In Flux: Explorations of material indeterminacy through sculptural practice

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IN FLUX

EXPLORATIONS OF MATERIAL INDETERMINACY THROUGH SCULPTURAL PRACTICE

SKYE KELLY /// BACHELOR OF ARTS (FINE ART) (HONOURS)
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DECLARATION
I certify that except where due acknowledgement has been made, the work is 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 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; ethics procedures and guidelines have been followed. I acknowledge the support I have received for my research through the provisions of an Australian government training program scholarship. Skye Kelly June 2018

All photos taken by Skye Kelly unless stated otherwise.
SUMMARY

In Flux investigates a range of indeterminate, transitive materials through the languages of sculpture and installation. The research will focus on exploring the latent potentials within certain classes of materials, through both a studio-based and exhibition methodology. This project is situated within a rich context of material exploration within art history, contemporary thought around temporal sculpture and meaning within materials, and examples of temporal material transformation within the field of physics. In Flux will result in a series of durational, sculptural installation works that examine the mutable boundaries created by material indeterminacy within objects and their spaces of display. These sculptural installation works will be temporal material experiences that are transformative of both the material and the viewer.
In Flux is a practice-based research project that will investigate a range of transitive, indeterminate materials and their properties, through a sculptural framework. The research will focus on exploring the latent potentials within certain classes of materials, through both a studio-based and exhibition methodology.

There is a selection of materials that will be at the centre of the investigations, including but not limited to; toffee, yeasted dough, bitumen, custard powder, gallium (a metal that melts at 29.76 degrees, just slightly above room temperature), hydrophobic paint, gelatine, egg albumen, chicle (a sticky gum derived from South American trees, used as a base for chewing gum), sweetened condensed milk and homemade silly putty (alternately known as ‘flubber’ which is a long-chain polymer material made from PVA glue and borax). All of these substances exhibit a range of inherent properties that will be a catalyst for sculptural outcomes. These properties include high viscosity, liquidity, repulsion, expansion, deflation and the ability to change material state. This selected class of materials I have termed as ‘indeterminate’, ‘transitive’ and ‘unstable’. This relates not only to their material properties but also their material behaviours. These behaviours include dripping (from one site to another), extruding (changing shape), folding (back onto itself) and stretching (from one point to another). The forms of these materials change in time, space, volume, colour and smell and so alter our experienced sense (or expectation) of their definition.

Practical studio-based research, or what we might term material research in a sculptural context, will be supported in this project by theoretical investigations into areas as diverse as food sciences, fluid dynamics, everyday chemistry experiments, molecular gastronomy, geology, sensory play as well as critical art theory.

This project will generate a body of artworks that will contribute to knowledge of material qualities and behaviours experienced through the languages of sculpture and installation.
In 2010 I started working with toffee, made from boiled sugar, water and vinegar, as a sculptural material. I was intrigued by the unusual material properties displayed by this substance. Toffee is a non-Newtonian fluid, as it exhibits some of the qualities of both a solid and a liquid. When sudden force is applied it will break or shatter but left to the natural forces of gravity, will deform and drip like a liquid. I researched this material in the studio through handling, manipulating and testing and became curious about its range of particular qualities and behaviours. Of particular interest was its unstable, transitive nature and how this could be utilised to create temporal sculptural works.

Through working with toffee I started to develop a specific methodology of material research, which I then applied to other substances. One of these was yeasted dough. Yeasted dough consists of the yeast, a living organism and flour, the food for the organism. A lump of yeasted dough exhibits a range of material behaviours based on the interaction of these two elements, including expansion and deflation. I experimented with pressing yeasted dough onto metal armatures and then baking it in a kiln, the heat of which kills the yeast and effectively stabilizes the material. The resulting sculptures were of interest in their formal similarities to dried lava flows and other geological phenomena. Through reflection and analysis, I realised that by stabilising the dough I was killing the transitive nature of the material. For me, this is where the excitement of possibilities lies.

I then went on to work with various other materials that are unstable, transitive and exhibit material indeterminacy. These include gelatine, sweetened condensed milk, custard powder and silly putty. Through continued interactions with these substances I have developed a particular interest in drips, pours, oozes, spills, seeps, extrusions, accumulations and erosion. I research the surface tension of liquids and the threshold between the edge of a spill and surface on which it rests. These indeterminate materials create mutable boundaries within objects and their spaces of display which heighten a viewer's experience (encounter) of instability.

In Flux is a process driven project that tests the formal traditions of sculpture by involving time as a main ‘material’. The project explores the inherent, comparative and spatial readings of an ‘object’ through testing its specific material behaviours.

opposite // creep. 2011. Toffee, steel  
[Photo: Jeremy Dillon]
below // studio details // silly putty & yeasted dough

BACKGROUND
REVIEW OF LITERATURE AND CURRENT PRACTICE (CONTEXTUAL REVIEW)

One of the characteristics of this Post-Minimalist era of sculpture was a new focus on materiality (Rahtz 2012). Alongside industrial and geological materials being used in their raw form, ephemeral, more plastic materials were being utilized. In contrast to traditional, durable materials, artists used organic matter, substances such as latex, rope, cloth, leather and fur to create sculpture (Lappard 1973; Ward 2009). One artist working within this context was Lynda Benglis. Her latex pour works such as Contraband, 1969, made by pouring liquid rubber latex directly onto the floor, were amongst considerations of colour and process, direct explorations of material behaviour.

In her essay ‘Soft Sculpture: Don’t Touch, Lick or Smell’ curator Lucina Ward asserts that these new ‘soft’ materials ‘emphasize natural forces such as gravity’ (2009, p. 20) and that their ephemeral nature affords these materials the ability to achieve ‘effects of collapsing, melting and disintegration’ (2009, p. 25). Building upon the tradition of these historical works, I use materials that actually collapse, melt, spill, erode and disintegrate. These transitive, indeterminate materials embody these actions rather than implying them. These historically ephemeral materials are by comparison relatively stable and durable.

Robert Smithson was an artist who was also working at this time. His works Asphalt Rundown (1969) and Glue Pour (1969) are relevant to my research in their explorations into the qualities of the materials involved. In both of these works Smithson enacted direct material interventions in the landscape, using the qualities of the materials and the gesture, as an expression on entropy. These were large-scale acts of material research. Smithson’s central concerns were entropy and a connection with site and these works were on a geological landscape scale.

