Holding the curve - an art practice investigation

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy, Architecture and Design.

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RMIT University
August 2013
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 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.

Belinda Winkler

August 14, 2013
Acknowledgements

I would like to express my sincere thanks to my brilliant supervisor Professor Richard Blythe, for his invitation to participate in this visionary program. Richard navigated my path through this PhD journey with steady guidance and timely, astute advice. I would also like to thank Dr Marcelo Stamm, whose insights were both inspiring and generous, and Ellen Jensen, whose encouragement and eye for detail was invaluable. And many thanks and gallons of gratitude must go to the inordinately helpful Diane Davidson.

I am so very grateful for the support and encouragement of the late Dr Fred Fisher and Dr Llewellyn Negrin in the early stages of this project within the University of Tasmania, and to my friend and mentor Kevin Perkins for his inspiration and belief in me before, during and beyond this PhD.

I would like to thank my wonderful friends who have encouraged and assisted me throughout this research, especially Jenny, who with good humour and wisdom has contributed so much to this project.

The sublime, subtle and evocative photography of my partner Peter has elevated this document and transformed my very practice. I thank him from the bottom of my heart for his unconditional love, support and remarkable energy throughout this PhD.

And last, but by no means least, I would like to thank my family - my steadfast and loving mother Beverley whose delight in creativity and learning is a constant inspiration, my eternally wise sister Sally, my father Colin and my extraordinary children, Jack, Ned and Molly (little Molly - who has so willingly brought to this research insight beyond her years and lent her beautiful face and hands to so many images within this document). None of this would have been possible without their encouragement, understanding, endless patience and love.

This research has been generously supported by RMIT School of Architecture & Design through the School Research Committee Funds.
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The Story of a Journey,¹ told in five parts:

1. The nature of the journey
2. The stages of the journey
3. Conversations along the way
4. Reflections on the journey
5. Where to next? – the forward story

What else should our lives be but a continual series of beginnings, of painful settings out into the unknown, pushing off from the edges of consciousness into the mystery of what we have not yet become, except in dreams that blow in from out there bearing the fragrance of islands we have not yet sighted in our waking hours...²

David Malouf

¹ Tom Porter describes the open-ended journey as, “an adventure into the unknown, one filled with risks but offering the exhilaration of the unexpected.”
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Please note:

It is intended that the following schematic, *Locus of the Research Concepts*, act as a constant visual reference throughout the reading of this Research Catalogue.

In hardcopy, the schematic can be lifted out, unfolded and placed above the Catalogue when reading.

In digital form, the schematic can be bookmarked in Adobe Acrobat.
exploring spaces of tension through form and photography

simulated, rather than actual, compression and tension
transforming planar curls into compound, 'bodily' curves with stretched 'skins'

perceptual tensions generated through forms created with compression and tension

curves generated through compression, tension and torsion

exploring scale through photography

cross-fertilization of art and design

the 'plaster mould aesthetic', juxtaposing flat white planes with smooth organic compound curves

searching for the evocative curve

relational tension - establishing tension between forms through spatial arrangement

design of physical and photographic presentation to accentuate the reading of tension

chronological progression of ideas

linked thoughts

a discovery, leading to a key shift

links to projects that trigger a realisation,

stress forces as form finding and making

seminal works

works that manifest key shifts in the practice

Realisation of the need for stress forces

reflective process

exploring the serendipity of form-finding using compression and tension - seminal process

in the genesis of the curve

locus of research concepts

an art practice investigation

belinda winkler

the creation of planar curves through placing materials in tension
1

The nature of the journey
Introduction

Warm, silky-smooth plaster... Soft, dove-grey, dewy forms emerging from their moulds... A maker by nature, I am happiest when covered in plaster and surrounded by an array of fresh warm casts, each imbued with the tension and pressure of its creation and loaded with potential. There is an intrinsic delight in the act of making, of using the hands and mind to create something that has not existed before, of bringing life to form. At once challenging and immensely satisfying, the pleasure I receive from the act of making is the constant motivation for my practice. Whilst I regard myself first and foremost as a ceramicist, I have an active practice that spans ceramics, sculpture, public art and design. For some years now, this practice has been intimately connected to my PhD research, which is a journey that has taken me down many roads – some intriguing, some revelatory, others extremely challenging – and whether the results were positive or otherwise, each has contributed to my mental space and transformed the way in which I practice.

The path of my PhD has not been one of theoretical extrapolation, but rather one of reflective, practice-based research, undertaken through the making of and reflecting upon sculptural forms and designed objects, and contextualised within a broader community of practice. Through the research I explored the evocative curve within form and endeavoured to develop an understanding of my use of the curve in surface and form and its potential to generate identifications and connections: sensually, emotionally, imaginatively and aesthetically. Dr Leon van Schaik proposes that bodies of knowledge are embedded in creative practices, knowledge that can be “revealed through the medium of design itself.”¹ My intention is to provide, through an explication of the

research, a detailed examination of my creative processes and my emerging understanding of the way in which I design, and to communicate the discoveries, insights and understandings that the reflective process has delivered. In doing so, I seek to contribute to art and design discourse in two connected but distinctive areas. Firstly, there is the area of creative practice and the body of knowledge surrounding the way creative practices actually work. Secondly, the research seeks to contribute to a body of knowledge that is focused on embodied perception, memory and meaning within the realm of the object, while concurrently participating in, and adding to, a dialogue revolving around the potential that lies within material-based form-finding and the physical act of making, exploring the inherent connections of these processes to an embodied perception of the object.

This Research Catalogue is the account of an iterative journey, each step leading to the next, each informing and evolving the research, each presenting possibilities, problems, solutions and then further possibilities: a cyclical process of searching...and re-searching. Rather than to provide a complete documentation of the entire journey, the purpose of this Catalogue is to provide an overarching description of my research: tracing the iterative process of making and reflecting; detailing my extensive reflections upon the manner in which I conceive, produce and describe the sculptural forms and designed objects that combine to form my practice; identifying key projects; describing decisive moments in which the practices of my ‘authorities’ have intersected with my own process, leading to discoveries and revelations, and identifying the insights and knowledge that have resulted from the research.

The Catalogue takes the form of a story told in five parts. Chapter One describes The Nature of the Journey, discussing my research methodology and providing an overview of the design research.
Chapter Two, *The Stages of the Journey*, “fights close to the bull”\(^2\) as I theorise “in the mode of practice”, \(^3\) alternating between getting “as up-close as possible, with all sensitivity to detail”, \(^4\) and stepping back, allowing for a broader picture to be painted. Within this chapter I articulate in detail the iterative nature of the research, moving through three phases of the reflective process and incorporating the conceptual and technical aspects of the research along with noting the influence of mentors, authorities, challengers and peers upon particular projects. Stepping into the very practice itself,\(^5\) this chapter provides an in-depth study of key works in this iterative journey, those that have either instigated or that manifest shifts in my practice. Concurrent to this discussion are my reflections upon the gaps, discoveries and watershed moments encountered during the course of the research.

Underlying both Chapters One and Two is the mapping out and discussion of the field, within the domain of creative practitioners in which I locate my practice. This field consists of sculptors, ceramicists, designers, architects, theorists and philosophers, all engaged in their own very particular way in concepts of embodied perception, haptic connection, physical and perceptual tensions, and sensuous phenomena.\(^6\) The members of this diverse group are linked by a shared language with its origins in the curve within surface and form. The intersections of my practice with the members of this group have, in many cases, delivered insight, and brought understanding or confirmation. On occasion, my works approach those of my community of practice and yet, no matter how close I draw to the work of these practitioners, be it in a physical or conceptual sense, my work differentiates itself from

\(^3\) ibid., p. 2.
\(^4\) ibid., p. 1.
\(^5\) ibid.
this group, finding its own expression within a set of similar concerns and thereby contributing to a shared dialogue.

Chapter Three, *Conversations Along the Way*, focuses on a catalogue essay and critical review, both of which accompanied my solo exhibition at the Bett Gallery Hobart in 2012, one that presented a body of work that responded to the reflective process and from which significant breakthroughs in the understanding of my practice occurred. The following chapter, *Reflections on the Journey*, discusses key shifts in my understanding that have emerged through these ‘conversations’ and through the reflective process. The fifth and final chapter, *Where to next? – the forward story*, is a summative piece that articulates key research outcomes, identifying two bodies of knowledge within which I position myself and where, through my research, I seek to make a contribution. Within this chapter I discuss possible and in-progress applications of my findings and look to the implications of the reflective process of my future practice.

While extensively illustrated, this Research Catalogue is nonetheless a written, language-based reflection. However, in reality, my reflections are primarily visual in nature. Thus, I have devised a schematic, designed to accompany this Catalogue, one that is “in the mode of showing rather than saying.”7 The fold-out schematic, inserted inside the front cover of the Research Catalogue (and to be placed above the Catalogue while reading), provides an overview of the research. An image-based representation of a very visual process, this poster illustrates reflective practice in which “the locus of research concepts [lies] within the work itself and for which words and written language are an optional tool for teasing out.”8 The schematic illustrates a chronological progression of ideas; seminal processes and works; projects that have triggered discoveries and realisations and, with

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7 M Stamm in van Schaik, op. cit., p. 29.
8 Ibid., p. 30.
this, have delivered insight and thus led to key shifts in my practice; works that manifest these key shifts; and projects that have triggered ideas and designs for new works resulting from the reflective process, revealing the influence that past works have had on current and future works. This is a visual explanation of the creative process at work, one that reveals the "...dynamic realm of possibilities embedded in ongoing and past practice." 9 My intention is that it acts as a constant visual reference for the reader, allowing them to place specific works, written accounts and explanations within the framework of the research as a whole.

In conjunction with an examination exhibition and associated presentation, this Catalogue maps my journey through the reflective process: documenting key projects; describing moments of insight within them where understanding of deficits and/or possibilities occurred and discoveries were made; explicating my emerging understanding of the condition for the possibility of the curve as it appears in my work, and tracking my engagement with concepts of visual and tactile perception, subjectivity, memory, and the aesthetic experience of the object – a process that reveals my growing understanding of the interconnected nature of physical and perceptual tensions and their role in the activation and apprehension of the object.


Here Stamm is discussing a notion developed in conversation with Blythe. Blythe first referred to this concept in:

Blythe, R, A Terroir of Terroir (or a brief history of design-places), Doctor of Philosophy, RMIT University, 2008, pp. 46 - 54.

1. The Nature of the Journey

Harald Welzer: It’s rather like a writing experience in which an entirely different text from the one you had originally planned emerges at the end.

Karin Sander: Exactly. The questions are clearly defined, but in coming to grips with the situation you encounter, the questions and also the type of answers you are looking for begin to change, and in the end something emerges that you had not previously envisaged. This is precisely what motivates you to do anything in the first place. If I could see in advance how a project is going to end, I’d have absolutely no desire to carry it out. The realization, or the result, must surprise me too.

This conversation between German sculptor and installation artist Karin Sander and researcher Professor Harald Welzer is focused on the act of designing. Sander and Welzer’s emergent approach to the design act reflects my own way of designing and informs this PhD. Sander speaks of clearly defined questions and possible answers morphing and changing in the course of designing and making a work. The excitement and trepidation of commencing a new body of work and, for that matter, a PhD, is captured by Sander’s words, as is the shifting nature of the design process. Similarly, my PhD research began at the University of Tasmania under a traditional Fine Arts PhD framework and concluded within RMIT University’s Invitational Reflective Practice-based Program, a change in approach that, at the outset of the research, I could never have anticipated. Sander refers to beginning with clearly defined questions and, indeed, as I commenced my research at the University of Tasmania I embarked upon the process of investigating the answers to a discrete group of connected

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11 ibid.
research questions. And yet, as Sander relates, “the questions and also the type of answers [I was] looking for began to change.” 12 With each investigation, new questions emerged, ones that seemed to have greater impetus than the originating ones.

A traditional framework asks the researcher to define a series of research questions or problems from the outset that will be addressed in the course of the research. 13 By contrast, RMIT’s Invitational Reflective Practice-based Program asserts, “Research does not begin with a question but rather in a close observation of the research subject which is designing.” 14 These observations are directly grounded in a close examination of the process of the making of the work as a means through which one can gain important insights into the nature, quality and further potentials of the work. Of course both methods have their strengths; for me, however, as a creative practitioner, the potential long-term benefits for my practice as a whole are far greater due to the reflective practice-based framework, where the type of research is one that is:

… concerned with the nature of practice and leads to new knowledge that has operational significance for that practice … The primary focus of the research is to advance knowledge about practice, or to advance knowledge within practice. Such research includes practice as an integral part of its method. 15

A reflective practice-based method addresses the whole practice as opposed to a discrete aspect of that practice.

Partway through my research, I found myself, through a series of

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12 ibid.
14 Meeting with Dr Richard Blythe and Dr Marcelo Stamm at Raincheck Lounge, Hobart 8th June 2011.
15 Candy, op. cit., p.1.
happy coincidences, at an RMIT GRC \(^{16}\) where I observed reflective practice and practice-based research in action. What I saw, over the course of the GRC weekend, was enlightening and exciting all at once. An analysis of the act of designing was the focus, as each candidate spoke of their research through designing and of the reflective process, revealing shifts and changes in their practices, exposing gaps, and revealing possibilities for new directions to pursue. There was also much discussion centred on reflections of the very act of designing and making, and the conversations, ideas and experiences shared with others in the process, revealing that, fundamental to this reflective practice-based approach to research is that “knowledge is inseparable from practice. It is not possible to know without doing.” \(^{17}\) What also emerged from the GRC weekend was a practice-based model where the main focus of the research was to “bring to the surface evidence about what designers actually do” \(^{18}\) and where research was conducted “in the medium of design itself” \(^{19}\), acknowledging that, “design practice contains bodies of knowledge that can be revealed through the medium of design.” \(^{20}\) This model does not have practitioners begin their research bound by the narrow parameters of a specific research question but focuses rather on the understanding and development of their active practices. This encounter with the GRC weekend eventually resulted in my transfer from the University of Tasmania to RMIT’s Invitational Reflective Practice-based Program under the supervision of Dr Richard Blythe.

The initial research, within the framework of the University of Tasmania, explored the dynamics of curve and line in conjunction with the phenomenological and psychological responses resulting

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\(^{16}\) GRC is the Graduate Research Conference, now renamed to PRS – Practice Research Symposium, “a change that attempts to identify the strategic focus of [the] research and postgraduate training program around design practice research”: RMIT University | Melbourne | Australia. “Practice Research Symposium (PRS) - RMIT University.” Accessed January 17, 2013.


\(^{18}\) van Schaik in van Schaik, op. cit., p. 3.

\(^{19}\) Stamm in van Schaik, op. cit., p. 28.

\(^{20}\) van Schaik in van Schaik, op. cit., p. 40.
from the work. Over time, the research evolved to encompass the curve in line, plane and volume, which in turn led to the discovery of the importance of stress forces in the creation of the curve within my work – a gradual realisation brought about through constant conversations with mentors Kevin Perkins and Dr Fred Fisher, as they examined my working methods. This was further refined, with the benefit of assisted reflection at RMIT, to the notion of the genesis of the curve, an investigation of the becoming – a material-based exploration with an emphasis on the physical, bodily act of making and the revelations generated in the process.

The significance of this research path is that it was an iterative one, reflecting incremental steps in the development of my understanding of the nature of my practice and ways of working, and revealing the exposure of gaps and my subsequent attempts to fill these gaps – a cyclical and iterative research processes of searching, reflecting, re-search, re-considering and re-evaluating and re-searching again. Although drawn from a scientific research methodology article, the following passage clearly articulates the value of an iterative approach to research:

Ultimately, the key to a successful research project lies in iteration… It is easy to think of research as a step-by-step “1,2,3” process, but it is important to be fluid and open to change. Oftentimes, by discussing the research project with advisers and peers one will find that new research questions need to be added, variables need to be omitted, and other changes made. As a proposed study is examined and re-examined from different perspectives, it may begin to transform and take a different shape. This is to be expected and is a component of a good research study… In conclusion, there is no one formula for developing a successful research study, but it is important
to realize that the research process is cyclical and iterative.21

The iterative approach to design research is one supported and encouraged by the RMIT framework. Dr Leon van Schaik, the initiator of the Invitational Reflective Practice-based Program, developed the notion of the ‘Scholarship Cone’,22 pictured on the centre-left in van Schaik’s ideogram below, to explain the way this specific form of reflective research is structured:

22 van Schaik in van Schaik, op. cit., p.8.
23 Ideogram by Professor Leon van Schaik, ibid., p. 5.
The cone model identifies iterative steps based on the concept of the gap. In this context, the term gap “signals that something is missing, that it requires filling or bridging.” 24 The practitioner researcher travels from the base of the cone, where their existing practice is located, upward, through several tranches of work, several iterations of the reflective process, as he or she examines past propositions, identifying a gap between where they currently are and where they would like to be, along with examining others who have tried to fill this gap. The practitioner researcher then makes some work to fill that gap, evaluating that new work through the review process and identifying how this has changed the nature of the gap. The gap is then redefined, revealing possibilities for new works that attempt to fill the gap. Once complete, these new works provide further material for reflection from which further gaps may surface. This iterative process continues, usually through three tranches of work, until the practitioner researcher reaches the “PhD moment”, 25 a significant moment where one is in “the position of being able to look back over the research and see how to communicate the research through a doctorate” 26 – and able to draw a thread through all stages of the reflective process, conveying the shifts in understanding of the driving urge of the work and of the mental space in which one designs.

