conclusion: From Atmospheres to Relational Techniques for Building Events

As this research concludes, connections between projects, techniques, ideas and materials feel more tightly meshed. From out of this relational closeness some consistencies can be drawn that offer ways of practising within the increasingly complex and interconnected conditions we are living in. These feelings resonate with our current moment where, as Jane Bennett describes with reference to Bruno Latour, “the modern self feels increasingly entangled – cosmically, biotechnologically, medically, virally, pharmacologically – with nonhuman nature. Nature has always mixed it up with self and society, but Latour notes that lately this commingling has intensified and become harder to ignore”.¹ To cope with these entanglements means “enacting or experiencing an intrinsic interconnectedness”² that characterises Timothy Morton’s ‘ecological thought’ and addressing the challenges of interconnectedness for creative practice that this research set out to explore. The relational techniques I have developed provide a flexibility appropriate to an entangled understanding of contexts and an openness to collaboratively working with the diversity of actants that are always at play in a forming situation, atmosphere or event.

At the beginning of this dissertation, I described my creative practice research as emerging out of the difficulties for creative practitioners in engaging with a critical conception of ‘atmospheres’. These difficulties arise because the concerns of atmospheres are mostly theoretical – focused on ways of describing what constitutes atmospheres – but not on how creative practices operate among them. In remaining intangible and vague, atmosphere became a slightly obstructive idea for practice-oriented concerns of architecture, installation or environmental art, and interior design. Moving away from ‘atmospheres’ as a critical term has enabled me to move beyond these theoretical conceptions to develop my own vocabulary and techniques of practice. This has resulted in thresholding and architectural judo as a set of techniques that allow a creative practitioner to open up,

¹ Bennett (2010), p. 115.
and then compose with, the relational complexities from which atmospheres emerge. Thresholding is a technique for conceiving of, and getting among, the turbulent flows of lived experience. Architectural judo articulates ways of practising within these flows through techniques of amplification, leverage, discordant feedback and destabilisation.

Taking turbulence as an ontological given might not have seemed particularly encouraging, at least initially. But it has led me to the development of thresholding as a way to negotiate the tensions between a constantly unfolding flux of the world and the existence of seemingly stable things: objects, concepts, categories. Things thought of as always in process, always in action, leads to shifting from the stability of objects to a relationally contingent world that, as Brian Massumi writes, is “in point of processual fact, populated by events more so than things. The world is made of verbs and adverbs more primordially than nouns and adjectives”.

Thinking through the event implies turbulence: objects and categories are at best metastable structures that emerge shimmering in the balance between a host of other forces. Turbulence does not exist in isolation, in a vacuum. It is necessarily highly relational—a way of foregrounding the relations between things as always in negotiation, always in event.

*Cloudsound* began with a concern for collapsing the space between atmospheres understood meteorologically and atmospheres as a quality of architectural space. In order to do this, a number of theoretical models for spatial interconnectedness were thought through along with creative project exploration. Experiments with camera obscura conflated ideas of atmospheres and weather, which were productively understood through Sylvia Lavin’s observation that the surface is the point where architecture is the most vulnerable and the most capable of turning into something else. Being on the edge of turning into something else led to a sense of personal and spatial uncertainty which I described through the term ‘interior turbulence’. The ‘mesh’ of Timothy Morton’s ‘ecological thought’ provided a more complex model for understanding the relational interconnections that *Cloudsound* made explicit. From these explorations, thresholding began to emerge as a relational technique for understanding a multivalent moment at the edge between spatial limits.

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The studio sketches of *Breathing. Space.* explored the continuum of air and breath. In so doing, these projects extended the idea of thresholding as a technique for understanding relational interconnection. It was here that the activities of everyday life began to explicitly infiltrate my creative practice and the importance of disposition to understanding my creative practice began to emerge more clearly. *Breathing. Space.* built on my experiences of making *Cloudsound* – no longer could boundaries be easily drawn between the space of my body and the surrounding environment. This interrelatedness became evident through a consideration of vital air exchange through breath. Breath is a dispositional conditioning of self, always in relation to a wider environment and the other creatures that populate it.

![Fig. 5.1](image)

Fig. 5.1 Architecture students working in the building initiated a tongue-in-cheek design competition that called for proposals for new temporary claddings as an interim measure.
And as my ongoing interactions with the RMIT Design Hub building have revealed, buildings can also be thought of as processual, always changing and inextricably part of events. This eventful conception of buildings provides a framework for understanding their dispositional character and the ways that this influences an event’s unfolding. The *Building Movements* installations I made with Scott Andrew Elliott extended qualities of tentativeness into the apparent rigidity of the Design Hub. Through an experimental process of collaborative writing, this friction was understood as leading to a moment of excess where the building-event came into a heightened register of liveliness. Along with *A6*, this long-term suite of project-based engagements with the Design Hub exemplifies buildings as tentative processual entities, if we stay attentively tuned into their ongoing eventful formations and reformulations. Henri Lefebvre’s ‘rhythmanalysis’ is valuable as a technique to attune to these subtle movements. It is from this understanding that the new relational techniques of architectural judo – consisting of amplification, leverage, discordant feedback and destabilisation – can be discerned. These offer ways of recomposing with the surrounding environment through processes of catalysis and modulation.