Richard Serra’s Verb List (1968-1968), is a list of infinitive verbs and possible contexts to be applied to materials. Serra used this list as a generative tool for producing works within his practice. Splashing (1968) is one of these works, which involved the artist splashing molten lead at the intersection between the floor and wall. This work enacted direct material engagement with a liquid substance. Serra’s notion of applying verbs to materials is influential to my methods when testing material properties.

In Sculpture in the Expanded Field art theorist Rosalind Krauss (1979) sought to characterize the expanded and diverse notions of what constituted sculpture. Written in 1979 this influential essay explored the multitude of activities, materials and practices that in the previous decade had changed the very nature of what was thought of as sculpture. Krauss described these effects, defining the field of sculpture as ‘infinitely malleable’ (Krauss 1979, p. 30).
I subject materials to ‘unauthorized’ tests; I spill materials that should be contained, I drop things that should be held. My research differs in that it operates on a human-scale and is enacted within the studio and gallery spaces.

Within my practice I create temporal material experiences. Artworks often involve material transformation over time. Of key importance to my practice is the Pitch Drop experiment. Professor Thomas Parnell began this experiment in 1927 and it is the world’s longest continually running laboratory experiment. This physics experiment was set up to demonstrate the material properties of pitch, a non-Newtonian fluid that exhibits both solid and liquid qualities. In 1927 a sealed glass funnel was filled with warmed pitch and left to settle. Three years later the stem of the funnel was broken leaving the pitch to slowly drip into the beaker below. At ambient room temperatures the pitch appears to be a solid but it’s actually an incredibly viscous liquid. (It has a viscosity 30 billion times that of water (Stephenson 2014)). In the 88 years the experiment has been running only nine drops have fallen.

English artist Julie Mecoli uses The Pitch Drop experiment as a direct reference for her Dark Matter series of works. In these works Mecoli crafts miniature replicas of existing cities from bitumen and sets them inside a glass funnel in the style of The Pitch Drop experiment. As time passes the cities gradually disintegrate flowing down through the funnel. (Mecoli 2013).

In her essay ‘Waiting for Art: The Experience of Real Time in Sculpture’, Elizabeth Buhe (2012) argues that artworks that unfold over time create in the viewer a sense of heightened perception. This arises from a form of anxiety that builds in the viewer induced by the anticipation of waiting and gives rise to a more fully engaged relationship with the artwork. Buhe excludes performance art, new media and film from this reading, identifying as a critical element the ‘unexpected perceptual experience of an inanimate object interfering with our sense of time’ (2012 p. 119).

Often material transformation in some sense occurs within temporal sculpture. Artists that I have looked at that employ these devices in their work include Anish Kapoor, Anya Gallacio, Michel Blazy, Amelia Whitelaw and Kitty Kraus.
The recent history of my practice also provides context. My work with toffee embodies the spirit of The Pitch Drop experiment through a sculptural framework but in a much more abstracted sense. I am interested in applying the themes of gravity, transformation, temporality and extrusion within my work to achieve more open-ended outcomes. My work creep (strain) 2012 encroached on the gallery over time, as 250kg of toffee was extruded through a large overhead platform. The toffee descended from its point of suspension to the floor. It slowly spread into a large spill, compressing the space of the viewer over time.

Through my research project I am interested in investigating the way indeterminate materials convey meaning and how this contributes to and affects the encounter with the work. I believe meaning is embedded within materials but that these meanings operate on elusive levels and are highly subjective and fluid. I am interested in creating multiple layered readings of transitive, unstable substances.

Ann-Sophie Lehmann proposes a framework to examine how meaning is derived from materials in her essay ‘How Materials Make Meaning’ (2013). This framework asserts that there are three ways meaning is embedded within materials. These can be characterized by interaction, attribution and comparison/imitation. Interaction with materials involves the direct physical experience of materials and is concerned with sight, smell and touch (Lehmann 2013). This is a kind of objective reading of meaning and is based on physical descriptors of inherent material qualities. At this level meaning is derived from acceptance of the face value of a material (Ingold 2007). Knappett describes this type of derivation of meaning as direct perception (2007).

Attribution is the process whereby meaning is attached to material qualities through the filter of social, cultural and political contexts (Knappett 2007; Lehmann 2013; Tilley 2007). This layer of meaning is necessarily unstable and changes over time and space. It emerges from the relationship between the viewer and the material.

Lehmann proposes that a third way of reading meaning in material is comparison or imitation (2013). This can be described as a type of material transference, whereby the material encountered imitates or represents another material in the viewers mind. Within the context of my practice the perception of meaning in materials is also derived from spatial relationships and the contrast between indeterminate materials and the structures used to support them.

My project In Flux is situated within a rich context of art history, contemporary thought around temporal sculpture and meaning within materials, examples of temporal material transformation within the field of physics and international research into materials as a generative source of art. It is part of a community of practice of artists, working within the themes of temporality, material exploration and material self-determination.

In Flux will investigate a range of transitive, indeterminate materials and their properties, examining the substances’ latent potentials and subjecting them to ‘unauthorised’ processes. The research will be enacted through studio experimentation and documentation and a series of public exhibitions. The proposed sculptural and installation artworks will be temporal material experiences that are transformative of both the material and the viewer.
MAIN OBJECTIVE

The main objective of this research project is to identify new ways of understanding the latent potentials of transitional materials through the languages of sculpture and installation.

AIMS

1. Generate a body of studio works including material tests, photography and video.
2. Create a series of sculptural and installation works and exhibit them at public spaces of display/galleries and the final examination exhibition.

RESEARCH QUESTIONS

1. What can material research, framed within an experimental studio based art practice, reveal about transitional, indeterminate sculptural materials?
2. How can the experimental use of transitional, indeterminate materials in the studio, contribute to notions of expanded sculptural and installation based practice?

METHODOLOGY & METHODS

Drawing on the concepts of ‘New Materialism’, my research methodology locates the studio and gallery as sites of the production of knowledge. ‘New Materialism’ as it relates to art, is an argument for the validity of art practice as a form of enquiry and knowledge production, founded in material processes that, unlike scientific modes of knowledge production, are subjective. Drawing on Iain Biggs and Julia Kristeva, Melbourne based art professor Estelle Barrett (2013) argues that the dominant and most valued form of knowledge production in our society is scientific. This relies on a removed, continual testing of phenomena, with every possible outcome labelled, named and categorised. In contrast, artistic practice has the potential to produce knowledge from material processes that are experiential, based on action, interaction and transformation (Barrett 2013).

Barbara Bolt (2010), artist and academic, furthers this concept, fleshing out the nature of material processes. According to Bolt the handling of materials is at the centre of knowledge production. Through continued interaction with materials a specific type of knowledge is produced. ‘Material thinking’ comes out of the interaction between materials, tools, processes and maker (Bolt 2010).