Integral to this process is an examination of others who have tried to fill similar gaps – others, in this instance, referring to a community of practice, and one of mentors and authorities, in the broader context in which we work. The term community of practice refers to the people who form an active practitioner’s community, those people with whom one shares thoughts, stories, experiences and knowledge – both tacit and explicit. Communities of practice are the conduits through which techniques are learnt.

24 Stamm in van Schaik, op. cit., p. 44.
ideas are discussed, expanded and/or refined, professional networks are extended and horizons are expanded. Dr Marcelo Stamm, Vice-Chancellor’s Senior Research Fellow, RMIT, in *Creative Practice Research Model: What We Do, How We Do It, and What We Discover*, counterpoints local, concrete authorities with the construct of distant and abstract cold authority. Stamm refers to the often-institutionalised problem of referencing “generic stock authorities or some intellectual establishment identified or discovered ex post”. In my case, this was a short, prescriptive written list of distant superstar references, comprising Anish Kapoor, Richard Serra, Santiago Calatrava, Ellsworth Kelly, Ron Arad, Barbara Hepworth and Eva Zeisel. The reality is that the mental space in which we design is primarily shaped through the actual, real, authentic interactions that occur within one’s community of practice. Domains such as theory and philosophy often contain noteworthy overlaps – intersections that provide a different way of seeing a shared thought, process or interest. Such intersections have the potential to “open up a space of possibility (a crack in the surface of the existing condition) in the creative work itself.” However, it is a close examination of the work itself that provides the most fertile ground for reflective research and the site from which theories and propositions regarding the practice, and the design process in general, are developed. Stamm poses the following questions with regard to the emergence of an individual’s situated and situational spatial intelligence:

Who did [I] listen to? Which authoritative scenarios played a constitutive role in [my] particular eidetic archives, mind space and spatial intelligence? Who is regarded as a

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27 Stamm in van Schaik, op. cit., p. 38.
28 ibid.
29 List compiled whilst at the University of Tasmania, under a framework that advocated no more than seven ‘contextual references’ to be discussed in the exegesis.
source of authoritative affirmation, and whose critiquing
expertise matters? 31

These questions, paired with the following task set by my
supervisor, helped me to understand the nature, identities and
influence of my authentic community of practice. The task to which
I refer was presented to me on commencing at RMIT, by way of
preparation for the forthcoming GRC. Blythe suggested that I
reflect upon my practice in terms of the work I do, how I do it, what
my concerns are when I do it, and what I have discovered while I
am doing it, noting that:

This explication can then be 'placed' in a broader
community of practice by introducing your 'authorities' at
moments when their work intersects with your own process
in a small discovery; this is more important that what
design theorists say, it is the site of the generation of
theory, your theories, that actually matter.32

Blythe also pointed out that I should look closer to home during
this process, turning my attention to the people with whom I
actually work, for example Les Blakebrough, an internationally
renowned ceramicist whose studio was, at the time, next to mine
and with whom I regularly conferred in regard to the vagaries of
casting with his porcelain, Southern Ice. Interestingly, in their
essay Tacit Knowledge – Making it Explicit, Dr Peter Howlett and
Prof. Mary Morgan provide an example of tacit knowledge in the
moulding and firing of porcelain.33 And, indeed, working alongside
the likes of Les Blakebrough as well as Leicester Cooper (a
ceramicist of high repute who had, in turn, learnt his craft from
people such as Finnish master model- and mould-makers Matti

31 Stamm in van Schaik, op. cit., p. 36.
32 Email from Richard Blythe to Belinda Winkler 17 October 2011.
33 Howlett , P & M Morgan. “Tacit Knowledge – Making it Explicit.” Economic History Department,
London School of Economics. Last modified 2010.
www2.lse.ac.uk/economicHistory/Research/facts/tacit.pdf.
Sorsa and Pekka Vuorisalo from Finland’s Arabia\textsuperscript{34}, allowed for the transfer of tacit knowledge. One can only glean so much from reading slip-casting manuals; in the end, the experience of watching, listening and learning in real time with practitioners who have demonstrated mastery in their field is irreplaceable.

In the course of reflecting upon my practice, a number of turning points, watershed moments, shifts in perceptions, choices and actions emerged that were indeed inextricably connected to intersections between the work of my authorities and my own processes – be they conceptual, aesthetic and/or technical. Thus began the process of developing a more considered and, above all, \textit{real} understanding of my community of practice, one that would be progressively revealed to be centred on practitioners, theorists and philosophers whose work and ideas engage in concepts of embodied perception, physical and perceptual tensions and sensuous phenomena\textsuperscript{35} and who, through their active practices, have developed technical- and material-based knowledge in the creation of form. A distinguishing characteristic of the works of my community of practice is their use of, or theories regarding, the curve or, more specifically, the reductive curve, and the role of that curve in the activation and apprehension of the object or, in some cases, of the image.

Early in the reflective process, my growing awareness and understanding of the nature of my actual working community of practice was revealed in the way I chose to consider and communicate this community, the account of which had moved progressively from the short written list of, at times, tenuously associated and distant superstar references, to a visual massing

\textsuperscript{34} Arabia is an internationally renowned Finnish ceramic design company http://www.arabia.fi/web/Arabiawww.nsf/en/home.

of images of the works of authentic members of my community of practice, centred on moments of intersection between my work and that of my authorities:

These images, displayed on a three-metre-long poster, provoked much discussion at the Spring 2011 GRC, much of which revolved around the actual relevance of each practitioner included. By way of example, Dr Paul Minifie questioned the inclusion of Anish Kapoor and Richard Serra, suggesting that, while both used stress forces in the creation of their works, their intent was entirely oppositional to mine, whereas Jon Tarry wondered why I had not included Constantin Brancusi and Isamu Noguchi as he could see many an intersection between their work and my own. In truth, I had long been drawn to Brancusi and Noguchi and referred to images of their works when in the midst of creating my own, but had yet to sort out exactly who was influencing the mental space in which I design. In response to the ensuing conversations around Minifie and Tarry’s questions, van Schaik suggested that I make a three-dimensional model explaining my community of practice and my relationship to each of them – one that would allow for this community to change and grow with my practice. In van Schaik’s words:

Who else is in that zone with me and why is what they’re doing not enough, why do I have to do it? Because they haven’t quite got where I think I want to go, and I haven’t

36 GRC Presentation Poster focusing on community of practice – designed by Belinda Winkler for the October 2011 GRC.
got there either yet, and this is an ongoing thing because every time you think about something there’ll be more people that come into it.\textsuperscript{37}

Thus, on my return to Hobart, I made a very simple version of this model and set it up in the corner of the studio and, as van Schaik had anticipated, new mentors, authorities, challengers and peers emerged with each new project: at last count, there were around 50 different ‘people on the table’, each of whom has contributed – or is currently contributing – to my spatial intelligence and to the mental space in which I design. Each time I make a change to the model, I photograph the change; thus, when all the photographs appear in sequence, I can observe the ways in which my community of practice shifts according to the nature of my work.

\textsuperscript{37} L van Schaik, RMIT GRC, Belinda Winkler presentation, October 2011.

\textsuperscript{38} Three-dimensional model, immediately after RMIT GRC October 2011, explaining my community of practice
Second iteration of the three-dimensional model, explaining my community of practice

Fourth iteration of the three-dimensional model, explaining my community of practice
The developments in the model of my community of practice occur not only through changes in my work, but also through shifts in my thinking about the very real nature of this community and who its members might actually be. This three-dimensional model is a tangible, 'quick and dirty', working, studio-based model that serves to clarify my own thoughts and research and has the added benefit of acting as a tool through which I can explain and discuss my community of practice with students and other visitors to the studio. However, for the purpose of ease of communication to a larger audience within PRS presentations and similar situations, I also took the time to map these changes graphically, in both a retrospective and current sense. I based the graphic representation on the structure of a three-dimensional model, with those practitioners closest to me being the most relevant with regard to current projects and thought processes, while on the periphery are those who play a role in the mental space in which I design but whose work is not in my direct sphere of reference at the time. With its origins in van Schaik’s notion of a three-dimensional model, the schematic version proved to be an extremely useful tool for reflection with regard to the nature of my work as my thoughts change and develop and new practices enter the sphere of my awareness. The schematic diagram is in a constant state of flux as I move between projects. It is an immediate, clear and effective thinking tool that, when viewed in the progressive iterations below, reveals my developing understanding of, and connections to, my community of practice:
These progressive diagrams offer a detailed visual explanation of the shifting nature of the intersections of my own practice and those of others. Constellating around my practice, as represented by the midpoint ellipse featuring a detail from one of my works, are the members of my community of practice, each of whose position, relative to me, is based on their current relevance to and influence on emerging bodies of work. This effectively illustrates the mental space in which I design, as I shift between projects. These shifts and changes are represented within these schematics as smaller constellations that gather and disaggregate and re-gather, as projects evolve. The far-left constellation in the final diagram (no.

41 Progressive schematics explaining my community of practice. Each is included at full size at the end of each relevant section and within the Appendices of this Research Catalogue.
2), for example, is specific to a developing body of work that explores spaces of tension through form and photography. This new constellation has developed as a result of overwhelming feedback from the panel of my October 2012 PRS presentation. The panel felt unanimously that I should pursue an exploration of the spaces of tension, both within my forms and in collaboration with Peter Whyte’s photography. As this project emerges, I have been considering the work of other practitioners who investigate similar concerns. These practitioners have, within my schematic, formed a cluster, a constellation, that includes Peter Whyte, Ellsworth Kelly, Richard Serra, Gwyn Hanssen Pigott, Barbara Hepworth, Marie Torbensdatter Hermann, Kevin Perkins and Robert Morris, each of whom manifests, within their work, an interest in compression of space and the tension that this moment generates. Perkins, Morris and West appear concurrently, within several constellations as their influence on my mental space has been revealed, through the reflective process, to be a constant through much of my practice. Each, in their own way, has impacted the development of not only the Spaces of Tension project, but also the Dimple and Swell project and, before that, projects such as Balance Point. Similarly, Kelly and Hanssen Pigott appear within several constellations over the time of the research, exposing their influence upon my practice as significant and ongoing.

The very real and ongoing effect that the practices of others can have on a creative practitioner’s “situated and situational spatial intelligence” is illustrated in a letter that artist Gwyn Hanssen Pigott wrote to the Art Gallery of Ballarat in 2006:

The protracted firing to very high temperatures made the pots dense, with heavily ashed surfaces and surprising flame patterns. Results were unpredictable, exciting. I was

42 Stamm in van Schaik, op. cit., p. 36.
forced to simplify shapes, and turned to Giorgio Morandi’s sketches for inspiration for bottle shapes and strong Italianate bowl forms to withstand the elemental firing. This led to looking at negative spaces, groupings – and my first still life: the beginning of a new ceramic adventure.\(^{43}\)

Hanssen Pigott elaborated on this intersection in an interview in 2008 where she explained that it was, in fact, 16 years previous to that pivotal firing that she had first encountered Morandi’s paintings:

I came across the huge 1972 retrospective exhibition of the artist Giorgio Morandi, who at that time I didn’t know anything about. He was a great artist of both landscape and still life. I just loved his work, I had never come across anything like this that I responded to so much. His still life groups were so very quiet, very intense, very pulled back. I started looking more and more at Morandi’s work, but


because of the pots I was making at the time, I didn’t connect Morandi’s still life paintings with my own work. They were just stored at the back of my mind. One of the things that I loved about Morandi’s paintings were the spaces in between the shapes and how these spaces were used.47

Just as the work of Morandi became a vital part of Hanssen Pigott’s mental space, Hanssen Pigott’s strong influence on my own work is apparent, and yet, as closely as Hanssen Pigott draws to the work of Morandi, her work remains unique and independent. Similarly, in the development of the Spaces of Tension project, I have drawn in very close to nine practitioners, including Hanssen Pigott, and yet, while each has brought something important to mind as this project takes shape, my work remains distinct from these influential practices. While the nine practitioners within this constellation are the closest community of practice that I can identify in relation to this project, each bringing something very particular to the notion of the space between, there is nonetheless something different about what I am doing with the same set of concerns. I referred earlier in this chapter to van Schaik’s description of the process of constellating and re-constellating as projects grow and change and practitioners within the field enter “the zone”48 and exit again. The practitioners with whom I constellate share a very particular space with me and yet neither they nor I have “quite got to where I think I want to go.”49 Each of us explores in our own way the relationship between two independent yet somehow integrated forms where the negative space between these forms plays a significant role in experiencing the work, be it in two or three dimensions. There is much to contemplate in the slit between the two black squares of Serra’s

48 L van Schaik, RMIT GRC October 2011.
49 L van Schaik, RMIT GRC October 2011.
US Government Destroys Art, the pressure exerted by the looming presence and push of the heavy black form of Bridget Riley’s *Kiss,* or the quiet intimacy of the near-kissing curves of Barbara Hepworth’s *Two Forms.* However, I would like to take the notion of the in-between somewhere slightly different again, where form and image work together in the exploration of this vibrating, intense space, where the image draws the viewer’s eye into the accelerating curves at the near-touching point between two forms in a study of “the space between, where the surfaces draw infinitely close, [and] sing with potential energy.”

My community of practice, illustrated in these schematics, includes artists, designers, architects and theorists, some local, some national, and some international. Some provide a constant reference point, for example Ellsworth Kelly, Robert Morris and Eva Zeisel, with whom I have no actual ongoing contact but from whose work I take great inspiration, be that aesthetically, conceptually, technically or theoretically. Others, such as Yael Tandler, Jupp Lissen and Juz Kitson, are there because of chance encounters where I have looked at their work and seen intersections between their practice and my own. These ‘ring-a-bell’ encounters with the work of others led frequently to more in-depth research into their practices and, at times, extended to the establishment of communication with that person, despite differences in geographic location. An example of this can be found in Mark West, Founding Director of CAST, at the University of Manitoba, where he is Associate Professor of Architecture. I first found West’s work in a book titled *Installations by Architects: Experiments in Building and Design.* On seeing

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52 Barbara Hepworth, *Two Forms,* White marble on marble base, Base 16 x 9 inches, 1935.


54 C.A.S.T. is the Centre for Architectural Structures and Technology, at the University of Manitoba, Winnipeg, Canada.

the images of his work and reading about what he does, I saw immediate connections to my own practice. West speaks of producing his first fabric-formed concrete experiment inside an old t-shirt. This experience revealed “a fuzzy concrete surface – one that you just had to touch.”\textsuperscript{56} I knew exactly what West meant here – I experience that same shiver of delight each time I peel the skin of a latex balloon off the warm damp plaster within, an act that delivers a completely new and unique form into the world. This plaster model is then ‘re-born’ as its cast is lifted gently from the mould, and again as that cast emerges from the kiln, still warm to the touch and glowing gently in its newfound translucency. I always find these brand-new forms a delight to hold and, interestingly, when in a gallery on display, the gallery staff tell constantly of people’s inability to restrain themselves from reaching out and touching, and even holding and caressing these forms. Thus, West’s words regarding his initial exciting find within his t-shirt struck a chord with me, creating a deeply-felt connection between our practices. West continued to experiment ‘beyond the t-shirt’, producing “sensual, skin-like textures on the surface of concrete forms that had the anthropomorphic qualities of bound bodices and bulging bellies.”\textsuperscript{57} With the full-to-bursting curves, the dimpling and swelling of forms made with pressure and gravity, the very bodily nature of his bulging forms, I knew immediately that the sculptural and architectural possibilities of West’s techniques could have very exciting implications for my own practice.


\textsuperscript{57} ibid.
Further research revealed that West has done a huge amount of research into fabric-formed concrete, the aesthetic and tension/compression form-finding principles of which intersected my practice in a fascinating way. West works in a way very similar to me, albeit with a different functional intent and on a much larger scale!