*With Fluidity* took these ideas of moving with movement out into public urban space, working with Christchurch city and the Ōtākaro/Avon River. Here the idea of conversation can be seen most strongly, both in the collaborative nature of the project, but also in a wider sense where the project materialised from a diverse array of ‘voices’, both human and non-human. Susie Pratt and I listened in and spoke back to these voices, literally and metaphorically, in creating this project. Implicit in these dynamics, the techniques of thresholding and architectural judo were used to attune to and re-choreograph the ambient qualities from which the event of *With Fluidity* unfolded.

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*At the time of writing, the Design Hub is preparing to shed its skin – with the 16,000 glass discs that form its outer façade scheduled for replacement in 2017. What sort of new building emerges from this remains to be seen, but it has become a site of increased activity and turbulence as new spatial configurations are negotiated in its continual unfolding.*
relational techniques for building events: a contribution to knowledge

This PhD makes a contribution to knowledge in its reappraisal of atmospheres as an unfolding event that can be operatively *practised* with through the relational techniques of architectural judo. These techniques are a thresholding of practice that negotiates and complicates the disciplinary relationships of architectural and interior design, and in so doing becomes extensible to other creative spatial practices, such as publicly and socially engaged art practices and the design of ‘urban interiors’. I have developed these techniques through a range of creative projects and engagement with related practices and theorists.

Articulating this way of practising also provides an opportunity to rethink the value of disciplinary distinctions and relations. It opens up ways of understanding creative authorship as diffuse and in excess of the human, echoing the concerns of the various ‘flat ontologies’ that were collectively discussed in the introduction. Thresholding leads to an understanding of things as inherently provisional, suggesting a reconsideration of some of the assumptions we make to navigate everyday life, and proposes a spirit of radical openness in place of these assumptions. Related to this is an expression of the value of a less rigid way of thinking and of the creation of experiences that encourage or invite this. Rather than quickly categorising or jumping to conclusions, such that thought and action become automatic background tasks, the relational techniques of architectural judo offer ways that the relations between the objects, environments and experiences that comprise an event can overspill their habitual categorisations and be placed into question.

Through a diverse series of creative projects, I have come to understand the context of design activity as an event that can be catalysed and modulated such that its degree of turbulence, instability or liveliness is increased. This is a particular approach to the designing of interiors, where an understanding of interiors is expanded through a relational framework that I describe as ‘building events’ and which I expand on in the discussion of future directions below.
personal values: conversational relations

In the introductory sections, I sketched a range of practices that I considered (along with my own practice pre-PhD) as engaging with what I called ‘atmospheric thresholding’. As a set of techniques that put thresholding into action, architectural judo provides prompts for creative practitioners engaging with the diffuse spatiotemporal relations that characterise atmospheres. This has been an important development for my understanding of practice, as it allows me to situate the diverse facets of my creative practice within the discipline of interior design and with a specific orientation towards architectural environments. Articulating these relationships has enabled me to apply the techniques and knowledge developed in a studio/gallery practice to larger-scale design projects and has reinvigorated my practice. Understanding thresholding as a technique for practising with simultaneity and transversality has also allowed me to assert the value of my writing practice in relation to my design practice.

This has opened a relational, ecological orientation where, as Felix Guattari describes, “the intrusion of some accidental detail, an event-incident” can suddenly make my “initial project bifurcate, making it drift from its previous path, however certain it had once appeared to be”.


Fig. 5.2 Breathing, Space. #1 (2013). Photograph by Hsu Han Chiang.
Rather than trying to work towards a predetermined outcome, I now recognise and welcome these moments of drift and deviation as moments when the world presses back into my creative practice.

But possibly most importantly, this research has underscored the value I place on relationships. These relationships occur through the collaborative nature of the projects that I now undertake, whether I am the person invited into a project or the person inviting others to work with me. Working collaboratively ensures that my practice provides continual surprises, new ways of opening up and relating to the world. A clearer sense of my particular disposition towards creative practice has emerged through the negotiations and conversations that occur in collaboration. And while many of these collaborations are with other people (many of whom have become close friends), I also understand my practice in terms of an expanded conversation that occurs through an attunement to materials and environments. These attunements involve listening and speaking with other, non-human collaborators through my creative practice. This is a disposition of meeting the world halfway, a thresholding between my sense of self and the environments through which I move, and in which I can begin to move-with through creative practice.
future directions: an ethical framework and an ongoing practice of ‘building events’

Looking back on the research I have undertaken, I would now be interested in articulating an ethical framework that I see as implicit to the dispositional tendencies of creative practices working with the relational techniques of architectural judo.