‘Material thinking’ is a type of first hand knowledge that is derived from studio practice and public presentation of works. This knowledge that comes directly from experience rather than contemplation of conceptual and theoretical knowledge. Barad describes knowing as a tangible experience that requires direct material engagement.

Knowing is a direct material engagement, a cutting together-apart, where cuts do violence but also open up and rework the agential conditions of possibility. There is not this knowing from a distance. Instead of there being a separation of subject and object, there is an entanglement of subject and object. (Dolphijn 2012, p. 52)

The nature of these direct material interactions produces outcomes that encompass “multiplicity, ambiguity and indeterminacy” (Barrett 2013, p. 63).

This gives the possibility for knowledge production that extends beyond that which can be determined and classified with signs and symbols, a knowledge that comes directly from art practice (Barrett 2013).
I will use various qualitative methods for developing and completing this practice-based research project. These are as follows:

- Gather and assemble transitive, indeterminate materials that have latent potential – sometimes different to their ‘authorised’ function e.g. using gelatine to create bubbles
- Subject selected materials to ‘unauthorised’ tests – I spill things that are contained, I drop things that should be held, I contain things that flow
- Experiment with and expand the properties of materials by either allowing or subverting their inherent behaviours
- Experiment with enlarging the scale of studio material tests
- Trials of various forms and material compositions of support structures for the indeterminate materials
- Test experimental studio works and the nature of encounters by display within my peer community
- Observe and document studio tests, material experiments and resolved works – documentation will be in the forms of photography, video and a visual diary
- Present resolved artworks to the public via exhibition

Within this research project I will build upon understandings of transitive, indeterminate materials from within a sculptural installation framework. As I have demonstrated within my contextual review this research is situated within a community of art practice and theory that is concerned with themes of plasticity and fluidity within materials, temporality and relationships between meaning and materials. My research will contribute to this field of knowledge by addressing these concerns mediated through the use of a specific class of indeterminate materials. In Flux: Explorations of material indeterminacy through sculptural practice examines how the mutable boundaries created by transitive materials within objects and their spaces of display, disrupt the stability of the spatial encounter. This research is concerned with how this stability is also affected within temporal installations that utilise material indeterminacy and how embedded, multiple-layered meanings are activated by the encounter with the work.

**RATIONALE**
// GELATINE BUBBLES
// GELATINE SUSPENDED FORMS
// GELATINE SNAKE FORMS
// CUSTARD POWDER
// FAT SPILLS
// FAT ACCUMULATED FORMS
// MALLOWHIP
// LIQUID EDGE
// MATERIAL LANDSCAPES

RMIT postgraduate studio // 2016

SKYE KELL Y / IN FLUX

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This branch of enquiry was initiated by mixing foaming agent into warm liquid gelatine and blowing bubbles into this solution with a straw. This resulted in bubbles that set firm as the gelatine cools over time, with the air trapped inside. I created various tests attaching the bubbles to a string and slowly building accumulated forms. These static forms were interesting but the process of the creation of the bubbles was lost in the final objects.

Further tests resulted in a suspended plastic bladder filled with gelatine solution, with a heating element to keep the gelatine warm and in a liquid state. An air pump pushes air into the liquid via clear rubber tubing. This results in the formation of bubbles that cascade down the bladder and onto the floor, slowly setting into a fixed state. It is a self-generating sculpture that unfolds over time. Once the gelatine reservoir is exhausted the form stops expanding and appears static, though at this point it is actually beginning a new phase of change. Although the gelatine is relatively stable, as an organic substance it slowly degrades over time. The rate of decomposition is dependent on heat and atmospheric conditions.
gelatine bubble details // 2014
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gelatine bubble bladder // studio test 2015
In this phase of the research I tested the ability of gelatine to hold a form when suspended. I mixed the gelatine with liquid glucose. This strengthens the gelatine and helps it retain its moisture when exposed to the air for long periods. This added strength allowed for the creation of suspended forms, made by pouring liquid gelatine into moulds around a central support. When the gelatine is set these objects are un-moulded and dipped in warm gelatine, creating elongated drippy forms.

These sculptural tests are initially soft and wobbly but over a period of weeks they dry out into relatively hard and brittle objects. As the forms dehydrate they shrink and their surface transforms from supple and slick, to rubbery and textured with fine wrinkles.

As the research unfolded in the studio, questions of scale and support emerged. Tests and experiments in the studio were initially primarily focused on the transitional materials. Physical supports to these materials were extemporaneous, using readily available materials at hand such as string, dowel, wood offcuts, masking tape and wooden skewers. These supports are transitional and were used as a temporary measure. As the research progressed out of the studio into public presentation more stable supports were used which provided a contrast to the unstable nature of the indeterminate materials.

Through working with the gelatine and gaining an understanding of its properties and limits I was able to enlarge the scale of the tests in the studio. Moving into the presentation phase of the research, the gelatine suspended forms were scaled up to human size and clear glass rods were used as supports.
foreground // suspended gelatine forms initial tests 2016
This material research involved filling sausage casings with warm dyed-black gelatine and allowing them to set. I sourced two different varieties of sausage casings, which exhibited differing qualities.

Collagen casings are manufactured from animal sourced collagen and are uniform in diameter and available in extremely long lengths. When filled with the gelatine solution and allowed to set, the casing created a matte skin. These forms were very long, flexible and rubbery, gradually drying to a more fixed and firm state over the course of a week. After a couple of months the dehydration of the gelatine was visible, with the forms shrinking and their skin withering, their surface reminiscent of willow charcoal.

Pig intestines are variable in their diameter and are permeable. They were much more delicate to work with and the resulting forms shorter, fatter and much more irregular. The gelatine slowly seeped through the casing as it set, creating a slick, shiny surface.

I also experimented with casting the gelatine in long, soft, plastic moulds. This resulted in forms that had a glossy, reflective, even surface. Without the strengthening element of a permanent casing though, there were limitations to the length that could be achieved with these forms.

gelatine snake form // made using soft plastic mould 2016
Cornflour and water mixed in the correct ratio is a simple example of a non-Newtonian fluid and I have been experimenting with this material in the studio. As I was conducting this research I began to use custard powder which is made of cornflour with added colour and vanilla flavour. When liquid is added to the custard powder it transforms from a dusty beige powder into a moist, vivid yellow substance. If allowed to dry out again, custard powder suspension facetst and cracks, creating a surface reminiscent of dehydrated earth.
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custard powder pile // 2014

studio process images // 2014-15
Kreamolene is a white, coconut-based, solid fat with a very low melting point. Through my research I have been investigating the material properties of this fat. I have created suspended bladders of warm Kreamolene that slowly drip onto the floor. This creates floor spills that slowly solidify in layers with very defined solid/liquid edges. One of the qualities of Kreamolene is that it can melt at warm ambient temperatures which means that floor spills can shift in form over time in the right climatic conditions.
Using Kreamolene I created accumulated suspended forms. These were made by dipping a core material (string, paper, dowel) into the warm fat, letting it cool, and then repeating the process. Slowly the soft white fat accumulates, creating suspended, drippy structures. I created wax forms, using the same dipping accumulative process, that were cast in bronze, which I recast as the internal support structure for these objects.