The intuitive way in which shapes emerged from the pour belied the rigour of West’s research process which involved methods derived both in the fine arts and the laws of nature. Associations with the body were constantly present which was not a coincidence but a co-incidence that played out in a really graphic way.\textsuperscript{62}

In addition, West’s work, when out in the public realm, received similar tactile responses to my own work:

On the street people stopped. They looked, walked toward it and then they reached out with their hand and touched. They were always surprised that it was hard, not soft. It happened all the time.\textsuperscript{63}

While West’s working methods are very similar to my own, the end results are very different, especially with regard to materials, scale and intended function. West’s research explores the use of flexible formwork for casting concrete wall panels, columns, trusses and other architectural applications, whilst mine is directed toward the object. Nonetheless, the benefits of a possible exchange of ideas and knowledge were apparent. West is one of a rare breed of researcher-practitioners who are incredibly generous with their research findings. He has placed online, accessible to all, images and explanations of his research, including very detailed technical information, filled with insights into his working methods.\textsuperscript{64} Of particular interest to me was West’s approach to surface modulation where a flexible skin, constricted and impinged upon by a variety of methods, including stitching, corsets and fastenings, the resultant seams, creases, crinkles and puckers of which are evident in the final form once fluid concrete, tension, pressure and time have played their part:

\textsuperscript{62} Bonnemaison, op. cit., p. 25.
\textsuperscript{63} ibid., p. 28.

In his dreamlike, poetic paper, *Arrival of Form*, West relates the process of casting with concrete. The narrative he composes around the meeting of fluid concrete and the skin in which it finds itself is very evocative and resonates with my own thoughts and memories of plaster in balloons. West describes moments that could be drawn from my own processes:

… but as the wet concrete lays down against the sides of its container a spark occurs... It is energized as a pure tension field, responding to the press of the wet concrete with a mirroring, opposite force. It becomes a skin.

West goes on to relate the familiar struggle for equilibrium between plaster and balloon – in his case, between fabric formwork and concrete:

As concrete presses harder against its newfound skin, and the skin tenderly matches each new thrust with a corresponding strain, see how they surprise each other in their mutual transformation! Their struggle slides into a collective dance, a mutual search for stasis... They find themselves effortlessly inventing new shapes of resistance that perfectly balance the skin’s tension against fluid urgencies.

At CAST, West and his team have developed an array of jigs, moulds, cranes, tools, equipment, etc.: indeed, all the infrastructure one could imagine to facilitate his explorations of the potential of fabric-formed concrete at an architectural scale using the working methods described above. I found West’s images and descriptions of his research, design and construction projects

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68 Ibid., p. 6.

69 Ibid.
inspirational, for I had not previously considered – other than in a pipedream kind of way – the translation of my own form-finding techniques to other scales. Suddenly, possibilities seemed to open up with regard to form and scale. I decided to email West, with a view to exchanging some thoughts and ideas regarding the overlap of our practices and to raising the possibility of applying for a position as Visiting Researcher at CAST where I might have access to his marvellous infrastructure. Immediately following my initial, formal email, I sent West a quick postscript that reads as follows:

From: Belinda Winkler <belinda@belindawinkler.com.au>
Subject: PS from Belinda in Tasmania
Date: 26 October 2010 11:37:19 AM AEDT
To: westm@cc.umanitoba.ca

PS Mark, recently I was reading your 'Arrival of Form' and on reading your words, "the aspect of dreaming something into being (my dreams, or concrete’s dreams) remains the central and constant accompaniment to all of this work", I immediately recalled the work of a wonderful Australian author, Peter Carey, called 'Oscar and Lucinda'...

"...the idea danced around the periphery of her vision, never long enough to be clear. When she attempted to make a sketch, it became diminished, wooden, inelegant. Sometimes, in her dreams, she felt she had discovered its form, but if she had, it was like an improperly fixed photograph, which fades when exposed to daylight. She was wise enough, or foolish enough, to believe this did not matter, that the form would present itself to her in the end."

and another excerpt from the same book...

"Her head was burning with dreams of glass, shapes she saw in the very edges of her vision, structures whose function she had not even begun to guess."

The book is one of the most beautiful I’ve ever read.


Sincerely,
Belinda

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70 Email from Belinda Winkler to Mark West 26.10.2010.
West’s reply was as follows:

From: Mark West <westm@cc.umanitoba.ca>
Subject: Re: PS from Belinda in Tasmania
Date: 29 October 2010 6:58:51 AM AEDT
To: Belinda Winkler belinda@belindawinkler.com.au
1 Attachment, 174 KB Secret_Life_bookish.docx

Dear Belinda,

Thank you for your generous email(s). How lovely to receive these small beautiful quotes - something so rare in my inbox. First let me say that the photographs you sent of your work are very beautiful. My guess is that if you wanted to spend some time at CAST, you would not be disappointed in that opportunity. We have a great deep bag of tricks here, and I think we may have in common the scent of a particular trail - or whatever . . . It would be interesting to find out.

I hope your PhD studies are going well, and assume this is a good or necessary thing, though it is a hard for me to reconcile the required rituals of PhD work with what you have otherwise transmitted. I am reminded of something Vladimir Nabokov said in a 1950’s CBC TV interview. When confronted with several quotes from literary critics describing his novel Lolita, Nabokov responded:

"I do not wish to touch hearts and I don’t even want to effect minds very much. What I want to produce is really that little sob in the spine of the artist reader."

[http://www.youtube.com/watch?v=Ldpj_5JNFoA ] Also for your reference I attach an unpublished text on Force and Matter and things structural. I hope this might be valuable in some way to your academic work. It is my attempt at producing an instructive technical analysis that does not kill the thing it describes, or at the very least, cause it to become 'diminished, wooden, inelegant'.

The Visiting Researcher program at CAST is very simple: If you come, you pay your own expenses. You would get a "nil-pay" appointment at the University of Manitoba, giving you access to the general infrastructure of the university and that of the Faculty of Architecture in particular (ex. libraries, computer facilities, etc., and, of course, a key to the CAST Building and studio space. Some Visiting Researchers have spent a couple of weeks, while others have spent as long as 6 months here. If you want to pursue this idea further perhaps a phone conversation (or better yet a Skype conversation) is in order.

Let me know what you think,
-Mark

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71 Email from Mark West to Belinda Winkler 29.10.2010.
West’s words, “I think we may have in common the scent of a particular trail – or whatever . . . It would be interesting to find out,” exemplify the purpose of communities of practice, which, despite differences in disciplines and even in location, share the same concerns, the exploration of which has the potential to develop knowledge at the point of intersection between practices. The discoveries that occur at those intersections, and the knowledge generated by them, has the potential to pave the way for a shift in the boundaries of a discipline area. Lave and Wenger, in their book *Situated Learning: Legitimate Peripheral Participation*, describe a community of practice as people who share a common interest and a desire to learn from and contribute to the community with their variety of experiences. They go on to define three elements that are necessary within a community of practice *per se*: a domain, a community, and a practice. My communications to date with West show a community of practice in formation, where the domain would be described as that of creative practitioners, a community within which are those practitioners with an active interest in the creation of forms that utilise embodied processes in their making, the end results of which promote embodied perception – which is inclusive of the curve and the haptic response to it. Both West’s practice and my own, as members of such a community, share a fascination with material forces and with the act of form-finding through physical, material-based experimentation. West’s eagerness to share his vast knowledge and experience, both online and through the provision of visiting researcher positions at CAST, speaks of a willingness to share information and knowledge with other members of his community and domain. And, while I am yet to take up a position as a visiting researcher at CAST, I intend to in the near future and believe that, in doing so, I would open up the possibility of an exchange of working methods and thoughts and

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72 Email from Mark West to Belinda Winkler 29.10.2010.
74 ibid.
ideas regarding the use of stress forces and embodied perception, and thus progress the knowledge base of our community. Indeed, this is already happening to an extent through my teaching at both a college and a tertiary level as I introduce my students to my materials, techniques and ways of thinking, and work with them in the imparting of tacit knowledge whilst concurrently encouraging them to use these techniques to achieve their own ends with regard to form and function:

While initially a distant reference point, Mark West and his tremendously inspiring practice has become a key member of my community of practice, and I will continue to develop and extend a working relationship with him. By contrast, the practices of, for example, Marie Torbensdatter Hermann, Andrew Kudless and

75 College students, Lucy and Tim, under the tuition of Belinda Winkler, learning the process of form-finding and plaster model-making via compression and tension.
Mårten Nettelbladt, are, at this stage, thought-provoking reference points, and are individuals whose work I have researched extensively. However, there remains the potential for active ongoing professional relationships to be established in the future. On a different level again are the relationships built much closer to home. As part of an active working practice, I am in constant contact with other artists and designers and work regularly with a variety of fabricators. Each has enormous knowledge and skill in the craft of their art. These are the people with whom I discuss the aesthetic, conceptual and technical aspects of my work, and the people whose advice I seek and whose opinions I value. I have met most of these artists, designers and makers in the course of making a work or body of works, as their particular skills and knowledge were recommended to me by other members of my community of practice. For example, sculptor and friend Folko Kooper suggested I visit the sculptor Curtis Hore during my struggles with bronze patina. I subsequently worked alongside Hore for some months learning the very specific and tacit knowledge associated with the bronze patina process. The photo below shows Hore demonstrating to me the application of liver of sulphur to bronze, heated to just the right temperature with a gas torch and applied first in spray form, to build the initial layer, and then with a stipple brush until the surface appears right, all the while maintaining just the right amount of heat. Then, while still hot (but not too hot), paste wax must be applied very gently with a clean, soft brush to the patina and then immediately – though gently – rubbed off again, using only a soft rag of 100% cotton. This last step I developed with Hore to achieve the particular soft glow, neither gloss nor matte, but suggestive of damp skin, for which I was searching.
The simplicity of the end result belies the complex and precarious process behind it and, while specialised books can give information on, for example, patina recipes, they cannot possibly impart the tacit knowledge necessary to master the art of the patina application process. This can only be learnt through the process of working with someone as skilled and knowledgeable as Curtis Hore. This story serves to illustrate the necessity of developing and maintaining a local community of practice where support, motivation and knowledge can be developed and exchanged. Through the encounters and thought processes related within the subsequent chapters of this Research Catalogue, it has become very apparent to me that reflective practice and the formation of communities of practice are integral to design research. Within these communities of practice, ideas, approaches, techniques and tacit knowledge are exchanged and peer support and problem solving are provided. Design research knowledge is integrated in the “doing, social relations, and expertise of these

76 Curtis Hore teaching the tricky art of patination.
77 Belinda Winkler, Balance Point, Bronze, 130W x 130H x 130D mm, 2011, Photograph by Peter Whyte.
communities. The processes of learning and membership in these communities of practice are inseparable.78

A thread that is prevalent throughout this form of practice-based research methodology is the inextricable relationship between knowledge and practice. A mentor and key member of my community of practice is Kevin Perkins who, as an active practitioner working in my field, is a staunch believer in the value of making and of developing a deep understanding of, and skill with, materials. Perkins is a master furniture-maker and sculptor, described by Craft Australia as “Australia’s foremost maker of fine timber furniture” and as a “Master of Australian Craft”.79 He was also for some years Head of Furniture Design at the University of Tasmania, School of Art, and in that role prioritised research and design through making. Perkins argued that the most valuable aspect of my research is found in the making, using the eye and hand to create works that quietly connect with people. He spoke to me of the materials with which I work being my means of expression and of how, as a maker of three-dimensional form, I have three things in my armoury to do all: lines, planes and volumes. Perkins speaks of people’s connection to compound curves and to forms that invite touch, his own thumbprint being composed of full, smooth sensuous curves. He values the art and craft of making, of developing and honing the skills necessary to create form and, indeed, his own skills with his chosen material, wood, are immense.

Some time ago now, Perkins passed me a copy of the *Weekend Australian Review* as it contained an article featuring Robert Hughes discussing Bernini’s consummate skill and his understanding of his tools and material, and bemoaning the current lack of such skills in our contemporary culture:

> … this sort of ability with material doesn’t come along by accident. It’s the result of profound acceptance of what the materials themselves can do. And you can’t have that without a culture of materials.

Hughes’ and Perkins’ belief in the implicit value of developing a deep understanding of and skill with materials is somewhat at odds with the current trends that place a higher value on the idea over the craft of art and where one is encouraged to locate art and design research within a theoretical context.

A prominent research practitioner who is pertinent to this line of thought is Dr Fred Fisher. Fisher, who sadly passed away on New Year’s Day 2013, was a highly regarded sculptor who received the

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80 Kevin Perkins, *Black Swan Lagoon Bowl #1*, 2008, 95 (h) x 425 (d) x 425 (w) mm, Photograph by Peter Whyte.
81 Kevin Perkins, *Cape Barren Goose Cabinet*, 1991, Huon pine, silky oak, ebony, silver and brass, 1570 (h) x 780(w) x 500(d) mm.
Dean of Graduate Research's Commendation\textsuperscript{83} for his Doctoral Thesis\textsuperscript{84}, and was widely exhibited and awarded for his sculptural work. Like his friend Perkins, Fisher worked with curves, creating breathtaking sculptures from curved planes:

![Button Seat](image1.png)

Over the years, Fisher imparted the value of research through the act of making; in his words, “Research is the science of discovery, the process (of designing and making) is the research and that the things discovered along the way, in the process of designing and making, are the research.”\textsuperscript{87}

Ceramicist Dr Damon Moon is yet another practitioner researcher who is critical of creative research being given credibility and justification through extensive reference to external authorities. Moon is an exponent of thorough researching within one’s field, and bemoans the apparent prevailing emphasis within ceramics

\begin{itemize}
\item \textsuperscript{83} Dean's Commendation Award for an Outstanding Doctoral Thesis, Dean's Commendation Awards, Graduate Research, University of Tasmania, Sandy Bay, Tasmania, 2007.
\item \textsuperscript{84} Fisher, RP, \textit{A Sculptural re-interpretation of aspects of European two-dimensional visual art in the period 1910 - 1940} (2006) [PhD], eCite Digital Repository at the University of Tasmania. \texttt{“eCite - Fred Fisher - A Sculptural re-interpretation of aspects of European two-dimensional visual art in the period 1910 - 1940.” Accessed July 20, 2013. http://ecite.utas.edu.au/56509.}
\item \textsuperscript{86} Fred Fisher, \textit{Button Seat}, 2006 MDF, plywood, Huon pine, acrylic paint 400(h) x 760 (dia) mm, Photograph by Peter Whyte.
\item \textsuperscript{87} Conversation between myself and Dr Fred Fisher at the University of Tasmania School of Art, March, 2009.
\end{itemize}
education and research on the imposed authority of tenuously related domains, such as philosophy and theory, over the imparting of knowledge and skills specific to the field of ceramics. Moon is an advocate of “the greater research endeavour that aims to make an implicit mastery fully explicit.” The following passage is taken from an open letter to Craft Victoria that Moon wrote in response to the closure in 2002 of the ceramics course at the Victorian College of the Arts:

‘Hi, my name is Troy, and I’m a designer-maker with a ceramics based practice. I am currently developing a body of work which explores the gender politics of domestic objects, and locates the kitchen as a site of abjection.’ Troy is a completely understandable product of the average ceramics department, the logical outcome of a system, which privileges Habermas over Hamada… Ask many ceramics lecturers who Ernest Chaplet or Auguste Delaherche are and they won’t have a clue, but mention a French post structuralist philosopher with absolutely no interest in pottery at all …

Stamm, in Creative Practice Research Model: What We Do, How We Do It, and What We Discover, depicts a situation where practitioner researchers “start to usurp massive external theoretical spaces and claim to have found an intellectual expression that ‘best articulates’ what they have been doing”, rather than claiming their own authority and joining the community of authorities. This circumstance is described as the ‘Topological Fallacy’, a notion developed by Blythe. It is entirely possible that ‘Troy’ is a victim of the topological fallacy, “where the endeavour

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88 Stamm in van Schaik, op. cit., p. 38.
90 ibid., p. 37.
91 ibid., p. 38.
[in Troy’s case, his ceramic practice] runs the risk of migrating out of the design practice as such, into a theoretical realm”. 93 Similarly, the initial stated aim of my PhD research at the University of Tasmania’s School of Art was to:

build upon and reinterpret Modernism and Minimalism’s concern for reductive form and in doing so, reinvest Modernist and Minimalist forms with greater emotional content and sensuality of form, thereby making a shift away from the current roles of contemporary art where the emphasis has tended to highlight…the more asocial, fragmenting and confrontational tendencies in contemporary society. 94

In retrospect, this statement implies that the driving urge behind my work was derived from a theoretical/historical construct, making the research a theoretical extrapolation as opposed to a rigorous examination of the practice itself. Increasingly, however, this heavily theoretically-biased investigation lost traction. I wrote to Fisher of my concerns, explaining that I felt my emphasis on modernism and minimalism felt increasingly artificial and contrived and that the real research lay in process, in what happens in the studio, with materials and techniques and the resulting forms:

Really Fred, I think I make what I make to try to achieve a particular curve that has a particular quality, a quality that animates the form. I experiment with materials and techniques in an attempt to capture that particular quality. This ‘particular quality’ seems to be found in a moment that occurs in the making of the work, when the tension or pressure applied to a material reads in that material and is captured, and then can be read in the resulting form. I think the formal devices I use, like the

93 Stamm in van Schaik, op. cit., p. 36.
anonymous white smooth surface and reductive simplicity are there to exaggerate that reading of tension and pressure, ensuring there are no distractions to this reading. I think that the curve is the line/form most likely to reveal that tension and pressure of its creation. I also think that the curve, in lineal, planar and in volumetric, reveals different pressures and tensions in each of its guises.95