Practising with the techniques of architectural judo brings us into close contact with the entangled interrelations that characterise Timothy Morton’s concept of the mesh, and hints at an ethical orientation for practice: “It’s a mistake to think that the mesh is ‘bigger than us.’ Everything is intimate with everything else … Inner space is right here, ‘nearer than breathing, closer than hands and feet.’ Rather than a vision of inclusion, we need a vision of intimacy”.\(^6\) Thresholding is a way to conceptualise this intimacy, through a relational technique that suspends neatly delineated categories. Architectural judo offers techniques for playfully engaging among the complexities that ensue from such an understanding. It is through the mutually inclusive understanding of action offered by architectural judo that paradoxes can be affirmed, rather than resulting in cognitive incapacitation.\(^7\) And, as Brian Massumi paraphrases the thoughts of Alfred North Whitehead, working productively with paradox develops our capacity “to hold a maximum of contrastive terms in itself without imposing the law of the excluded middle on them … which he [Whitehead] further equates with ethical ‘progress’.”\(^8\)

A practice based on techniques of thresholding is well situated to build this ethical capacity to work through mutual inclusion, and perhaps begins to address Felix Guattari’s urging that it is “essential to organize new micropolitical and microsocial practices, new solidarities, a new gentleness, together with new aesthetic and new

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\(^7\) Massumi (2014), p. 7. Also of relevance here is Gregory Bateson’s conception of disposition as a measure of “receptivity to extrinsic information or its ability to juggle multiple logics,” described in Easterling (2010), p. 260.

\(^8\) Ibid., pp. 42–43.
analytic practices regarding the formation of the unconscious”.


Like many of the phrases and project titles I have developed through this research, the multivalency of ‘building events’ suggests at least two simultaneous ways of conceiving of my approach to interior design practice. ‘Building events’ is both a noun phrase and a verb phrase. Taking building as a noun implies a shift in understanding from a static object to an entity in continual processual unfolding. This shift in understanding arises from the active verb phrase that suggests a practice of event construction. I approach interior design as an expanded practice of event design, which operates quasi-autonomously from architectural environments to build events through techniques of relation. Projects such as the Building Movements installations, the meeting pavilion of AJ6, and With Fluidity’s recompositions of spatiotemporal relations through an urban audio walk, each used techniques of architectural judo to recompose with a built environment, understood as an event in process. These environments became events subject to catalysis and modulation. This notion of ‘building events’ informs the way I move into new projects in other architectural environments, the sorts of agendas these projects might pursue and their modes of design and production.

An exemplary vehicle for this practice of building events can be seen in the annual RMIT Interior Design graduate exhibition, INDEX, which I have coordinated for the past two years. INDEX works in a different site each year – typically abandoned, under-utilised or dormant buildings around inner Melbourne – and over the course of
Fig. 5.4 INDEX (2014). This iteration of INDEX occupied a sawtooth warehouse space, with student work and banners hung from tensioned braided steel cable, which was put up into the ceiling via three scissor lifts. These stayed on site and became lanterns at the entrance and by the bar, contrasted with 12 tonnes of breeze block that was used as plinths for models and objects. Facing page: fig. 5.5 INDEX (2015). The design of the 2015 exhibition was based around ideas of porosity and lightness, with light used explicitly as a material.
six days a large-scale exhibition (comprising over 1000 m\(^2\) and more than 50 graduating projects) is designed and built. This requires large-scale collaboration, communication, rapid decision-making and compromise as a small team of staff work with graduating students to realise the exhibition. An intense sense of relational complexity pervades this period of activity and, out of this highly distributed and contingent way of working, a design proposition emerges. The exhibition-building process culminates in an opening night event, followed by a series of smaller public events, that activate the site and bring it into new registers of life and visibility. My role in coordinating this exhibition-event continues, offering the opportunity to continue to hone the techniques of architectural judo through a collaborative large-scale interior design practice.

The relational techniques of architectural judo have been developed across projects in galleries, workshops of bodily attunement, studio sketches, installations in public spaces, experimental writing, architectural design and audio walking. These build on thresholding as a technique for discerning and opening up the relational complexity of a forming situation or atmosphere, and propose ways of working with and within an eventful understanding of the world. They have also given rise to ways of thinking and being that permeate beyond my creative research practice. In combination, these techniques suggest a broader orientation and attunement to a life lived “on a moving threshold of metastability, of fragile, provisional equilibrium that is subject to constant perturbation”.\(^{10}\)

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