Continuing my research I investigated expanding the scale of these forms and also the possibilities of change of state within the encounter. As Kreamolene will melt at high ambient temperatures, there is a possibility for the sculptural object to slowly melt and re-solidify as a floor spill. This research was enacted when these accumulated fat forms were shown for public encounter.
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studio process images // 2015

detail // 2015
SKYE KELLY / IN FLUX

bronze form // 2016

bronze dipped in fat // 2016

SKYE KELLY / IN FLUX
MALLOWHIP

Mallowhip is a commercial baking product that is made of gelatine, liquid glucose and other additives. To activate the product you heat it and then beat the liquid to incorporate air as it cools. During this process the Mallowhip increases in volume by up to a third. When freshly made its texture is soft and bouncy like marshmallow. As it is exposed to air over time it develops a hard, brittle shell. I experimented with adding colour to the Mallowhip and created accumulated forms. Suspended bladders of the substance were pierced and their contents extruded. The mallowhip accumulated in a floor pile, slowly growing over time.
This ongoing series of photographs is an attempt to capture the tense and bulging edge of a spill. I have been researching the liquid edge of spills, through physical material tests with various viscous liquids including gelatine, Kreamolene, custard powder suspension and toffee.
gelatine spill // 2016

custard powder, citric acid, vinegar spill // 2014
breastmilk in buckets // 2015

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MATERIAL LANDSCAPES

This is an ongoing series of photographs exploring the formal aesthetic qualities of the transitive materials I work with. These photographs are untitled but I have included a list of their material subjects.

- blooming gelatine // p 109
- blooming gelatine // p 110
- melting fat // p 111
- gelatine pour with bubbles // p 112
- gelatine bubbles with bubbles removed // p 113
- melting mallowhip // p 114
- extruded mallowhip // p 115
- heated mallowhip // p 116
- drizzled custard powder spill // p 117
- grocer powder spill // p 118
- blooming gelatine // p 119
- mallowhip rubble // p 120
- custard powder, acetic acid & vinegar spill // p 121
EXHIBITED WORKS

// INDETERMINATE STATES
// IT ALL FALLS EVENTUALLY

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This exhibition was an installation of sculptural works that changed in form over the duration of the show. The gallery was a large white square room with a raw concrete floor. There was a series of 2.5 - 3 metre long golden, suspended gelatine forms, that were supported by glass rods. There were also a series of slender black gelatine sausage-like forms that were supported by steel hooks. These works were effected by subtle and slow change in their surface, volume and structure during the course of the exhibition. At installation their surfaces were slick and moist, drying and forming a skin over time. There was a small but perceptible change in their form as the gelatine dehydrated, tightened and shrunk. Over the two week duration of Indeterminate States these works changed from being flexible and supple to being firm and rigid.

Also shown were a number of fat works. These were wall-based and were forms made of accumulated white vegetable shortening supported by white cord and stainless steel. The fat has a very low melting point which means these objects are very sensitive to ambient temperatures. The instability of these sculptures is not apparent until the moment of change. During the exhibition the work closest to the door, which was subject to the greatest fluctuation in temperatures, collapsed to create a small pile of fat on the floor of the gallery. This residue created evidence of change which influenced how the remaining works were encountered.

The final work in the show was a suspended plastic bladder filled with gelatine solution, with a heating element to keep the gelatine warm and in a liquid state. An air pump pushed air into the liquid via clear rubber tubing. This resulted in the formation of bubbles that cascaded down the bladder and onto the floor determining the form of the work and slowly setting into a fixed state. This was a self-generating sculpture that unfolded over time. Once the gelatine reservoir was exhausted the form stopped expanding and appeared static. This work was activated during the course of the opening night and was the focus of much public engagement. People spent a lot of time with the work as it evolved and would come and ‘check’ on the work periodically over the course of the five hour opening. There was a strong sense of push/pull with the work, with some people expressing their repulsion but still being compelled to keep spending time with the artwork.

After the opening, the bubble bladder existed as a relatively stable object, in a kind of ‘aftermath’ phase. A sense of temporality was recoverable from the work, the pile of gelatine bubbles extending to the plane of the floor below the suspended form gave information about the unfolding of a material occurrence over time. The work was much stronger though when it was in its ‘active’ phase, operating as a kind material performance or event.

Presenting these works for encounter, it became clear that there were two classes of sculptures in the exhibition. The gelatine and fat works operated at a slow and at times imperceptible rate of change and the bubble bladder that generated change of form in the direct time of engagement. The more subtle rate of change of the fat and gelatine works was rendered static when shown in contrast with the material performance of the bubble bladder. These sculptures became more like artefacts with their embedded material agency difficult to recover by the viewer.

The Bubble Bladder was at its most successful as a work when it was actively unfolding. In this phase the work was mutable and embedded with material agency. This raised multiple questions:

- Does the encounter with the material performance/event/unfolding need to be available throughout the duration of an exhibition?
- If so, how can this be achieved?
gelatine bubble bladder // suspended gelatine snake form
foreground // gelatine bubble bladder
left // gelatine suspended forms
right // gelatine snake form
overleaf // installation view & detail
kreamoline fat pile // kreamoline accumulated form

[Photos: Skye Kelly]
left // gelatine suspended forms on glass rod  above // detail // [Photo: Skye Kelly]
suspended gelatine forms // [Photo: Caitlin Rigby]

accumulated fat forms // suspended snake forms
Notfair was a large art fair/exhibition held in a two-storey disused margarine factory in Windsor. The work I exhibited at Notfair eventually was a large suspended sphere of toffee which was extruded through a net which enclosed it. This work was site specific and was positioned on the first floor of the warehouse. The sphere of toffee was hung from a large hoist that was present in the factory. I positioned the hoist so that the toffee sphere was above two apertures that were present in the floor. The toffee descended from its point of suspension to the floor where it slowly spread into a large spill. As the spill expanded throughout the course of the exhibition, the toffee crept through the holes in the floor and descended in long thin strands to the ground floor of the warehouse.