Fisher’s reply was as follows:

This is what your work is about and it is also what your project is about. You need to forget about minimalism and modernism!96

He discussed what he regarded as the important aspects of my research, including what he termed, "pressing the body/curve into the flat plane and the pushing of hard into soft/body form."97 Fisher stressed that theory and history, while interesting in their various overlaps with my practice, had less to do with my research than the actual process of making the work. In my initial research I spent significant time focusing on the psychology of haptic perception, on the philosophy of phenomenology, and on attempting to build my own theories around those of the modernists and minimalists. This was, effectively, a fictionalising of my mental space, an act that halted my “tentatively emerging authority.”98 This is not to say that there is nothing to be gained from other fields, for illumination can in fact come from moments where two disparate fields intersect. However, real knowledge and understanding of creative practice is found within the work of that practice, in the design and making and the discoveries made in the process. An alternative approach to the reliance on the theories of others, and potentially a far more valuable one for the

95 Email from Belinda Winkler to Dr Fred Fisher 12/09/10.
96 Email from Dr Fred Fisher to Belinda Winkler 15/09/10.
97 Conversation with Dr Fred Fisher at the University of Tasmania’s School of Art 10/08/2009.
98 Stamm in van Schaik, op. cit., p. 37.
creative practitioner, can be found in the RMIT reflective practice-based research model. This form of research places the emphasis on actual creative practices, researching these through the medium of design itself. This model is visually articulated in Blythe's ideogram below:

Here, Blythe uses the ‘Theatre of Research’ metaphor to explicate the ways in which reflection works in creative practice research at RMIT. On the stage are the works of the practice to be examined. Surrounding these are drop curtains that represent three reflective frames, through which the practitioner researcher can reflect upon the works on the stage. ‘R-o’\textsuperscript{100} refers to reflective research \textit{on} the existing body of work of the practice, while ‘R-i’\textsuperscript{101} concerns research \textit{in} the work of the practice – current projects taking place alongside the R-o research. ‘R-f’,\textsuperscript{102} on the other hand, projects forward to future possibilities that come to light as a result of the reflective process. The creative practitioner’s mentors, authorities, challengers and peers shape the mental space through which they design, as do reflections \textit{on}, \textit{in} and \textit{for} the work of the practice. All these elements are present during the design act, each playing a role in the process that is far from linear and in which there exists a “dynamic realm of possibilities embedded in ongoing and past practice.”\textsuperscript{103} This reveals the reflective process to be a fluid and dynamic one, in which the past condition is not static but, rather, is protean, shifting and changing in the light of new projects. Blythe and Stamm have named this concept ‘Dynamic Transcendental Reflection’.\textsuperscript{104}

\begin{footnotesize}
\begin{itemize}
\item [\textsuperscript{100}] Blythe in van Schaik, op. cit., p.13.
\item [\textsuperscript{101}] ibid.
\item [\textsuperscript{102}] ibid.
\item [\textsuperscript{103}] Stamm in van Schaik, op. cit., p. 25.
\item [\textsuperscript{104}] ibid., p. 20.
\end{itemize}
\end{footnotesize}
This ideogram by Blythe illustrates the 'dynamic transcendental moment' where “past may be re-arranged, re-assessed and re-related in the light of emerging work”,\textsuperscript{106} examples of which I will detail in the following chapters, \textit{The Stages of the Journey} and \textit{Where to Next? – the forward story}. The account of my research journey, which follows in these chapters, relates a dynamic interplay of reflection on, in and for practice, and the development of new practice realms that have emerged through dynamic transcendental reflection, revealing the inextricable relationship between knowledge and practice that is at the core of RMIT’s approach to research.

\textsuperscript{105} Ideogram by Dr Richard Blythe developed in conversation with Dr Marcelo Stamm in van Schaik, \textit{op. cit.}, p. 22.
\textsuperscript{106} ibid. p. 26.
2

The stages of the journey
2. The Stages of the Journey

If the artist carries through his idea and makes it into visible form, then all the steps in the process are of importance. The idea itself, even if not made visual, is as much a work of art as any finished product. All intervening steps—scribbles, sketches, drawings, failed works, models, studies, thoughts, conversations—are of interest. Those that show the thought process of the artist are sometimes more interesting than the final product.¹

Sol LeWitt

² The studio in the midst of the design process of Red Loops
Within this chapter I discuss the three iterations of my reflective process, viewed through the lens of the shifting nature of my search for understanding and explanation of what it is that I intuitively respond to in a curve, and I reveal my growing understanding of the interconnected nature of physical and perceptual tensions and their role in the activation and apprehension of the object. Each iteration of the research has been an investigation that has resulted in a discovery, a development in understanding and, with this, a shift in my practice and therefore in my research, sometimes in a small way, and at other times more significantly. With each shift, new questions arose and thus new investigations were commenced – a constant and cyclical process in my search for knowledge and understanding.

Initially, the research travelled through two iterations, commencing as a studio-based investigation of the activation of furniture forms through the dynamics of curve and line. This investigation evolved to incorporate a broader examination of the activation of form through the visual dynamics of the curve, explored through the making of objects, be they functional design or purely sculptural in nature. The third iteration in the research emerged with the realisation that the curves I intuitively sought were those that appeared to project tension and energy. This necessitated a change in investigation methods, from form-making to form-finding, as I experimented with the application of stress forces, tension, compression, torsion and bending, to line, plane and form, in order to create visually dynamic curves imbued with a sense of sprung tension. Concurrent, and, as it would later be revealed, intimately connected with this research was a line of investigation centred on relationships between forms, or, more specifically, between curves in form.
The incremental progression of my research is recounted within this chapter through the use of images of key works in my iterative journey, and is woven through with reflections upon the various discoveries made during the research, effectively “theorising through practice”,¹ which can, as Dr Marcelo Stamm points out, “only be carried out meaningfully if one steps into the very practice”,² as opposed to the more traditional approach of speculating “theoretically about the practical”.³


⁴ ibid.

⁵ ibid.
2a. The Backstory

The past talks back differently to us depending on what we experience in the present and what we foresee of the future; an important advance, step, or insight now – be it positive or negative – may cast a wholly different light on and even ‘give meaning’ to an entire past.⁶

Dr Marcelo Stamm’s words speak of the reflective process in practice. Indeed, in the process of compiling my research for the purpose of communicating it through this catalogue, I became aware that I was unable to view, let alone discuss, any of my past works through the same eyes as those through which I regarded the works at the time of their making. Initially, I had anticipated that I would proceed through an account of the work, one that would progress forward, in a linear fashion, both chronologically and developmentally, in a technical and conceptual sense. However, building on Dr Richard Blythe’s reflection model,⁷ Stamm explains that fundamental shifts in my understanding of my practice have “cast a wholly different light”⁸ on my works to-date, changing their significance and meaning as I reflect back upon them.

The transcendental paradigm (...) makes us aware that possibilities in the past could not be seen as what they are unless one has made the experiences of the present.⁹

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⁹ ibid.
Thus is the benefit of the reflective process revealed as it delivers insight and understanding of past works, and in doing so reveals previously unseen possibilities within those works. Steve Jobs says, “You can’t connect the dots looking forward; you can only connect them looking backwards,”\(^{10}\) and indeed, looking back, I can see that all my past works that I regard as successful, have utilised physical and perceptual tensions. This is a notion that has emerged through the reflective process, and which I have only recently been able to fully grasp and articulate. Previously, I could neither understand nor articulate why some works sang whilst others did not. In fact, it has only been within this past year that I have developed my understanding enough to be able to communicate my thoughts on the matter with what I regard to be some accuracy and insight. Dr Leon Van Schaik refers to this as reaching “the PhD moment”,\(^{11}\) that moment where you can look back and say: “Oh look I can tell this story, here it is, here are the shifts, this is what I can communicate.”\(^{12}\) Van Schaik diagrammatically represents this moment as existing at the top of the multilayered ‘Scholarship Cone’\(^{13}\) - “a point at the top of the cone where there is then a sense of having completed this tranche of research.”\(^{14}\) My research journey has led me to the conscious understanding of (as opposed to an intuitive feel for) the inherent connectedness of physical and perceptual tensions, and the pivotal role that they play in the activation and apprehension of the object. However, at the beginning of the journey, the concept of tension had not even entered my conscious radar. I often used stress forces, i.e. tension, compression and torsion, to create form but had no understanding that it was the process of doing so that delivered the curves to which I responded the most. This insight and subsequent, intimately related ones emerged through the reflective process, the journey of which I relate in the coming

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\(^{11}\) van Schaik in van Schaik, op. cit., p.8

\(^{12}\) ibid

\(^{13}\) ibid

\(^{14}\) ibid
pages. However, before I begin, I give a brief overview of the nature of my practice before commencing the PhD research.

As far as I can remember, I have always been attracted to working with clay, having grown up in an atmosphere where ceramics were both collected and made. Clay moulded its way firmly around my soul through its texture, responsiveness and willingness to take on any shape and form. For years, I made curvaceous hand-built ceramic works: organic, amorphous blobs and large-scale urns with pregnant bellies, usually appearing while I myself was pregnant. These, over time, evolved into human-sized ‘disembodied dresses’ with curves resembling Marilyn Monroe’s or Jessica Rabbit’s.\textsuperscript{15}


\textsuperscript{16} Belinda Winkler, \textit{When I Entertain}, in progress.
Curves were, and remain, my visual thumbprint. They are present in everything I make. However, it was not until I met an adventurous ceramicist, Stephen Hudson, my lecturer in Ceramics at the University of Tasmania’s School of Art, that I learnt about the wonders of slip-casting and of model- and mould-making in plaster. At the time, I was wrestling with a particular curved form, in effect an oversized droplet shape. I did not seem to be able to convincingly capture the full-to-bursting curves I wanted through hand-building techniques. Hudson suggested I try a technique that he had seen a student using some years previously in Canberra that entailed filling a balloon with fluid plaster and, while still malleable, pushing objects into the balloon until the plaster was set. Hudson thought that this technique might capture the teardrop form I was after, and indeed it did! Hudson’s suggestion sparked off a series of initial works, all using this technique to create the initial form, the plaster ‘plug’ for the subsequent mould. Thus began my love of slip-casting, and my fascination with this particular technique, combined with the plaster and balloon form-finding method, has become the centre of all my practice and the source from which all my work in other mediums springs – another fact of which I have only become aware in hindsight, through the reflective practice process.

Slip-casting is a difficult craft to master and not a practice for everyone. One must be extremely particular and must follow the many steps in the process with attention, accuracy and rigour. One must also be taught by a master in order to learn the art of this craft, in its many small and subtle but critically important steps. I was lucky enough to have such a teacher in Leicester Cooper, a slip-caster of high repute who had learnt his craft from people such as Finnish master model- and mould-makers Matti Sorsa and Pekka Vuorisalo from Arabia\textsuperscript{17} in Finland. Cooper patiently taught me how to mix plaster to just the right consistency, 

and how to avoid the many pitfalls of even this seemingly simple process, for example the dreaded lumps, denser patches and/or air bubbles. Cooper has exactly the right temperament for model-making and mould-making and slip-casting as his eye for detail and desire for precision is second to none, a trait that is vital when mapping out and marking the equator and separation lines on the model, in preparation for mould making. There are no short cuts in this process and Cooper’s consistently high quality results are testimony to this. He taught me the value of applying the many layers of soft soap until the plaster model has just enough soft pearly shine to allow it to be released from the mould, but not leave any residue on the new and pristine casting surface. A mould made under Cooper’s supervision is a thing of beauty, a work of art in itself. I have made many a mould in my day and have not been able to keep them all; however, I have kept every single one made with Cooper, each being a clear and constant reminder of how things should be done.

This story serves to highlight the people, sense of aesthetics, materials and techniques that have impacted upon the mental space in which I design, but also bring to the forefront my engagement with curves and the ceramic aesthetic that permeates, and continues to influence, my practice. It also illustrates the origin of my fascination with forms that are

18 Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper
generated through tension. Early works such as Trouée\textsuperscript{19} and Stretch and Swell\textsuperscript{20} were made using the tension and compression, plaster and balloon form-finding method:

\textsuperscript{19} Belinda Winkler, Trouée, Glazed ceramic, 400 x 700 x 800 mm, 2002.
\textsuperscript{20} Belinda Winkler, Stretch and Swell, Glazed ceramic and decals, 400 x 600 x 400 mm, 2002.
\textsuperscript{21} Balloon/plaster from-finding.
\textsuperscript{22} Belinda Winkler, Trouée, Glazed ceramic, approximate dimensions 400 x 700 x 800 mm, 2002, Photography by Uffe Schulze.
\textsuperscript{23} Belinda Winkler, Stretch and Swell, Glazed ceramic and decals, 400 x 600 x 400 mm, 2002, Photography by Uffe Schulze.
In retrospect, I find it intriguing that I intuitively used stress forces when making the decals for *Stretch and Swell*, stretching fishnet stockings over photocopiers, office-party style, to capture that moment of stretch in the netting, emulating the stretch of the stockings over the swell of the thigh. The tension and compression used to create the first forms of these ceramic works were intuitively carried across to the *Illumination Enhancers*, lights made from breast implants under compressive forces.

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24 Belinda Winkler, *Illumination Enhancers*, Breast implants, acrylic LED lights, stainless steel wire, 100 x 100 X 100mm, 2003.
25 Belinda Winkler, *Illumination Enhancers* (details), Breast implants, acrylic LED lights, stainless steel wire, 100 x 100 X 100mm, 2003, Photography by Uffe Schulze.
In 2004 I decided to revisit the forms of *Stretch and Swell* and *Trouée*, pushing plaster-filled balloons down onto a wire hung at a curve. This created a beautiful, slightly asymmetric curved cleft that ran around and through the plaster within the balloon. Reminiscent of cell division (or bottoms, depending on your perspective) I found something inherently appealing in the combination of crisp line and full curve in these forms. After making a series of plaster forms, I selected the one that somehow had everything I was looking for but could not recognise until I saw it. While making the complex, six-part mould, made with the help of Cooper, around this chosen model, I was envisioning that the resulting cast would be a closed form, as in *Stretch and Swell*, though slightly larger in scale. However, whilst in the process of casting these forms I became increasingly captivated by the deep, shadow-filled space dissected by the sweeping curve within the mould itself, and began to wonder if I might try putting aside the flat mould piece of its base, revealing that beautiful interior.

26 Slip-casting mould made by Belinda Winkler under the tuition of Leicester Cooper.
The resulting casts took me in two directions, both of which used the flat plane of the mould edge in combination with the deep curved internal spaces. The first work was *Float*,\(^{27}\) a seating and shelving project that incorporated the ceramic ‘bottoms’ pushing through flat Corian® planes.

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\(^{28}\) Belinda Winkler, *Float*, Glazed ceramic, Corian, 1800 x 450mm, 2004, Photography by Uffe Schulze.
The second work that came from the *Float* mould was *Gather*, a series of blown acrylic forms inserted into a wall. These forms were made using compressed air, forced up under a sheet of heat-softened acrylic, clamped down with a template and dissected above by a thin curved steel wire. The compressed air effectively blew a bubble with the acrylic, one that bulged as it expanded, very much like the action of plaster against the latex skin of the balloon.

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29 Belinda Winkler, *Gather*, Blown acrylic, plywood, 2 pak paint 3000 x 2400 x 500mm, 2004.
30 Belinda Winkler, *Gather*, Blown acrylic, plywood, 2 pak paint 3000 x 2400 x 500mm, 2004, Photography by Uffe Schulze.
The white flat plane of Gather was punctuated with the kidney bean-shaped Mandelbrot Sets,\textsuperscript{31} which appeared as deep footprints in the fresh pristine snow of morning.

A few years after making Float and Gather I began a series of large-scale bench seats for Design Island\textsuperscript{32} based again on the aesthetic of the plaster mould. This time, the sections of the Float mould that combine deep curves with flat planes were used as the starting point for the work. Two of these works were Suspended Echo and Closer:

\textit{Closer}, to my mind the more successful of the two, consisted of a pair of 4 metre long, curving white bench seats. The curves of the forms are carefully controlled, setting up a subtle tension between the two arcs, which nearly, but not quite, touch in the centre. The


\textsuperscript{33} Belinda Winkler, \textit{Suspended Echo}, Acrylic Mirror, MDF, 2 pak polyurethane, 400 x 4400 x 3000mm, 2005.

\textsuperscript{34} Belinda Winkler, \textit{Closer}, \textit{MDF}, epoxy resin, 2 pak polyurethane, 400 x 4500 x 3500m, 2006.
convex/concave fitting of the two bench seats creates a sense of visual inseparability between the two forms. The negative space between is just as important to this work as the functional space that the bench seating provides. As one pushes into the other, the space between is captured, forming a compression point. The curved ends of the two benches lead the eye subtly inwards, between the forms, toward that point. Thus, both physical and perceptual tensions were brought to bear in this work and, while not yet articulated, I would continue to play with these two notions of tension in many works to follow.

35 Belinda Winkler, Closer, MDF, epoxy resin, 2 pak polyurethane 400 x 4500 x 3500m, 2006.
In 2005, curator Philip Watkins invited me to create a work for an exhibition at CAST Gallery, Hobart, titled *Fellow Anthropoid*. Watkins sought works that “manipulate inter-personal space and give personal traits to non-human, inanimate objects.”\(^{36}\) *Anthropomorphic* and *interactive* were the two qualities he especially wanted the work to embrace. I was enjoying the scale of the bench seats I was concurrently making so when Watkins said I could use as much of the gallery space as I liked, I decided to make a work that would occupy the entire length of the back wall of the gallery, all nine metres of it. Watkins wrote in the *Fellow Anthropoid* exhibition catalogue:

> Belinda Winkler’s work is the architectural personification of the shift in focus from object to context in the light of this exhibition. It pays tribute to site specific Minimalist works but functions very differently in space; its phenomenological role, whilst still part of the work, serves a very different purpose.\(^{37}\)

The work, *Achromatic Wrap* was a 9 x 3-metre expanse of architectural seating. The overall sensibility of this work was one of extreme formal economy, its four flat hard planes alternating with three soft curved strips, echoing Dan Flavin’s minimalist work, *The Nominal Three (to William of Ockham)*.\(^{38}\)

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37 ibid.

Each of the three curved strips was made from Lycra® that stretched between two arcs, transforming uniform featureless surfaces into curvaceous, elongated forms that contrast with the flat planes of the walls that divide them. Continuing the explorations of the 'plaster mould aesthetic', I juxtaposed flat white planes with smooth organic compound curves, a combination that I had long found compelling. Shadows arced up, over and across these undulating surfaces, accentuating the rise and fall of the curves that the taut Lycra® shaped. The literal lines of the physical construction of *Achromatic Wrap* combined with the incidental lines formed by shadows on the surface. On an architectural scale, Lycra® creates distorted walls that are unexpectedly soft, producing inviting and receptive surfaces. Although interactive, like all furniture, its interaction was neither obvious nor straightforward. It required consideration and an element of risk on the part of the user to discover the function. However, the risk was rewarded as the seating, secreted behind the Lycra® skin, was revealed. As the sensuality of the work was explored, its function was discovered. Things do not always feel or react as one anticipates; a tension exists between the expectation of the mind and the discovery of the real.

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Belinda Winkler, *Achromatic Wrap* (detail), Lycra®, MDF, foam 9000 x 3000 x 1500mm, 2005, Photography by Uffe Schulze.
With the intention of expanding upon the concepts explored in *Achromatic Wrap*, I designed *Swell*. Whilst *Achromatic Wrap* was contained within the expanse of a flat wall, *Swell* was contained within a ‘white box’, and could not be read from the outside at all. Encountering the furniture required the negotiation of a narrow gap in a wall. Once within, two sweeping white arcs were encountered, each echoing the other. Each comprised a single, uninterrupted curved surface, beginning at the floor and simultaneously stretching across, up and back to meet the ceiling in a continuous, flexed and fluid plane. Interaction was necessary in the perception of this work and function was not immediately apparent to all who entered this space. Lycra® gives beneath the pressure of the hand - pushing the Lycra® wall lead to the discovery of its bounce, its tension and its responsiveness to touch. Leaning against the wall effectively tested its resistance and allowed for the discovery of its ability to receive and support the body. Allowing one’s body to slide down the smooth supple

surface, to momentarily experience a sensation of falling, permitted the discovery of the soft, stable seat, hidden within, just beneath the surface.

43 Belinda Winkler, Swell (detail), Lycra®, MDF, foam 5400 x 4500 x 2800mm, 2006, Photography by Uffe Schulze.
Belinda Winkler, *Swell* (details), Lycra®, MDF, foam 5400 x 4500 x 2800mm, 2006, Photography by Uffe Schulze.
Within both *Achromatic Wrap* and *Swell*, physical tensions were produced as the Lycra® spanned the support framework from ceiling to floor, along with further tensile stretching upon interaction.

Simultaneous to the generation of physical tensions were emotional tensions, created between the external form and the internal space, between stability and risk, knowledge and uncertainty, concealment and revelation. I would suggest, in hindsight, that it was the tensions implicit in *Achromatic Wrap* and *Swell* that made them sing, rather than the formal relationships between line and curve. However, at that stage, I was convinced that the success of these works lay in this juxtaposition and so, with this in mind, I commenced my PhD research, focusing on the activation of furniture forms through the dynamics of curve and line.

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45 David Roberts and Evan Hancock trialling the stretch of the Lycra® during construction of *Swell*, October, 2006.
2b. Shifting Sands: the first iteration of the research

In Chapter One I referred to Dr Leon van Schaik’s notion of the Scholarship Cone and the associated concept of the gap that requires “filling or bridging”.\(^1\) It is the need or desire to fill that gap that drives the work, that compels one to explore and to make in order to discover, to search and re-search a process that may fill the gap, but in doing so reveals another gap. Richard Serra articulates this process when he writes,

> As you develop any body of work solutions follow sequentially, but the problem doesn't necessarily stay the same. Often a solution leads to another problem of a different order, another possibility.\(^2\)

Serra’s words reveal his driving force to be that of the gap, be it a knowledge gap, or a “gap of work missing and yet to come”.\(^3\) Stamm identifies three “drivers”, three elements that drive the creative process: “transcendental, hermeneutic/cognitive and motivational”.\(^4\) At various times throughout the account of my research that follows, it is possible to distinguish each of these drivers as the force that impelled the creation of the works. Initially, however, it was in hindsight the hermeneutic driver – resulting from a knowledge gap, a gap in understanding – that drove the work. This gap was manifested in my search for understanding and explanation what it is that I intuitively respond to in a curve, and the link that I suspected existed between the evocative curve and embodied perception and meaning within the realm of the object. Perhaps also, there was a “motivational driver”,\(^5\) brought on by a desire to continue to extend my practice beyond the

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\(^3\) Stamm in van Schaik, op.cit., p. 46.
\(^4\) ibid.
\(^5\) ibid.
medium of ceramics to encompass design at many levels, including particularly the realm of furniture design where the potential for physical engagement with form and working in large scale had proven to be an exciting challenge to date. Thus, the first iteration of my research began with an investigation of the activation of furniture forms through the dynamics of curve and line.

I embarked upon my research with a Public Art Commission for $25,000 from Arts Tasmania’s Art for Public Buildings Scheme to design and make seating and sculptures for the Oral Health Services’ Training Facility at New Town. The brief required sculptural elements to be located at intervals along a new pedestrian path between the entrance canopy of the new building and the street. It was necessary that these elements act as a way of finding markers to alert visitors to the location of the entrance, and that one of the elements incorporate a bench seat. I approached this brief with the intention to explore, through these works, the activation of form through the dynamics of curve and line, and had the words of architect Christopher Egan resonating in my mind:

I have always found some mix of curves and straight lines very appealing. If I can get something that combines curving and straight lines, I feel a cool tension… I think the two sitting next to each other are fundamentally, humanly sexual.6

While making the large-scale bench seats the year before, I had been looking at Santiago Calatrava’s dramatic arcs and powerful curves. I was fascinated by the sense of movement that Calatrava captured in his works and was intrigued by the fact that much of his work is drawn from the human body in motion, indeed

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Alexander Tzonis wrote that Calatrava’s “goal is to capture the abstract morphology of moving figures.” ⁷ I was, and still am, particularly drawn to his sculpture Flame ⁸ and to the energy-filled arcs of his bridges.

One of the works I made during that period had its beginnings in a taut curved plane, held in tension through a series of clamps and visually bouncing off Calatrava’s dynamic curves.

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⁸ Santiago Calatrava, Sail or Flame Sculpture.
This work was at its best at that particular moment: I took the photo, as it seemed to capture everything I wanted for that piece, without realising that it was, in fact, in the sprung tension that the magic lay. I pinned this photo to my studio wall, somehow knowing I wanted to find that moment again somewhere. With Calatrava and that magic MDF curve in mind, I began the form-finding process with strips of paper, twisted and curved into arcs and curls.

Echo #2 in progress.
I really enjoyed the sprung curves I made in stiff paper with the slightest of attachment points. The curves were dynamic and tight, visually engaging, and had a lightness of touch to the ground that I loved. I tried some similar twists in foam with interesting results.

Form-finding with paper and card.
The foam gave edge and depth to the twisted planes of the paper which seemed to take on a new life on the modelling plane of Cinema 4D.\textsuperscript{14}

However, the constraints of the budget effectively prohibited multiple unique forms so I went back to the many paper models I had made, where the simplest and strongest was, to my mind, the circular forms. I decided to use, as a starting point, a particular paper form that had a lightness of touch to the ground and a certain spring, and one that would be, I hoped, eminently repeatable.

\textsuperscript{13} Form-finding with polyurethane foam.
\textsuperscript{15} C4D modelling mimicking the foam form-finding tests.
Viewed from the side, this simple form played complex visual games with balancing ellipses, and when modelled on the computer these ellipses could be rotated and offset in an intriguing way. The asymmetry imparted by the addition of the internally rotated ellipse unbalanced the composition and lent dynamism to the form.

I then decided to incorporate the perceived width and volume that was captured in the edge and form of the foam tests.

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16 Paper form-finding model.
17 C4D modelling to find ‘the right’ combination and rotation of ellipses.
I loved the result but immediately became aware that I had been here before. This form hearkened back to a work I had made four years previously, the *Droplet Stool*.

My initial reaction to this was one of horror. I had inadvertently redesigned an old work, rather than creating a completely new (and, I thought, brilliant!) one. I spoke about this with friend and mentor Dr Fred Fisher, whose reaction was, "Work comes from work!" He said that, in his opinion, all our work builds upon our older works; that we make work that extends initial works, and that this is in fact the way of a good practice because the work is not continually disparate but, rather, evolves and gets stronger. Similarly, Kevin Perkins has long said that the world of art and design is characterised by evolution, not revolution. I have since read about the concept of *tabula rasa*, "an absence of preconceived ideas or predetermined goals." Alexander Tzonis,

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18 C4D modelling to give 'substance' to the ellipses.
19 Belinda Winkler, *Droplet Stool*, Fibreglass, zircon sand, 2 pak polyurethane, 600 x 450 x 350mm, 2003.
20 Belinda Winkler, *Droplet Stool*, Fibreglass, zircon sand, 2 pak polyurethane, 600 x 450 x 350mm, 2003, Photography by Uffe Schultz.
21 Conversation with Dr Fred Fisher at the University of Tasmania, Centre for the Arts, September 2007.
22 Conversation with Kevin Perkins at the University of Tasmania, Centre for the Arts.
in *Santiago Calatrava: The Poetics of Movement*, discusses this concept in relation to the design process:

Most artists, architects, and even some engineers do not build their inventions on a *tabula rasa*. The new does not come from nowhere as much as the avant-garde has often claimed. In fact, unprecedented design often emerges from a thorough understanding of history. The best ally of invention is memory.\(^\text{24}\)

This idea is, of course, closely related to Dr Richard Blythe and Dr Marcelo Stamm’s notion of Dynamic Transcendental Reflection, discussed briefly in Chapter One.

Having taken on board the wise words of Fisher and Perkins, I decided to progress with the elliptical design, modelling the moulds with Cinema 4D for the forms to be cast in fibreglass. I then sent the files through to the University of Tasmania’s School of Architecture in Launceston to be cut on their CNC router by technician Robin Greene:

\(^{24}\) Tzonis, op. cit., p. 214.
C4D modelling of the mould to be cut on the CNC Router.

The MDF mould for Curva.
These moulds, both on screen and in the flesh, had an extraordinary Bridget Riley-like optical art quality in which concavity and convexity, negative and positive, became confused: fantastic objects, visually and functionally related to my slip-casting moulds. Perhaps I found these moulds so intriguing

27 The MDF mould for Curva.
because I had not physically crafted them myself, thus making them, at first sight, distantly familiar yet essentially completely new to me. I suspect it was this distance that allowed me to see the moulds in a fresh way, making their elliptical push/slice into the flat plane the source of my design for the Oral Health Services bench seat. As I began playing, once again, with rotating ellipses and the facets between them on the computer, I was looking to the works of Ellsworth Kelly with their reductive simplicity and curvilinear compositions. I was particularly drawn to *White Curve 1* (1972)\(^{29}\) and *Red/Blue* (1964),\(^{30}\) where the lines are created at the edges of shape and form, and positive and negative shapes alternately command attention. In *Red/Blue*, Kelly pushes a vivid red ovoid into a bright blue space. I had long been fascinated by the simplicity and dynamism of this work, along with its intriguing visual similarity to my slip-casting moulds.

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\(^{32}\) Plaster slip-casting mould.
The final design for the bench seat mirrored the ellipses of the sculptures and referred to their cast origins, implying that they may have resulted from this “mould”, a reference reinforced through the break line in the seat that echoes the sections of a multi-piece slip-casting mould.

The fabrication of the bench seat entailed mapping the rectangle and ellipse of the design onto MDF templates and transferring these onto polyurethane foam. Beyond that, it was a matter of cutting, carving, shaping and sanding to achieve the form modelled on the computer, one that emulated the elliptical cookie cutter slice into the flat plane.

33 Belinda Winkler, *Curva* 2007, Installation View, Fibreglass, 2-pak polyurethane, stainless steel, LED lights, 1000 x 530 x 200mm, Commissioned by Arts Tasmania, Art for Public Buildings Scheme, Oral Health Services Tasmania Photography by Peter Whyte
34 Plaster slip-casting mould as the inspiration for the C4D modelling of *Curva*. 
Cookie cutter slice into a flat plane.

The hand shaping process involved in the fabrication of Curva Seating.
The client was extremely happy with the completed and installed works, as was I, to a point. However, I was not convinced that I had captured the dynamic curves and tumbling forms I sought and wondered if, instead, that the work might be a little static. The design process, nonetheless, delivered several embryonic ideas that would emerge in later projects, including the paper-strip form-finding and the precarious balance point. Something in the design process that sprang forth immediately was a particular moment that occurred when fabricating the bench seat. I had made thin, curved MDF templates to guide my cutting and sanding of the...

37 Belinda Winkler, Curva Seating, Marine ply, polyurethane foam, fibreglass, stainless steel, 2 pak polyurethane, 150 x 2300 x 650mm, 2007, Commissioned by Arts Tasmania, Art for Public Buildings Scheme, Oral Health Services Tasmania Photography by Peter Whyte.
polyurethane foam. The intersection of the template and foam curves seemed to create an energy and sense of movement:

This moment, perceived during the act of making, took me back to a work by Ellsworth Kelly that I had been looking at while working on the design for Closer (the large-scale pair of curved bench seats referred to in the previous section). I was especially drawn to his work *White Curve 1*, a two-dimensional work that investigates compression of space, visual tension and curvilinear composition. *White Curve 1* explores form and ground as positive and negative shapes within the work alternately command attention. The space between forms is activated by this interplay. The visual dynamism of *White Curve 1* is accentuated through implied movement as the interaction of space, shape and form cause the eye to move over the work.

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38 The small section of *Curva Seating* during fabrication.
I had this work in the back of my mind, along with the intersecting curves of MDF and foam, as I designed and made the two works that followed. Curva Converge and Diverge are a pair of bench seats that take the perceived negative space of Kelly's White Curve 1 and make it into the positive form that remains after two semicircular spaces have been, apparently, pressed out. The lines in these works are created at the edges of shape and form, as they are in White Curve 1. These lines act in such a way that the

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40 Sketch of Ellsworth Kelly, White Curve 1.
41 Belinda Winkler, Converge, Marine ply, polyurethane foam, fibreglass, 2 pak polyurethane 2000 x 450 x 500mm, 2008.
42 Belinda Winkler, Diverge, Marine ply, polyurethane foam, fibreglass, 2 pak polyurethane 2000 x 450 x 500mm, 2008.
form acquires energy, imparting a sense of movement and dynamism.

While the cookie-cutter slice of *Curva* made a right-angled cut into the rounded surface of the foam, I attempted to instil into the forms of *Converge* and *Diverge* a greater sense of energy through changes in the camber of the vertical planes. This was borrowed, in effect, from the constant presence of a favourite mould and model kept permanently on my studio desk.

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43 C4D modelling and fabrication process of *Converge*.
44 Belinda Winkler, *Diverge*, Marine ply, polyurethane foam, fibreglass, 2 pak polyurethane 2000 x 450 x 500mm, 2008, Photography by Peter Whyte.
45 Belinda Winkler, *Converge*, Marine ply, polyurethane foam, fibreglass, 2 pak polyurethane 2000 x 450 x 500mm, 2008, Photography by Peter Whyte.
What I failed to observe was that the beautifully cambered facets of the model from which this mould was made were true curves, created through the tension and compression of my balloon/plaster form-finding method. The model was in fact a slice, taken from the plaster model for *Float*, effectively making it, to use the term coined later by Stamm, a “tension print.”