Notfair eventually used the physical materiality of space as formal construct, to extend the material agency of the work and heighten the temporal experience. The extension of the work over two different spaces allowed for comparative experiencing of the sculpture and required the viewer to re-invest in the work through multiple viewings. It created a complication which destabilised the encounter with the work and lengthened the duration of the material performance. The extension of the sculpture over multiple spaces supported the experience of the unfolding of time and material change.
detail // right // after 6 hours of activation
right // © p 149 // [Photos: Skye Kelly]
SKYE KELLY / IN FLUX

detail // after 1 day of activation

detail // after 4 days of activation
detail // ground floor with coffee descending from the roof
SECOND MILESTONE REVIEW SUMMARY DOCUMENT

IN FLUX: EXPLORATIONS OF MATERIAL INDETERMINACY THROUGH SCULPTURAL PRACTICE

RESEARCH ABSTRACT

In Flux investigates a range of indeterminate, transitive materials through the languages of sculpture and installation. The focus of the research is exploring the latent potentials within certain classes of materials through both a studio-based and exhibition methodology. This project is situated within a rich context of material exploration within art history, contemporary thought around temporal sculpture and meaning within materials and examples of temporal material transformation within the field of physics. In Flux will result in a series of durational, sculptural installation works that examine the mutable boundaries created by material indeterminacy within objects and their spaces of display. These sculptural installation works will be temporal material experiences that are transformative of both the material and the viewer.

In Flux: Explorations of material indeterminacy through sculptural practice is a practice-based research project investigating the following questions:

1. What can material research, framed within an experimental studio based art practice, reveal about transitional, indeterminate sculptural materials?
2. How can the experimental use of transitional, indeterminate materials in the studio contribute to notions of expanded sculptural and installation based practice?

At this midway point in the project the research questions have not been altered and are still at the centre of the work being undertaken. During the candidature to date I have tested, experimented with and created preliminary works from a selected set of transitive, indeterminate materials. Through material research I have investigated the qualities of these substances, gaining an understanding of their material properties. Through handling, manipulating and testing these materials I am gaining an understanding of their specific physical nature and material behaviours. These individual material properties are informing the sculptural outcomes within this project. The nature of a material is intrinsically linked to its sculptural possibilities. The material qualities of these substances are influencing the form, duration and stability of the work.

The aim of this research project is to identify new ways of understanding the latent potentials of transitive materials through the languages of sculpture and installation.

The objectives of this project are to:
// Generate a body of studio works including material tests, photography and video.
// Create a series of sculptural and installation works and exhibit them at public spaces of display/galleries and the final exhibition exhibition.
// Produce an Appropriate Durable Record (ADR) that records the processes and outcomes of the project, documenting both studio based research and exhibition practice.

At mid-candidature I have generated a body of small-scale sculptural studio works using custard powder, gelatine and coconut shortening. I have also produced a number of test videos and photographs, focusing on the liquid edge, to be further refined into completed works. I have compiled a running draft document of my Appropriate Durable Record, which is a recording of studio processes, tests and works. Moving the project forward towards completion, I am refining studio works to exhibit and test within the parameters of public encounter. I will also be expanding the set of indeterminate materials under investigation.

At this stage in the project several themes are emerging as important to the research. The first of these is the importance of physical supports and testing the work outside of the studio context. Up until this point in the research, tests and experiments in the studio have been focused on the transitional materials. Physical supports to these materials have been extemporaneous, using readily available materials at hand such as string, dowel, wood offcuts, masking tape and wooden skewers. These supports are transitional and were initially used as a temporary measure. At this stage in the research it is emerging that these transitional supports are sympathetic to the indeterminate materials, particularly at this small scale, with objects grouped in clusters. I am in the process of casting some support forms in bronze and considering other more stable materials for use in supports. These will provide a contrast to the unstable nature of the transitional supports. I anticipate the change in supports will shift the work considerably. Moving forward with the project further testing of both types of supports within the studio but most importantly out of the studio context is necessary.
unstable substances. Elusive levels and are highly subjective and fluctuates the encounter with the work. I believe meaning is embedded within materials but that these meanings operate on a more intimate scale and is enacted within the studio and gallery spaces.

Robert Smithson's large-scale acts of material research Asphalt Rundown (1969) and Gloucester (1969) are relevant to my project in their explorations into the qualities of the materials involved. In both of these works Smithson enacted direct material interventions in the landscape, using the qualities of the materials and the gesture as an expression of entropy. Richard Serra was also interested in these types of material acts. Serra's Vert List (1968-1968) is a list of inflexible and possible contexts to be applied to materials. Serra used this list as a generative tool for producing works within his practice. Splashing (1968) involved the artist splashing molten lead at the intersection between the floor and wall as a direct material engagement with a liquid substance. Both Smithson's and Serra's experiments are influential to my approach in testing material properties. I subject materials to 'unauthorised' tests, I spill materials that should be contained, I drop things that should be held. My research differs in that it operates on a more intimate scale and is enacted within the studio and gallery spaces.

Within my practice I also create temporal material experiences. Artworks often involve material transformation over time. Of key importance to my practice is The Pitch Drop experiment. This physics experiment was set up to demonstrate the material properties of pitch, a non-Newtonian fluid that exhibits both solid and liquid qualities. At ambient room temperatures the pitch appears to be a solid but it's actually an incredibly viscous liquid. There is much interest in the time taken for the pitch to drop which can take up to 1.3 4 years (Stephenson 2015). As Elizabeth Bube argues in her essay 'Waiting for Art: The Experience of Real Time in Sculpture' (2012), artworks that unfold over time create in the viewer a sense of heightened perception. This arises from a sort of anxiety that builds in the viewer induced by the anticipation of waiting and gives rise to a more fully engaged relationship with the artwork.

In this research project I am interested in investigating the way indeterminate materials convey meaning and how this contributes to and affects the encounter with the work. I believe meaning is embedded within materials but that these meanings operate on elusive levels and are highly subjective and fluid. I am interested in exploring and creating multiple layered readings of transformative, unstable substances.

Ann Sophie Lehmann proposes a framework to examine how meaning is derived from materials in her essay 'How Materials Make Meaning' (2013). These can be characterized by interaction, attribution and comparison/imitation. Interaction with materials involves the direct physical experience of materials and is concerned with sight, smell and touch (Lehmann 2013). Attribution is the process whereby meaning is attached to material qualities through the filter of social, cultural and political contexts (Knappett 2007, Lehmann 2013, Tilley 2007). This layer of meaning is necessarily unstable and changes over time and space. It emerges from the relationship between the viewer and the material. Comparison or imitation can be described as a type of material transference whereby the material encountered imitates or represents another material in the viewers mind (Lehmann 2013). Within the context of my practice the perception of meaning in materials is also derived from spatial relationships and the contrast between indeterminate materials and the structures used to support them.

My project In Flux is situated within a rich context of art history, contemporary thought around temporal sculpture and meaning within materials, examples of temporal material transformation within the field of physics and international research into materials as a generative source of art. It is part of a community of practice of artists working within the themes of temporality, material exploration and material self-determination.

Drawing on the concepts of 'New Materialism', my research methodology locates the studio and gallery as sites of the production of knowledge. 'New Materialism' as it relates to art, is an argument for the validity of art practice as a form of enquiry and knowledge production, founded in material processes that, unlike scientific modes of knowledge production, are subjective. Australian artist professor Estelle Barrett (2013) argues that the dominant and most valued form of knowledge production in our society is scientific which relies on a removed, continual testing of phenomena, with every possible outcome labelled, named and categorised. In contrast, artistic practice has the potential to produce knowledge from material processes that are experiential, based on action, interaction and transformation (Barrett 2013). Furthermore as Barbara Bolt (2010), artist and academic proposes, the handling of materials is at the centre of knowledge production. 'Material thinking' comes out of the interaction between materials, tools, processes and maker (Bolt 2010) and results in a type of first hand knowledge that is derived from studio practice and public presentation of works. This comes directly from experience rather than contemplation of conceptual and theoretical knowledge.

My 'material thinking' involves using various qualitative methods for developing and completing this practice-based research project at mid-candidature, the following methods have been used:

// Gather and assemble transitive, indeterminate materials that have latent potential – sometimes different to their 'authorised' function e.g. using gelatine to create bubbles
// Subject selected materials to 'unauthorised' tests – I spill things that are contained, I drop things that should be held, I contain things that flow
// Experiment with and expand the properties of materials by either allowing or subverting their inherent behaviours
// Observe and document studio tests, material experiments and resolved works – documentation will be in the forms of photography, sketches, video and a visual diary
// Test experimental studio works and the nature of encounter by display within my peer community

I am currently in the early stages of utilizing this method.

// Trials of various forms and material compositions of support structures for the indeterminate materials

During the next cycle of my research, I will use the following set of methods, in addition to the methods above, to bring this research project to completion.

// Experiment with enlarging scale of studio material tests
// Consult with experts from other disciplines within overlapping fields of research e.g. food sciences, fluid dynamics
// Present resolved artworks to the public via exhibition

These activities situate this research within a community of art practice and theory that is concerned with themes of plasticity and fluidity within materials, temporality and relationships between meaning and materials. My research contributes to this field of knowledge by addressing these concerns mediated through the use of a specific class of indeterminate materials. In Flux: Explorations of material indeterminacy through sculptural practice examines how the mutable boundaries created by transitive materials within objects and their spaces of display, disrupt the stability of the spatial encounter. This research is concerned with how this stability is also affected within temporal installations that utilise material indeterminacy and how embedded, multiple-layered meanings are activated by the encounter with the work.

BROADER RESEARCH CONTEXT

In 'Sculpture in the Expanded Field' art theorist Rosalind Krauss (1979) sought to characterize the expanded and diverse notions of what constituted sculpture. Written in 1979 this influential essay explored the multitude of activities, materials and practices that in the previous decade had changed the very nature of what was thought of as sculpture. Krauss described these effects, defining the field of sculpture as 'infinitely malleable' (Krauss 1979, p. 30).

One of the characteristics of this Post-Minimalist era of sculpture was a new focus on materiality (Rahtz 2012). Alongside industrial and geological materials being used in their raw form, ephemeral, more plastic materials were being utilized. In contrast to traditional, durable materials, artists used organic matter, substances such as latex, rope, cloth, leather and fur to create sculpture (Lippard 1973; Ward 2009). In her essay 'Soft Sculpture: Don't Touch, Lick or Smell' curator Lucina Ward asserts that these new 'soft' materials 'emphasise natural forces as gravity' (2009, p. 20) and that their ephemeral nature affords these materials the ability to achieve 'effects of collapsing, melting and disintegration' (2009, p. 25). Building upon the tradition of these historical works I use materials that actually collapse, melt, spilt, erode and disintegrate. These transitive, indeterminate materials embody these actions rather than implying them. These historically ephemeral materials are by comparison relatively stable and durable.

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Robert Smithson's large-scale acts of material research Asphalt Rundown (1969) and Gloucester (1969) are relevant to my project in their explorations into the qualities of the materials involved. In both of these works Smithson enacted direct material interventions in the landscape, using the qualities of the materials and the gesture as an expression of entropy. Richard Serra was also interested in these types of material acts. Serra's Vert List (1968-1968) is a list of inflexible and possible contexts to be applied to materials. Serra used this list as a generative tool for producing works within his practice. Splashing (1968) involved the artist splashing molten lead at the intersection between the floor and wall as a direct material engagement with a liquid substance. Both Smithson's and Serra's experiments are influential to my approach in testing material properties. I subject materials to ‘unauthorised’ tests, I spill materials that should be contained, I drop things that should be held. My research differs in that it operates on a more intimate scale and is enacted within the studio and gallery spaces.

Within my practice I also create temporal material experiences. Artworks often involve material transformation over time. Of key importance to my practice is The Pitch Drop experiment. This physics experiment was set up to demonstrate the material properties of pitch, a non-Newtonian fluid that exhibits both solid and liquid qualities. At ambient room temperatures the pitch appears to be a solid but it's actually an incredibly viscous liquid. There is much interest in the time taken for the pitch to drop which can take up to 1.3 4 years (Stephenson 2015). As Elizabeth Bube argues in her essay 'Waiting for Art: The Experience of Real Time in Sculpture' (2012), artworks that unfold over time create in the viewer a sense of heightened perception. This arises from a sort of anxiety that builds in the viewer induced by the anticipation of waiting and gives rise to a more fully engaged relationship with the artwork.

In this research project I am interested in investigating the way indeterminate materials convey meaning and how this contributes to and affects the encounter with the work. I believe meaning is embedded within materials but that these meanings operate on elusive levels and are highly subjective and fluid. I am interested in exploring and creating multiple layered readings of transformative, unstable substances.
At mid-candidature the focus of the studio research completed can be loosely divided into four categories of enquiry. There is a network of connections between these categories, with running themes of temporality, change of state, accumulation and liquid edge.