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46 Slip-casting mould.
47 Email from Dr Marcelo Stamm to Belinda Winkler 9 July 2012.
48 Balloon/plaster form-finding.
I was yet, however, in this unfolding research journey, to come to that realisation, and so I continued to try to understand the kind of curve I could intuitively recognise but could not create. In this search, I decided to return to an aspect of the Curva bench seat, one that I had photographed during the fabrication process.

49 Fabrication process of Curva Bench Seat.
For me, this image, taken of a narrow section of the bench during fibreglassing, evoked the energy and dynamism that the actual piece failed to attain. In order to capture that in the new work, I returned to Cinema 4D, stretching the ellipse and placing it onto a 3.2 metre-long rectangular surface:

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C4D modelling in the development of the 3.2 Bench Seat.
The next steps in the fabrication of this work involved the same steps as the *Curva* bench seat, mapping out the design and transferring it onto polyurethane foam, and cutting, carving, shaping and sanding in an attempt the replicate the computer-modelled form.

51 Fabrication process of the 3.2 Bench Seat.
The 3.2 Bench Seat installed in the gallery.

Belinda Winkler, 3.2 Bench Seat, Marine ply, polyurethane foam, fibreglass, 2 pak polyurethane, 3200mm x 355mm x 500mm, 2009, Photography by Peter Whyte.
The completed work, the 3.2, employed the visual language of my plaster moulds and slip-cast forms with their seamlessly smooth, unblemished, white surfaces that juxtapose curve and line, plane and swell. However, like its predecessors, the 3.2 still failed, in my mind, to capture the dynamism and vitality that I sought. The arc of the 3.2 seemed to lose energy, and the surface through which it sliced lacked a certain ‘fullness’. Words are problematic in this explanation but suffice to say, the piece simply did not work. Despite this, I was determined to find out how I could make the curves of my work sing. Stamm would describe this as a “hermeneutic driver”, resulting from a knowledge gap, a gap in understanding that was driving the work. He writes:

(...) according to the cognitive gap something is not yet (fully) understood, and new work will be produced in order to better understand what needs to be comprehended, including (also) the previous work.

In a conversation referred to in Chapter One that occurred during this time, Fred Fisher said that, in his view, my work was about “pressing the body/curve into the flat plane and the pushing of hard into soft/body form.” His words laid a seed in my mind that seemed to germinate when intersected by two other thoughts. The first of these was my recollection of two works, Lunar and The Uncertain Sea, by Isamu Noguchi, (shown opposite) of which I was particularly fond.

54 Stamm, op.cit., p. 46.
55 ibid.
56 Conversation with Dr Fred Fisher at the University of Tasmania’s School of Art 10/08/2009.

Noguchi's treatment of the flat plane in these works was very thought provoking. In *Lunar*, Noguchi had carved the granite such that the surface of the works appeared to have been pushed from above and below, causing the flat plane to alternately dimple and swell. *The Uncertain Sea*, by contrast, has three swellings emerging from the plane, as if some unseen force from below is impelling them to do so. Noguchi's works resonated with Fisher's words, both speaking of the action of forces on form.

It was also around this time that Kevin Perkins suggested I look at the way artist and furniture maker Peter Adams creates compound curves in timber surfaces that receive rounded drop stones.\(^{59}\) Perkins thought I may find something in Adams' gently undulating surfaces and sensual curves that appear to dimple and swell with the weight of the rocks.

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This got me thinking about the push I had been trying to emulate over the last year or so, and of Fisher’s words. Adams appeared to have pushed the stones of his *Drop Stone* benches into the surface of the Huon Pine, and the Huon, accordingly, had swollen up around the pressure point, as soft sand around a heavy stone. In previous works, my emergent notion of the *push* had been one of a slice or stamp (the cookie cutter slice into the flat plane referred to above). By contrast, with these new works I looked to a visually gentler approach, one where the interruption to the surface was not composed of planes, but rather of shallow compound curves. The incorporation of my cast ceramic forms seemed to imply that they might have been the cause of the surface interruption:

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62 Belinda Winkler, *Drift*, MDF, 2-pak polyurethane, ceramic, stainless steel, Seat dimensions 1900mm x 450mm x 460mm, 2009, Photography by Peter Whyte.
Belinda Winkler, *Encounter #2*, (detail), MDF, 2-pak polyurethane, ceramic, stainless steel, Seat dimensions 1900mm x 450mm x 460mm, 2009, Photography by Peter Whyte.

Belinda Winkler, *Drift*, MDF, 2-pak polyurethane, ceramic, stainless steel, Seat dimensions 1900mm x 450mm x 460mm, 2009, Photography by Peter Whyte.

Belinda Winkler, *Encounter #2*, MDF, 2-pak polyurethane, ceramic, stainless steel, Seat dimensions 1900mm x 450mm x 460mm, 2009, Photography by Peter Whyte.
Again, while relatively happy with these works, I still found them unconvincing. The problem, I decided, was to do with the fact that the divot was based more on sand washed away from the base of rocks, than the action of a push - of erosion rather than pressure.

It was then that it occurred to me that if the action of sanding was eroding then perhaps if I could actually push into a soft plane, instead of emulating it, I may get the result I was after. I was drawing closer to an understanding of what it is that I intuitively respond to in a curve; however, this gap in understanding was not yet filled and thus continued to drive my work – an ‘in-practice’ example of van Schaik’s and Serra’s concepts of gaps to be filled, drivers of the work, problems, solutions and further possibilities,\(^{67}\) referred to at the beginning of this chapter. The notion of physical, bodily action seemed more immediately evocative than attempts at artifice, although at this stage I had yet to form a link between

\(^{66}\) Belinda Winkler, *Bay of Fires*, 2006

\(^{67}\) Serra, op. cit., p. 77.
embodied perception and physical and perceptual tensions, and their roles in the activation and apprehension of the object.

Concurrent to the design research described above, I was conducting my sculptural ceramic practice, which had been evolving over the preceding decade or so. In Chapter 2 (a): The Backstory, I related how this practice began with hand-built works that increased progressively in scale and curvaceousness until I learnt the art of slip-casting, from which point I focused all my energies on developing my skills with this technique, fitting it in around my furniture design research project. Over this period, my ceramic forms had become increasingly refined in surface and reductive in form. I continued to explore the balloon/plaster form-finding method to arrive at full, rounded forms that gently bulged and swelled, reminiscent of the biomorphic forms of Jean Arp and Constantin Brancusi. These were then cast from earthenware clay and finished with a white 2 pak high build matte undercoat paint, one that gave a surface that was very much like the plaster from which my forms originated: a smooth, chalky, matte surface that softly absorbs light and gathers shadows.

68 Plaster models in the studio in the morning light.
Belinda Winkler, *Perhaps*, 2 pak polyurethane, ceramic, 200 x 300 x 400mm, 2008, Photography by Peter Whyte.

Belinda Winkler, *Encounter #1*, 2 pak polyurethane, ceramic, 500 x 500 x 500mm, 2008, Photography by Peter Whyte.

Belinda Winkler, *There*, 2 pak polyurethane, ceramic, 200 x 300 x 300mm, 2008, Photography by Peter Whyte.
The process of making these forms is deceptively simple. It requires only a balloon, plaster, water and me. Filled with fluid plaster, the balloon is pushed in, over, under, around or between parts of my body. This process delivers seductively smooth surfaces and voluptuous forms that retain a memory of my body. The balloon expands under the weight of the plaster and the resultant form has a certain resonance with the body as it sags, expands, and stretches, dimples, swells and bulges in its own relationship with gravity, pressure and structure.

72 Belinda Winkler, Alight, 2 pak polyurethane, ceramic, 150 x 150 x 150mm, 2008, Photography by Peter Whyte.
If too much fluid plaster is poured into the balloon, beyond its capacity, it will burst; conversely, if insufficient plaster is used, the balloon and thus the plaster form will exhibit unfortunate puckers.

Balloon/plaster embodied form-finding.

Plaster models showing sufficient and insufficient plaster.
There are many aspects to this process, the subtleties of which I have discovered progressively through trial and error: water temperature; density of plaster; how much fluid plaster to pour into the balloon; as well as how much pressure to apply, and with which part of my body, and at what angle to hold the balloon such that gravity is used to best effect alongside the pressure from me, and how long I absolutely must hold that position, unmoving while the plaster sets. Even with experience, many variables – such as latex thickness, the capacity of the balloon when balanced with that thickness, the amount of air bubbles that inadvertently become trapped inside the balloon, and the ambient temperature – all contribute to success, or lack thereof, in the result. Thus, one must make many, many plasters in order to find the one that sings. With the fresh, gently bulging plaster forms in front of me, I look for those with a lightness of touch to the ground, with resolved curves and a sense of energy. I look for those that seem to breathe.

Plaster models.
In his opening speech for Design Island 2009, Prof. Adrian Franklin\textsuperscript{77} spoke of the implicit sensuality of these ceramic forms:

When I look at the work of Belinda Winkler (...) I am immediately in her world of sensuality, of two beautiful objects in a relationship. I want to join them in their interface of surface, texture and touch. Who would not?\textsuperscript{78}

The sensuality that Franklin perceives in these forms echoes the making process, which, for me, is a very sensual experience. I referred above to the mixing of the plaster. This is something that one could do with measurement and ratio; however, with the

\textsuperscript{76} Plaster model for Alight #2.
\textsuperscript{77} Dr Adrian Franklin is a Professor of Sociology at the University of Tasmania. He is also the presenter of the Australian Broadcasting Corporation television series Collectors and author of a regular newspaper column, The Collector in the Mercury, Hobart, Tasmania.
subtleties of density and variations in balloon thickness, etc., the mixing process becomes one of touch and feel, of tacit understanding of the particular need at that moment. The process of mixing dry plaster with water is one that can only be done with hands deep inside the mix, which turns from milk to cream as I stir gently, hands beneath the surface, finding silky globs with touch alone and squeezing them through my fingers, feeling them merge into the creamy mix. Once in the balloon, the plaster slowly begins to set, its temperature rising. I love that moment when I peel off the balloon’s skin and touch the warm, dewy, perfectly smooth and white and new plaster beneath. The subsequent plaster moulds, made around these forms, are a compelling mix of the hard edge and the organic, as the deep concavities and rising convexities of the casting surface are juxtaposed with the lines, edges and flat planes of the mould piece joins. The perfect white voids of the moulds are then filled with fluid porcelain, glossy and creamy in consistency. After just the right amount of time, the soft, dove-grey clay cast is gently lifted out of the mould, and placed on smooth white paper. Right at this moment, they seem perfect and I cannot take my eyes off them. There is so much work that goes into creating a completed ceramic form: so much, that at times I wonder why I do it, but it is that moment of warm, soft, dewy perfection that carries me along, year after year. I suspect I will never tire of that moment.

These soft grey casts are then left alone until leather-hard, when their rims are sponged to a fine lip. At this point they have faded, and by the time they are ready for the kiln the casts are pure white. When they emerge, still warm from the kiln, they have a gentle barely pink hue, as if blushing, ever so slightly. As I sand each cast until seamlessly smooth, I am reminded of the sugar eggs my mother used to leave out each Easter for my sister and I to discover in the morning. These forms are ready to be sprayed when their surfaces are completely smooth and unblemished, when all traces of process are removed, such that there is nothing
to snag the eye and distract from the reading of the work. As John Pawson writes, “Seamlessness, to me, brings a sense of wholeness, it means not having your visual concentration broken.” 79 The white 2 pak paint used to coat the surface brings these forms back to their plaster origins, yet transformed, with disturbing imperfections deleted, point-of-balance altered, and lightness of touch to the ground assured.

Shortly after the *Design Island 2009* exhibition of these ceramic forms, the Alcorso Foundation 80 commissioned me to design and make a limited edition set of tea bowls that would reflect the aesthetic style of my sculptural ceramics, with their distinctive curvaceous forms and seductively sensuous surfaces. I had not made functional ceramics before and I was excited by the challenge and the possibilities that it presented, so I willingly took the commission. It was around this time that I came upon Danish ceramicist Marie Torbensdatter Hermann’s work. Torbensdatter Hermann throws perfect cylindrical pots and then, while still soft, removes this perfection by gently pushing into the form with her fingers. In doing so, she leaves the evidence of her hand in the end work for the user to discover.

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Of this, Torbensdatter Hermann says:

My work is about the hand of the user and the piece itself. I am fascinated with how our fingers interact when we use and hold ceramics. I intend the pieces to give visual pleasure and a tactile awareness when used ... the privilege one has by making functional tableware is that here people are 'forced' to touch and the tactile awareness can be explored even though we are not always conscious of it.82

I was intrigued by her thoughts on the advantage of making functional ware. I had noticed that people were drawn to touch my work, but had usually done so illicitly. I was making sculptures, after all, and yet touch, especially in galleries, is forbidden. Even if one owned the work, it was inevitably placed in the home to be viewed, not interacted with. I wanted people to be able to touch my work because, for me, the act of touching has always delivered such satisfaction and pleasure, providing such direct bodily experience. I was also fascinated to watch people's reactions


when handed one of my works to hold. Their fingers seemed to be
drawn to the dimple, the inward point of compression that was the
source of the bulging, swelling curves that surrounded it. A
thought-provoking intersection with this observation is found within
the German philosopher Johann Gottfried von Herder's 1778
treatise Sculpture. Herder wrote that "sculpture is created for the
hand" and that "almost without wishing it, our sense of touch is
drawn toward every pliant curve and every delicate form." Herder
is speaking here of embodied perception in our aesthetic
experience of sculpture. Two hundred years later, a research
paper by David Freedberg and Vittorio Gallese added another
level to Herder's ideas as they investigated motion, emotion and
empathy in aesthetic experience. Within this paper, Freedberg
and Gallese discuss “the felt effect of particular gestures involved
in producing [works of art].” They discuss the growing denial
over the last century of emotional, empathic and non-cognitive corporeal responses to art. Freedberg and Gallese refute this
position by citing current research into mirror neurons, explaining
that this research offers insights into the “frequent but hitherto unexplained feeling of physical reaction, often in apparent
imitation of the actions represented within a work of art or suggested by the implied movements involved in its making.”
Freedberg and Gallese have found that the viewer's experience of
an abstract artwork is significantly enhanced through the
relationship between their own embodied empathic feelings and
the qualities of the artwork in terms of the “visible traces of the
artist's creative gestures.” They propose that "a crucial element

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85 ibid., p. 93.
86 D Freedberg, Department of Art History and Archeology, Columbia University, 826 Schermerhorn Hall, 1190 Amsterdam Avenue, New York 10027, USA
87 V Gallese, Department of Neuroscience, University of Parma, Via Volturno 39, I-43100 Parma, Italy
89 ibid., p.197.
90 ibid., p.199.
91 ibid.
of esthetic response consists of the activation of embodied mechanisms encompassing the simulation of actions, emotions and corporeal sensation, and that these mechanisms are universal." 92 While to pursue a discussion of neurophysiology would be to enter into another domain entirely, one well beyond the scope and relevance of my own research, it is, never the less, useful to point to findings in this area that correspond to those of my own art-based enquiry.

Similarly, while existing in an entirely different research domain, Maurice Merleau-Ponty’s theories of phenomenology bring, from a philosophical perspective, insight and understanding to my own work, particularly with regard to his theory that “perception is not simply a question of vision, but involves the whole body." 93 Merleau-Ponty pointed to the existence of “felt bodily imitation of the implied actions of the artist”, 94 as did Freedberg and Gallese. The concavities that appear in my works are the result of pressure placed on the original plaster form by my fingers, the heel of my hand, my elbow, my shoulder or even my knee. The action of, for example, my finger pushing into the skin of the plaster-filled balloon is captured by the setting plaster, the resulting form providing a record of that action, in both a visual and tactile sense.

92 ibid., p.197.
94 Freedberg, op. cit., p. 199.
Looking to my works such as *Drift, There* and *Alight*, I decided that I would like similar indentation in the base of the tea bowls so that, when holding the vessel, one’s fingers could slip unconsciously in. However, of the models I made, all had too great a footprint and lacked that lightness of touch to the ground that I sought. I then experimented with the ‘belly button’ on the sides of the forms in a variety of scenarios, but found that, when I held them, my fingers played around the line of the base facet instead of migrating up. So I tried squeezing the balloon in a cup-holding position but found the end shape produced to be visually complex and even a little grotesque – a fine, if difficult to define, line to tread.

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85 The embodied process of balloon/plaster form-finding.
86 Belinda Winkler, *Drift*, 2 pak polyurethane, ceramic, 300 x 300 x 300mm, 2008, Photography by Peter Whyte.
I pondered these dilemmas for some time, drawing and thinking, and physically plaster-ballooning until I decided to try out a budding idea, one in which all the intervention needed would be the bulge of the action of gravity against internal pressure from liquid plaster confined by its latex skin. In this process, I hoped to attain a simpler form that could lose its predictable symmetry through diagonal slicing of top and base, placing the end form at a gestural angle.