TEMPORALITY - GELATINE BUBBLES

I have experimented with mixing foaming agent into warm liquid gelatine and blowing bubbles into this solution with a straw. This results in bubbles that set firm as the gelatine cools over time, with the air trapped inside. I created various tests attaching the bubbles to a string and allowing them to sink and rise to accumulate at the surface. These static forms were interesting but the process of the creation of the bubbles was lost in the final objects. Further tests resulted in a suspended plastic bladder filled with gelatine solution, with a heating element to keep the gelatine warm and in a liquid state. An air pump pushes air into the liquid via clear rubber tubing, resulting in the formation of bubbles that rise up through the bladder and onto the floor, slowly setting into a fixed state. This is a self-generating sculpture that unfolds over time. Once the gelatine reservoir is exhausted the form stops expanding and appears static, though at this point it is actually beginning a new phase of change. Although the gelatine is relatively stable, as an organic substance it slowly degrades over time. The rate of decomposition is dependent on heat and atmospheric conditions. Moving forward with the research, I will be refining the structural and mechanical components of this work and experimenting with expanding the scale.

CHANGE OF STATE - GELATINE SUSPENDED FORMS

I have been testing the ability of gelatine to a hold a fold when suspended, by mixing it with liquid glucose, which strengthens the gelatine and helps it retain its moisture when exposed to the air for long periods. I have been creating suspended forms, made by pouring liquid gelatine into moulds around a central support. When the gelatine is set, I have been unmoulding the forms and dipping them in warm gelatine, creating elongated wobbly forms. These sculptural tests are initially soft and wobbly but over a period of weeks dry out into relatively hard and brittle objects. I have created wax forms, using the same dipping accumulative process, that are being cast in bronze, to trial as the internal support structure for these objects.

ACCUMULATION - KREAMOLENE

Kreamolene is a white, coconut based solid shortening, with a very low melting point. During the research to date I have been investigating the properties of this fat. I have created suspended bladders of warm Kreamolene, that slowly drip onto the floor. This creates floor spills that slowly solidify in layers, with very defined solid/liquid edges. I have also been making accumulated suspended forms, that are made by dipping a core material (string, paper, dowel) into warm Kreamolene, letting it cool and then repeating the process. Slowly the soft white fat accumulates, creating suspended wobbly forms. Moving forward in the research I will be investigating expanding the scale of these forms and also the possibilities of change of state within the encounter. As Kreamolene melts at a very low ambient temperature, there are possibilities for having the sculptural object slowly melt and re-solidify as a floor spill.

LIQUID EDGE

I have been researching the liquid edge of spills, through physical material tests with custard powder suspensions, gelatine, Kreamolene and egg albumen. I have been documenting these liquid edges through photography and video. Within my remaining candidature I plan to refine these photographic and video sketches, to produce resolved media works, that capture the tense and bulging edge of a spill.

OUTLINE OF PROGRESS

In Flux: Explorations of Material Indeterminacy through Sculptural Practice

In Flux investigates a range of indeterminate, transitive materials through the languages of sculpture and installation. The focus of the research is exploring the latent potentials within certain classes of materials through both a studio-based and exhibition methodology. This project is situated within a rich context of material exploration within art history, contemporary thought around temporal sculpture and meaning within materials and examples of temporal material transformation within the field of physics. In Flux has resulted in a series of durational, sculptural installation works that examine the mutable boundaries created by material indeterminacy within objects and their spaces of display.

The objectives of this project are to:

1. Generate a body of studio works including material tests, photography and video.
2. Create a series of sculptural and installation works and exhibit them at public spaces of display/galleries and the final exhibition exhibition.
3. Produce an Appropriate Durable Record (ADR) that records the processes and outcomes of the project, documenting both studio based research and exhibition practice.

At completion I have moved through multiple cycles of studio and exhibition based research. I have generated numerous bodies of small-scale sculptural studio works using a range of transitive materials. I have scaled up and refined selected works and exhibited and tested them in the parameters of public encounter. I have compiled a running draft document of my Appropriate Durable Record, which is a record of studio processes, tests and works.
and material self-determination. In 'Sculpture in the Expanded Field' art theorist Rosalind Krauss (1979) sought to characterise the expanded and diverse notions of what constituted sculpture. Written in 1979 this influential essay explored the multitude of activities, materials and practices that in the previous decade had changed the very nature of what was thought of as sculpture. Krauss described these effects, defining the field of sculpture as 'ininitely malleable' (Krauss 1979, p. 30).

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My project In Flux is situated within a rich context of art history, contemporary thought around temporal sculpture and meaning within materials, examples of temporal material transformation within the field of physics and international research into materials as a generative source of art. It is part of a community of practice of artists working within the themes of temporality, material exploration and material self-determination.

Drawing on the concepts of 'New Materialism, my research methodology locates the studio and gallery as sites of the production of knowledge. 'New Materialism' as it relates to art, is an argument for the validity of art practice as a form of enquiry and knowledge production, founded in material processes that, unlike scientific modes of knowledge production, are subjective. Melbourne based art professor Estelle Barrett (2013) argues that the dominant and most valued form of knowledge production in our society is scientific which relies on a removed, continual testing of phenomena, with every possible outcome labelled, named and categorised. In contrast, artistic practice has the potential to produce knowledge from material processes that are experiential, based on action, interaction and transformation (Barrett 2013). Furthermore as Barbara Bolt (2010), artist and academic proposes, the handling of materials is at the centre of knowledge production. 'Material thinking' comes out of the interaction between materials, tools, processes and maker (Bolt 2010) and results in a type of first hand knowledge that is derived from studio practice and public presentation of works. This comes directly from experience rather than contemplation of conceptual and theoretical knowledge.

My 'material thinking' involves using various qualitative methods for developing and completing this practice-based research project. Some of the methods used include:"

1. Gather and assemble transitive, indeterminate materials that have latent potential – sometimes different to their 'authorised' function e.g. using gelatine to create bubbles
2. Subject selected materials to ‘unauthorised’ tests – I spill things that are contained, I drop things that should be held, I contain things that flow
3. Experiment with and expand the properties of materials by either allowing or subverting their inherent behaviours
4. Observe and document studio tests, material experiments and resolved works – documentation has been in the forms of photography, sketches, video and a visual diary
5. Trials of various forms and material compositions of support structures for the indeterminate materials
6. Test experimental studio works and the nature of encounter by display within my peer community
7. Present resolved artworks to the public via exhibition

These activities situate this research within a community of art practice and theory that is concerned with themes of plasticity and fluidity within materials, temporality and relationships between meaning and materials. My research contributes to this field of knowledge by addressing these concerns mediated through the use of a specific class of indeterminate materials. In Flux: Explorations of material indeterminacy through sculptural practice examines how the mutable boundaries created by transitive materials within objects and their spaces of display, disrupt the stability of the spatial encounter. This research is concerned with how this stability is also affected within temporal installations that utilse material indeterminacy and how embedded, multiple-layered meanings are activated by the encounter with the work.