97 Balloon/plaster form-finding process.
Design drawings taking the principles of the sculptural ceramic works and applying them to potentially functional forms for the Alcorso Commission.

Model-making for the Alcorso Commission.
This process provided me with an array of plasters, each with bases faceted, allowing them to balance stably, and tops sanded flat, allowing them, when cast, to become hollow vessel forms.

The amount of plaster removed from what would become the base of each form dictated the size of its footprint. Too great a footprint meant that the form would sit heavily; too little, and it would not balance steadily enough to risk filling with fluid when eventually in use. Conversely, when just the right amount of plaster was removed, the form would have a lightness of touch to the ground, appearing to sit up and breathe in. I suspect that I sought this particular aesthetic for these forms for several reasons. Firstly, this perky appearance was in keeping with the visual language established through my sculptural ceramic practice, and, secondly, the elevated spring was reminiscent of my favourite coffee cup. This cup is one designed and made by Les Blakebrough, the internationally renowned Australian ceramicist. It bears the distinctive identifying characteristics of much of his work with regard to material and aesthetics; pure white, translucent Southern Ice\footnote{Southern Ice is a porcelain clay, developed by Les Blakebrough in the 1990s, which is now manufactured by Clayworks Australia.}\textsuperscript{101} porcelain vessel forms that elegantly rise upward and outward from their surprisingly small touch-point.

\footnote{Belinda Winkler, Design process for Alcorso Commission Photography by Peter Whyte.}
Every morning for many years now I have had my coffees in a Les cup, and every time I drink from it I enjoy its crisp whiteness, its glowing translucency and fine rim. Living with and using beautiful objects such as these gets into one’s psyche, as does working alongside a master in his field. I grew up looking at Blakebrough’s works in local galleries and heard him discussed in revered tones. For quite some years, he and I would both arrive by 6am at the ceramic studio at the School of Art in Hobart. A hard worker and a perfectionist, Blakebrough has established in Tasmania and nationally a culture of excellence with regard to porcelain. His work is elegantly designed and masterfully created. His technical skill is second to none. I recall someone commenting at the 2010 City of Hobart Art Prize that the Tasmanian entrants were all using porcelain in its white, vitrified, unglazed state, super-fine and translucent. We have Les to thank for that.

102 Les Blakebrough, *McDonald Range Eucalyptus*, Large Bowl unglazed deep etched Southern Ice Porcelain, 18h x 22 dia cm, 2005, Photography by Peter Whyte.
The next step in the design process for this commission entailed deciding which forms to take through to moulds from the many plaster models made. I spent time looking at and playing with the many possibilities of relationships between forms, looking for those that seemed to engage on some level with each other.

103 Belinda Winkler, Design process for Alcorso Commission Photography by Peter Whyte.
There was something of Eva Zeisel within these forms and relationships, in the chubby curves and intimate moments.

Zeisel once said, "I don't create angular things ... I'm a more circular person — it's more my character ... Even the air between my hands is round."¹⁰⁶ Lyrical, curvaceous lines and playfully expressive forms were Zeisel’s language. A Hungarian/American ceramicist and industrial designer, Zeisel believed that “designs should communicate with one another and engage us through their friendly, zoomorphic shapes.”¹⁰⁷

So many of the plasters I had made seemed to communicate with one another, responding to each other in curve, form and attitude. While differences in height and volume, when paired, seemed to create a parent/child or male/female narrative, forms that were more similar appeared to imply lovers of equal measure. Perhaps a less sentimental explanation to this satisfying combination could be found in the asymmetry of this apparently simple form. As I

¹⁰⁷ ibid. p. 47.
shifted the orientation of the form, it would, in turn, appear to have altered within itself, left-leaning becoming upright and symmetrical, upright appearing to then lurch to the right. Thus, two matching forms could each take on their own personality, depending on their relative positions. Consequently, all but one of the numerous plasters I had made was put aside and a single, ovoid, egg-like plaster form was chosen to take forward and to become the model for the final work.

To achieve simplicity paradoxically requires an enormous amount of effort. To create simplicity, to reduce an artifact, an object, an artwork or a room to its essential minimum, requires patience, effort and care.\textsuperscript{108}

The sequence of images that follow, reflect in my own work, these observations of architect and designer John Pawson regarding the complex process behind the creation of a seemingly simple form.

Mould Making process for *Their Lips Met.*
Journal entry of casting times.
Slip-casting process.

Journal entry of mould-making technical issues.
Making a crack mould.

Journal entry of crack-mould plans - Les Blakebrough’s name often appears in these journal entries, as, during the many early mornings in the studio, he would offer advice with regard to the current technical problem at hand.
Production line of casts.
Molly stacking greenware into the kiln.
Journal entry of bisque-firing schedules.
Greenware to bisqueware.
Journal entry of glazing tests.

Glazing process.

Polishing process.
One of the advantages of a brief or commission is that it can push one out of one’s comfort zone and into unfamiliar territory. For me, the Alcorso Commission with its functional bias meant a departure from the technically simpler earthenware clays I was used to, and a shift into the beautiful but technically fraught world of porcelain. Porcelain, when vitrified, has greatly increased strength and longevity when compared with lower-fire clays. It also has the potential to be eggshell-thin whilst still retaining this strength. If taken to the limits of fineness, and fired high enough to vitrify, porcelain can be translucent enough to see one’s fingers through it and to glow with light. Beauty can come with a price, however, and in porcelain’s case it remembers every mistake, every attempt at repair, each of which return to haunt the maker. It also demands to be taken to extremely high temperatures, high enough to vitrify, but too high and the form will begin to sag – higher still, and it will slump and melt. Even the very talented and experienced Eva Zeisel has been quoted as saying,

Earthenware keeps its form, because it isn’t fired at very high temperatures, so many shapes can be made easily in

122 Belinda Winkler, Their Lips Met, Porcelain and Glaze, 70x 70 x 70mm, 2009. Commissioned by The Alcorso Foundation, (Lesley Alcorso Editions), Photography by Peter Whyte.
earthenware. But porcelain gets soft and close to melting when it’s fired, so it is much harder to manipulate.  

Nonetheless, I felt that a commission of this calibre should utilise porcelain rather than an easier but lower-quality clay, and so began my journey with porcelain and the steep learning curve that accompanies it. In a recent interview with writer Nick Tantaro, I recalled this experience and the impact it has had upon my practice, the retelling of which was subsequently published in the *Design Island* catalogue to accompany the 2012 *Design Island Program*:  

In response to a commission from friend and mentor, Patricia Cleveland OAM, in 2009, Belinda shifted from purely sculptural ceramics to vessel forms and in doing so, moved from earthenware clay to fine white luminous porcelain. As a result, this transformed her practice, forever changing the way she thinks as a designer and maker. 

The first time I opened the kiln to see what had happened to the little casts I had placed so carefully into the kiln two days before, I could not have been more delighted! Even though I knew they would shrink by 15%, I was both surprised and intrigued by their smaller stature: scale can change everything. Still warm, the first one I picked up nestled into my hand perfectly and when I held it up to the light, the entire interior space glowed with soft, diffused light.

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124 “Design Island was officially launched in 2005 by Arts Tasmania as a triennial program aimed at raising the profile of the Tasmanian design sector. The program combined an annual showcase, artist talks, workshops and public forum. It was (and arguably still is) one of the most important programs aimed at increasing the profile, skills and knowledge of Tasmania’s design sector.” Design Island, Design Centre Tasmania, 2013, Design Island Tasmania - Taking Tasmania’s Best Designers to Market. “Design Island.” Accessed February 12, 2013. http://www.design-island.com.au.  
The translucency of the vitrified porcelain vessel is apparent as it rests in my hand, back-lit by the morning sun.
Author and lecturer Prof. Ellen Dissanayake encapsulates this feeling superbly when she writes:

There is an inherent pleasure in making. We might call this joie de faire (like joie de vivre) to indicate that there is something important, even urgent, to be said about the sheer enjoyment of making something exist that didn't exist before, of using one's own agency, dexterity, feelings and judgment to mould, form, touch, hold and craft physical materials, apart from anticipating the fact of its eventual beauty, uniqueness or usefulness.127

Wonderful as this initial little vessel was, I decided to investigate what it would look like with internal glazing. Though vitrified and therefore non-porous and thus not functionally requiring glaze, I ran a test, applying several clear glazes of varying gloss levels to the interiors of bisque-fired128 vessels. The results showed that, while some glazes did not fit129 the clay body, one glaze in particular130 had fired perfectly. The internal glazing gave these vessels a glossy wet interior that, for me, seemed to allude to the mouth and lips of the body. I decided to internally glaze the entire series, bringing the clear gloss glaze right up to the very lip of the cup. I then hand-polished the exterior with increasingly fine of grades of wet and dry sandpaper until each attained a silky-smooth, skin-like finish, one that delights the touch when resting in the hand, or when brought to the lips to sip.

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128 Fired to 1000°C.
129 Disparate coefficients of expansion and contraction in clay and glaze.
130 Walker’s Mid-Fire Clear Gloss Glaze EN250.
Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70x 70 x 70mm, 2009. Commissioned by The Alcorso Foundation, (Lesley Alcorso Editions) Photography by Peter Whyte.
These little cups were such a contrast to my closed forms, in which the surface completely encompassed the space within. Instead, these vessels possessed a rim, a lip, a transition between glossy, wet interior and matte, skin-like exterior. Ellen Lupton, in her book *Skin*,\(^{132}\) describes a similar quality when she writes that skin “lacks definitive boundaries, flowing continuously from the exposed surfaces of the body to its internal cavities.”\(^{133}\) These “cavities”, however, are revealed, allowing the void to be seen and felt. When held up to the light, their shadowy, private interiors were transformed, glowing with translucency, and suddenly both interior and exterior were revealed at once, allowing both to be seen and understood in a glance.

Prof. Adrian Franklin, in his role as *The Collector*,\(^{134}\) attended the preview of the Lesley Alcorso Editions and shortly afterwards wrote the following in his newspaper column:

> Belinda Winkler’s *Their Lips Met* suggests an intimate occasion. Fine egg-shaped cups form pairs that lean towards each other. Not only egg-shaped, they are silky smooth, with a softness in the hand. These little works of sculpture seem to be looking for a love nest somewhere.\(^{135}\)

The anthropomorphic nature of these vessels is apparent in Franklin’s words. The angle of each form suggests imminent movement as they “lean towards each other”, a narrative built through bodily associations and recalled memories. The full, rounded curves of the vessels add to this anthropomorphic reading, reminding us of our own bodies. Another aspect to

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\(^{133}\) ibid., p. 29.

\(^{134}\) *The Collector* is Adrian Franklin’s regular column in the Saturday Magazine, *Mercury Newspaper*, Hobart, Tasmania.

these works, revealed by Franklin, is the blurring of boundaries of sculpture and of objects designed for function.

In her essay *Crafts, Perception and the Possibilities of the Body*, Margaret A. Boden, Research Professor of Cognitive Science at the University of Sussex, discusses the difficulties inherent in the attempt to make finite distinctions between art and craft. Here, she proposes that the central aim of ‘craft’ is to produce something that is not only aesthetically pleasing but also potentially functional, paralleling design in this respect. By contrast, the purpose of art is not primarily to engage the viewer in some bodily act through function but, rather, to draw the viewer to think and to emote. However, Boden then describes a variety of scenarios in which artefacts of both art and craft “impinge on the observer”, especially with regard to what Boden describes as “impulse to action”. By way of illustration, Boden uses the example of sculpture, describing how the sculptural artefact “often invites one to touch the surface, especially if the piece represents or recalls bodily contours.” Boden follows this line of thought by pointing out that craftwork, “since it is potentially functional, … [also] engages one on a bodily level.” Boden argues, through the work of ceramicist Andrew Lord, that it is, in fact, entirely possible for an object to elicit both intellectual and bodily responses, and concludes that “inevitably, some designer-makers will choose to work in a way that deliberately exploits this fact,” a statement that, aligns with the intentions of Torbensdatter Hermann, along with my own.

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137 *ibid.*, p. 291.
138 *ibid.*, p. 293.
139 *ibid.*, p. 293.
140 *ibid.*
142 Boden, op. cit., p. 299.
The relevance of this theoretically-based discourse lies in its intersection with my own practice and my developing understanding and explanation of what it is that I intuitively respond to in a curve. At this point in time, I was still working within a project-based research framework and as such had restricted myself to the parameters of that project, i.e. an investigation of the activation of furniture forms through the dynamics of curve and line. In the meantime, I had continued my practice as a ceramicist, making and exhibiting sculptural works in earthenware clay. I regarded this aspect of my practice as my professional art practice, running in parallel with my university research on designing and making large-scale furniture projects. However, with the design-based Alcorso Commission, my self-imposed categories began to shift and to waver. The two arms of my practice, which I had previously regarded as entirely separate ventures with different motivations and outcomes, began to coalesce. Through the Alcorso Commission, my sculptural ceramic practice had entered the realm of design while, conversely, as I looked back on past works I could see that the ‘ceramic aesthetic’, so often prevalent within my furniture design, resulted from my long-standing immersion in the practice of ceramics – sometimes intentionally, at other times subconsciously. I began to see that my research and my professional art practice were, in fact, one and the same and that the categorical separation of the two was neither real nor productive. Both aspects of my practice came from the same mental space, each aspect impacting on the other, although, until that point, the cross-fertilisation was largely intuitive and subconscious.

On reflection, this realisation was a watershed moment in my practice as a whole: rather than being discrete and separate, the core aspects of my practice – those of art and design – are in fact intimately connected. This is a dynamic relationship, a two-way process in which each informs, inspires and
strengthens the other. Thus, while the initial research was pursued through furniture forms, it evolved to incorporate a broader examination of the activation of form through the visual dynamics of the curve, explored not only through furniture forms but rather through the making of objects, be they of functional design or purely sculptural in nature.
Communities of Practice
1st Iteration of the Research

1. Alcorso Commission
   - Kevin Perkins
   - Eva Zeisel
   - Marie Torbenstøl Hermann
   - Pat Cleveland
   - Les Blakebrough

2. Sculptural Ceramic Practice
   - Leicester Cooper
   - Eva Zeisel
   - Constantin Brancusi
   - Jean Arp

3. Furniture Design Projects
   - Ellsworth Kelly
   - Kevin Perkins
   - Peter Adams
   - Isamu Noguchi
   - Santiago Calatrava
   - Barbara Hepworth
   - Fred Fisher

On the periphery of my mental space

- Anish Kapoor
- Richard Serra
- Ron Arad
2c. The Possibilities in Plaster: the second iteration of the research (Part One)

During the form-finding process of *Their Lips Met*, I made many, many plaster models, some of which appear in the photograph below.

The *Locus of the Research* schematic, inserted inside the front cover of this Catalogue, features this image repeatedly, demonstrating the extent to with these plasters – or perhaps, more specifically, the results of a particular process and the distinct qualities it delivers – have influenced subsequent works within my practice. Initially, as I will explain shortly, this was a purposeful, conscious act; however, their influence on later works has only been revealed through recent reflections on my practice. Dr Richard Blythe articulated this intuitive design process during the

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1 Belinda Winkler, Design process for *Their Lips Met*, Photography by Peter Whyte.
RMIT University/Sint-Lucas Practice Research Symposium, at the Sint-Lucas School of Architecture in Belgium:

[…] creative practitioners (researchers) […] remember earlier instances while working on a current project. This remembering involves a re-membering or re-constructing a version of an earlier instance a process that is substantially different to simply recalling in the sense that what emerges are all sorts of possibilities for creating a new construction of that earlier instance …

Indeed, these plasters themselves are a re-membered version of a series of earlier plaster forms that I had made in balloons, and cut though with a band saw. This was a process I had repeated many times: slicing through solid plaster models at different angles, producing a range of effects.

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3 Belinda Winkler, Balloon/plaster form-finding process.

4 Belinda Winkler, Balloon/plaster form-finding process, Photography by Peter Whyte.
I loved the combination of flat plane, crisp edge and compound curve that resulted from this process. The facets of these forms caught the light in a completely different way to their curved sides, an effect I was fascinated by, did not take anywhere in particular, but did leave sitting on a shelf in the studio where I could look at the forms from time to time, where they gathered dust and waited quietly.