OUTLINE OF PROGRESS:

At the point of my mid-candidature review I had generated a body of small scale-scale sculptural works and identified a number of key areas of importance moving forward with the project. These included the importance of the physical supports to the indeterminate materials, questions of scale and the need to move the work out of the studio context and into places of public encounter.

During this last phase of the research project I have refined the support structures of the sculptures, enlarged the scale of the works and exhibited the research outcomes in two exhibitions. These activities have completed the last phase of the research and have generated clear strategies for the project examination exhibition.

I will give an outline of the two exhibitions and a discussion of the research findings that came out of these events.
This raised multiple questions:  
// Does the encounter with the material performance/event/unfolding need to be available throughout the duration of an exhibition?  
// If so, how can this be achieved?
TIMELINE

WORK COMPLETED SINCE CCO
CONFIRMATION OF CANDIDATURE PRESENTATION 5 JUNE 2015

JULY – DECEMBER 2015
// Continued to read and research current literature relevant to the project
// Continued material research on selected set of transitive materials
// Created small scale sculptural tests
// Created video and photographic test works
// Continued to document artistic research
// Presented work at ‘Thinking Through Practice, RMIT peer to peer group critique session
// Started to collate documentation for ADR
// Continued to interact with and contribute to RMIT’s arts research community

JANUARY – FEBRUARY 2016
// Continued to read and research current literature relevant to my project
// Continued material research on selected set of transitive materials
// Continued to document artistic research
// Created small scale sculptural tests
// Fabricated waxes for casting in bronze, for support structures of gelatine suspended objects and Kreamolene accumulations
// Prepared draft ADR
// Prepared presentation for Mid-Candidature Review

SECOND MILESTONE REVIEW PRESENTATION 18 FEBRUARY 2016

MARCH – JUNE 2016
// Conducted material research with chicle, gelatine, Kreamolene, Mallowhip
// Explored sculptural possibilities of the static charge of gelatine granules
// Ground back, cleaned and polished bronzes for support structures
// Trialled different support structures for indeterminate materials
// Experimented with grouping sets of differing material objects together
// Experimented with combining transitive materials into singular objects
// Continued to document artistic research
// Continued preparation of ADR
// Continued to interact with and contribute to RMIT’s arts research community

JANUARY – AUGUST 2017
// Prepared works for exhibition
// Exhibited preliminary works derived from my research proposal at Testing Grounds
// Reflected on outcomes from exhibition and the questions posed from the research
// Continued to document artistic research
// Continued preparation of ADR
// Continued to read and research current literature relevant to my project
// Continued to interact with and contribute to RMIT’s arts research community

FEBRUARY – APRIL 2018
// Prepared presentation for Completion seminar
// Planned resolved sculptural works for examination
// Finalised time and exhibition space for examination
// Continued to read and research literature relevant to my project

THIRD MILESTONE REVIEW PRESENTATION 18 APRIL 2018

MAY – JULY 2018
// Prepare and finalise resolved sculptural work for examination
// Continued to document artistic research
// Edit, format and finalise ADR

ADR SUBMISSION DUE 16 JUNE 2018
EXAMINATION EXHIBITION PLANNED FOR WEEK FROM 17 JULY 2018
I WOULD LIKE TO EXTEND DEEPEST THANKS TO THE INCREDIBLE PEOPLE THAT HAVE BEEN INSTRUMENTAL TO THIS PROJECT COMING TO FRUITION.

TO MY SUPERVISORS, GREG CREEK AND FLEUR SUMMERS, THANK YOU SO MUCH FOR YOUR UNFAILING GUIDANCE, SUPPORT AND ENCOURAGEMENT. IT'S BEEN SUCH A PLEASURE AND PRIVILEGE TO WORK WITH YOU BOTH.

THANK YOU TO PETER CRIPPS, SIMON PERRY AND DON GORE, WHO HAVE ALL HAD A HUGE IMPACT ON THE DEVELOPMENT OF MY PRACTICE. SUPER SPECIAL THANK YOU TO NEALE KENNY, WHO ALWAYS HAS THE ANSWERS.

BIG THANKS TO JOHN HALL, YOUR SUPER PROBLEM SOLVING, FABRICATION AND INSTALLATION SKILLS HAVE BEEN INVALUABLE.

LOVE AND CHEERS TO VITTORIA DI STEFANO AND REBECCA DELANGE, SO GREAT TO HAVE SHARED ART STUDY LIFE WITH YOU BOTH.

SUPER GRATITUDE TO SIMON PERICICH, YOUR DESIGN, EDITING AND LAYOUT SKILLS ROCK!! THANKS FOR YOUR PATIENCE AND DEDICATION TO GETTING THE JOB DONE.

THANK YOU TO EL YSE MABERLEY, JOHANNA FAIRLEY AND GEORGIA KELLY FOR YOUR KEEN EDITING EYES.

THANKS TO ANTON BAKKER FOR YOUR PRINTING ADVICE AND SKILLS.

HUGE LOVE TO MY FAMILY AND FRIENDS FOR YOUR AMAZING FRIENDSHIP DURING THIS PROJECT AND HELPING CARE FOR MY CHILDREN, THANK YOU SO MUCH: GRANDPA LES, JANE, STEVE, JO, JOHN, CAPPA, JAZZ, ANTON, EL YSE, SAM AND JASMINA.

TO MY DEAR PARENTS, ROSS AND GEORGIA KELLY, WHOSE ABSOLUTE AND UNFAILING SUPPORT HAS MADE THIS PROJECT POSSIBLE. THANK YOU BOTH SO MUCH, FOR ALL OF YOUR LOVE AND ENCOURAGEMENT AND CARE. YOUR CONSTANT BELIEF IN ME IS THE GREATEST GIFT.

FINALLY, UNENDING LOVE AND GRATITUDE TO MY CHILDREN, LILITH AND AURORA AND MY PARTNER IN LIFE, LOVE AND ART, DUNCAN FREEDMAN. YOU GUYS ARE THE BEST.