The plaster models made in the design process of Their Lips Met joined their friends on a shelf in the studio. The shelf was at eye-height, making the plasters seem, to my eye, like a cityscape. There was an architectural quality to them, reminding me of photographs of Manhattan Island – though, in this instance, a friendly, rounded version of that city. Conversely, the photograph of the cluster of plasters was pinned to the studio wall, right above the light switch, where it caught my eye constantly. Photographed from above, as if from the first floor of a building, the image reminded me of a gathering in a piazza, where couples and small groups of people were congregating. It seemed that there were so many different dynamics occurring between these people and, when I returned to the actual plasters, I found that, through the act of rearranging them, new relationships and interactions could be initiated. These plasters had exciting potential; they seemed to possess endless possibilities. Another level of their potential occurred when I placed a few of the porcelain vessels from Their Lips Met amongst the plasters. Whilst the models were vessels waiting to happen, their function was denied by their solidity. When a few of the vessels from Their Lips Met were placed among this group, the play on function and its denial through the solid/hollow juxtaposition was really interesting. The combination had distinct possibilities.
When the call for entries went out for works in ceramics in the City of Hobart Art Prize,\(^5\) I decided that, if I were shortlisted, the Tasmanian Museum and Art Gallery, with its large, open gallery spaces, would be the perfect setting for this work, potentially providing an opportunity to make and display a large gathering of these forms. As is often the case with these things, receiving a shortlisting means the provision of an image of the intended works for early production of the exhibition catalogue. For this image I wanted the look and feel of many forms gathered together at once so I set about making still more plaster models to add to the group. Photographer Peter Whyte and I discussed the possibilities for this image, Whyte suggesting diffused light from a single light source and explaining that this would accentuate the rounded forms. He started with the camera high above the surface upon which the plasters sat and then progressively lowered the camera until level with the forms:

Whyte progressively lowered the lighting in the sequence above, effectively increasing the intimate mood of the image and allowing shadows to gather. For the final image Whyte brought the camera in closer, emphasising the combination of rounded form and crisp edge. This image also had the advantage of not revealing the top surface of the forms; the solidity or hollowness was kept a mystery, waiting to be revealed.

This approach to the photography of *Composition of Curves* repeated the photographic process used for *Their Lips Met*, in which Whyte had similarly placed the camera at a variety of heights and angles with the aim of thoroughly documenting the work:

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We moved the vessels around, playing with their relationships, distance and leaning, combined with the angle and height of the camera, which produced a diversity of attitudes and moods:

7 Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70x 70 x 70mm, 2009, Photography by Peter Whyte.
The last pairing of images in the above sequence shows the vessels being pushed together to the point of nearly, but not quite, touching. While close in the image on the left, the proximity of curves in the image on the right seems to reveal more clearly the compression of space and visual tension between the forms – a slight, but significant difference. Kevin Perkins described these forms as kissing, a term he often applies to curves that come into close contact. The term seemed particularly apt when regarding

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8 Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70x 70 x 70mm, 2009. Photography by Peter Whyte.
this particular placement of these forms. For me, the visual tension
generated through the compression of space was heightened by
this kiss metaphor or, more specifically, to the metaphor of that
exact moment before a kiss, a liminal moment, balanced on a
threshold. Louis Pasteur once said, “In the field of observation,
chance favours only the prepared mind,” 9 and when flicking
through a book of architectural terminology, Perkins’ words re-
emerged in my mind as I came across a delightful explanation of
the architectural kiss:

We talk of the kiss in architecture when one element
comes deliberately close to another – without ever quite
touching – so the poignancy of the moment is not lost on
the observer or user. 10

The explanation went on to describe the moment as one that is,
“immediately before the point of contact, [where both parties are
held] in perfect tension for a moment in time and space.” 11 There
was much in this explanation to consider and to be excited by. It
gave language to this very visual and emotional moment and, in
doing so, seemed to give the idea greater traction in the
articulation of my thoughts. I had been looking at and hinting
toward that moment – that point of near-touch – for some time. It
had appeared in Closer, the large-scale pair of bench seats
referred to at the beginning of this chapter, in the placement of the
sculptures in Curva, and again in the bench seats, Converge and
Diverge, while concurrently occurring in the placement of my
ceramics forms.

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9 L Pasteur in Unsal, M, *Minimalist Art vs. Modernist Sensibility: A Close Reading of
2004, p.108.
11 ibid.
12 From left to right: Belinda Winkler, 2006, Closer, MDF, epoxy resin, 2 pak polyurethane 400 x 4500 x 3500m, 2006.
Ellsworth Kelly's *White Curve 1*, with its visually dynamic interplay of form and ground, of positive and negative space, has informed my investigations. While initially I had been drawn to this work by the energy and movement captured in line and shape, increasingly it was the space between his forms that captivated me.

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Belinda Winkler, *Diverge*, 2008, Marine ply, polyurethane foam, fiberglass, 2 pak polyurethane 2000 x 450 x 500mm, Photography by Peter Whyte.
Belinda Winkler, *There*, 2008, 2 pak polyurethane, ceramic, 200 x 300 x 300mm, Photography by Peter Whyte.
Belinda Winkler, *Breathe*, 2006, 2 pak polyurethane, ceramic, 300 x 300 x 600mm, Photography by Peter Whyte.
Belinda Winkler, *Curva*, 2007, Installation View, Fibreglass, 2-pak polyurethane, stainless steel, LED lights, 1000 x 530 x 200mm, Commissioned by Arts Tasmania, Art for Public Buildings Scheme, Oral Health Services Tasmania Photography by Peter Whyte.


Sketch of Ellsworth Kelly's *White Curve 1*. 
Madeleine Grynsztejn describes Kelly’s work as releasing tension and energy\(^\text{15}\) and, for me, much of that tension is held in the space he creates between forms, a tension of anticipation, much like that described above by Tom Porter in *Archispeak*.\(^\text{16}\) Grynsztejn, after interviewing Kelly, wrote that he “welcomes the movement of the spectator, which would turn a work (...) into a ‘sliver of space.’”\(^\text{17}\) On reading this I thought immediately of the way, when Whyte was photographing *Their Lips Met*, that, when shot diagonally across the pair, one could appreciate the closeness of the forms though the space between them was hidden, only becoming apparent when the camera moved to capture them side-on, such that the meet-point of the two forms became the focal point of the photograph:

![Image of porcelain sculptures](image)

Similarly, this moment is revealed through the movement of the viewer, as with Kelly’s work. In arranging the plasters for Whyte to shoot for the City of Hobart Art Prize catalogue image, I paid close attention to the relationships that I was setting up between each of the forms, both in a one-to-one sense and within the total composition. However, when it came to portraying these


\(^\text{16}\) Porter, op. cit., p. 108.

\(^\text{17}\) Ellsworth Kelly in conversation with the author in Grynsztejn, op.cit., p.13.

\(^\text{18}\) Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70x 70 x 70mm, 2009, Photography by Peter Whyte.
relationships within the image, it did not occur to me to ask that this be the focus, as it were, of the photograph.

Belinda Winkler, Design Process, Composition of Curves, Porcelain, dimensions variable, 2010, Photography by Peter Whyte.
Recently, in conversation with Whyte, held with the wisdom of hindsight, we discussed this deficit in the image, and all the ones that I commissioned before it. I recalled that, at that point, I was unable to articulate what it was that I wanted his images to manifest. By the same token, as Whyte explained, he was at the time of shooting this image still getting the measure of my work, and a constant exposure to my work and conversations with me over time had now given him the knowledge to interpret my work with insight. Whyte described how cumulative knowledge comes with multiple jobs for the same person. Thus, while the relationship between forms within my work was becoming increasingly important, I had yet to focus on and really understand, acknowledge and communicate this actuality.

Once the image was shot, I then set about the arduous process of transforming these plasters into porcelain, selecting only those models that had, within them, a certain life, those that seemed to swell as if taking a breath. I decided to pursue my thoughts on the juxtaposition of hollow and solid forms; however, in porcelain, one cannot cast solid, so this meant making the moulds with an additional face, a top piece that could be removed as needed, allowing me to cast both closed and open forms.
Mould No. 1, Composition of Curves, 2010 - a multi-part mould with top sealing piece for open or closed form casting.
And so, with 20 moulds made, each with its own top face and plug for closed casting, I commenced the casting process:

Porcelain in notoriously difficult to work with and while Their Lips Met had cast without much drama, this new body of work proved to be far from easy. I had made closed forms before, developing my technique in forgiving low-fire clay where uneven wall thickness mattered less. Porcelain, however, is unforgiving, demanding even wall thickness. In theory, this is achieved by casting as normal; pouring in, waiting, pouring out, draining and trimming away the extraneous slip from the pour-hole. It is at this point, with closed forms, that one pours a little more slip back into the mould and then quickly puts the plug in and turns the mould onto the plug, allowing the slip inside to run down to and cast over the plug-casting surface. However, if one adds too much or too little slip at this crucial final stage, the wall thickness over the plug will be either too thick or too thin. Uneven wall thickness leads to split casts and, once split, a porcelain cast cannot be repaired. Thus, one must find the measure of the pot, to use a tea-maker’s expression, or suffer the consequences:

Results of pour 2

Molds 5, 4, 8, 9, 2, 3, 1, 6, 10
Split -> 5, along top

Mold 7
Not enough slip to cure seal, but not split.

Note on "Rain Lips Yet":
Looks like next cycle, under the same conditions:
They have not split.
Mold 7 not closed by accident + cut split.
At yesterday, split with 8 hrs heat.
At today, split (not closed) with 4 hrs heat.

I'll cast Mould 9 + 5 till I can work out how to make these closed forms work!!

Sigh

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22 Poor casting results resulting from too much “topping-up” before closing.
23 Journal entry of poor casting results, 09.06.2010.
Whether the process of casting is going well or otherwise, it is essential to keep detailed notes on all the variables so as to avoid repeating mistakes and to develop and understand the ‘recipe for success’. Sometimes casting can go smoothly, and other times, not, making comprehensive note taking essential. After much trial and error, I found exactly the right amount needed for each of the 20 moulds. However, despite having solved the casting of the closed forms, the attrition rate remained unbelievably high, a devastating fact for which I could not account despite testing, re-testing, diligent record-keeping of times and conditions, many phone calls to the factory, and conversations with fellow slip casters.

Months later I discovered that all the problems of excessively long casting times and splitting were due to a bad batch of slip that the factory had inadvertently released. This was a harsh lesson from which I learnt that, when working with a medium such as porcelain, all aspects of the process require complete control, right down to the mixing of the slip.
Images and journal entry of poor casting results, 09.06.2010.
Given the preciousness of each of the successful casts of these little forms, I laid a wide expanse of clean white photographic backdrop paper across the very large table I was working on, so that each time I took a now-treasured cast from its mould, I could place it at the far end of this table, where it could be safely admired. The scale of the table (5000mm x 1750mm) meant that, after I had reached forward across it to set down each new cast, my viewing distance was much greater than I was used to. I would stand back and look at the gatherings, surrounded by vast expanses of empty space. They began to look like penguins huddled together on the icy plains of Antarctic:


I had not seen my work in this way before and grew increasingly interested in its perceptual possibilities. I began to imagine the final work displayed and viewed this way, across empty space on all sides.

Gradually, the collection of successful casts grew as more and more steadily joined the group. Eventually, the group seemed to divide naturally: open forms in one cluster, and closed in another:

The two groups, while different, seemed to balance each other; and, while I enjoyed the contrast of the open and closed groups, I began to play with combinations of both. The black hollows and white facets, the circles and ellipses, resulting from the angle of the slice, were together visually fascinating. It seemed that working with two groups of combined forms may be where the solution to this work lay. I had very much enjoyed the internal glazing of Their Lips Met, but for this work I wanted to play with the contrast of white facet and dark hollow. Reflections and light from glazing would interrupt this, so I resolved to leave all these works unglazed, to allow shadows to gather both externally and internally. Juhani Pallasmaa, in his seminal book, The Eyes of the Skin: Architecture and the Senses,\textsuperscript{28} writes of the window as “the mediator between two worlds, between enclosed and open, interiority and exteriority, private and public, shadow and light …”\textsuperscript{29} The elliptical openings in these little forms act as Pallasmaa’s window, their lips forming the boundary between inside and outside, allowing us access to their otherwise secret interiors.

\textsuperscript{29} ibid, p. 47.
\textsuperscript{30} Design process for Composition of Curves, 2010.
During this casting process, friend and fellow artist Jenny Topfer visited the studio to see how the work was progressing and offered her hand to the laborious process of sanding and polishing, joining my partner, mother, and children as we all worked together to complete this very time-consuming task! Topfer had recently purchased a wonderful work, *Memento Mori* by Gwyn Hanssen Pigott, and as a consequence had spent many a happy hour living with the work placed in the centre of her living room table. In an essay titled *Slow Ceramics: A User’s Perspective*, Topfer wrote:

I confess to spending more time than I should moving the pieces about to see how the tensions and rhythms change, how the shifting light alters the volumes and shadows, how the relationships between the vessels and the spaces play. (…) Ceramic pots (…) are a form of art that, like good sculpture, beckons you to touch them, to hold and to share the process of their making. 

31 Gwyn Hanssen Pigott, *Memento Mori*, Translucent porcelain 9 pieces, 4 bottles, 4 beakers, bowl L: 70 cm H: 30cm D: 17 cm, 2009.
33 Gwyn Hanssen Pigott, *Memento Mori*, Translucent porcelain 9 pieces, 4 bottles, 4 beakers, bowl L: 70 cm H: 30cm D: 17 cm, 2009, Photography by Peter Whyte.
Memento Mori, like much of Hanssen Pigott’s work, features groupings of vessel forms, hearkening back to Giorgio Morandi’s still lives. But these are no ordinary vessels. Fifty years of throwing and slip casting went into this work, each vessel showing the perfect imperfection\(^{34}\) of her deft hand, each glowing and luminous and each with its own subtle variations of tone and hue. Doubtless the combination of her own skills and eye as an artist, along with the daily appreciation of Memento Mori, led Topfer to question if I had sufficient variation in heights and volumes in the array of forms gathered for composition in my studio. Once asked, I could see what Topfer meant, and indeed wondered why I had not seen it before. All the forms, while different, had a similar volume and height, so I set about making some plasters that would alter this, to see how they would change the work that was at this point beginning to take shape. This did not turn out to be as simple as I had hoped – to go up in balloon-size would mean too great a change in volume, so I needed to stay with the size I had been using. However, when more plaster was poured into these balloons, they would, as gravity would have it, increase in volume but not very much in height. After much experimentation, I found that if I pulled down and stretched the plaster-filled balloon as the plaster was beginning to go off, but released my grip before leaving a permanent dimple, I could achieve greater height without proportional volume increase.

\(^{34}\) Topfer, op.cit., p. 96.

\(^{35}\) Balloon/plaster form-finding process.
I then filled one of the *Their Lips Met* vessels with clay, made a mould around it, and cast from that, the end product being 15% smaller than the original and thus providing a variance in height and volume at the other end of the scale. Although identical to the original in all respects but size, the end result felt entirely different. The small one seemed so petite by comparison – the smallest form I had made to date, making it seem somehow more precious. Two years down the track, it still delights me every time I see it.

The legions of casts continued to grow until it was time to stop casting and move onto bisque firing, sanding, high firing and polishing:
The sanding process entails the removal of the seam resulting from the mould break line. Technically, this is a sign of mould deterioration from over-use; visually, however, while not what I want for a variety of reasons that I shall detail shortly, there is something intriguing about this delicate ridged line intersecting the belly of the form. The mould break line around the equator of the form is a necessary evil but there lies within it the potential to make it a decisive design feature, as opposed to an irritating and time-consuming flaw. Another feature of the casting process is the progressive drying of the casts as they move through graduations of tone, gradually shifting from deep soft grey through to bleached white. The combination of drying stages, pictured below, is quietly captivating. This ephemeral process could be emulated through

the use of coloured pigments added to the slip; however, for this particular work, I am not seeking any distraction from the reading of curve and form, through colour or surface feature. The making process often presents visions of opportunities, not all of which can be pursued at that time but which I try to document in diagram or photography, and then put aside – ‘on the back burner’, as it were.

Sarah Whitfield, when relating Ellsworth Kelly’s painting process, recounts a similar concern for a lack of distraction:

[Kelly has a] preference for the anonymous, for an art that does the job without drawing attention to the way it is done. Avoiding a painterly surface is also necessary if the eye is not to be distracted from the shape of the work, or indeed, from the shapes contained within the work.38

Perhaps also, there is a suspension of disbelief that needs to be addressed. Obvious signs of the making process, marking the way in which a form came into being, may prevent an anthropomorphic reading of the work, perhaps lessening my own and a future viewer’s engagement with the form. Aside from the formal aspects of this work, such as the intersection of line, plane and volumetric curve, the dynamics of circles and ellipses, the juxtaposition of

37 Current works as triggers for future works.
open and closed forms and the balance of massing and dispersion, of weight and distribution, the heart of the work, as it were, lay in the relationships between forms. For me, these relationships took on a very anthropomorphizing nature, ranging from the tension of the anticipation between new lovers, to the gentle intimacy of a mother and child, to the gathering of a close, family group and the solitary leaning away toward the unknown. Each form, curve, gesture and attitude would take on a new level of engagement, depending on where and with whom it was placed in a group.

Ellen Dissanayake, a Seattle-based independent scholar whose writings about the arts synthesize many disciplines, including visual art and music, evolutionary biology, ethology, psychology, anthropology and neuroscience, suggests possible reasons behind this empathic response to these essentially inanimate objects:

At the core of ritual and art as I have described them is the emotional intersubjectivity developed and practiced in mother-infant interaction.

Making and making special are inseparable from the innate human impulse to share feelings and from the need and ability to express ourselves in relationship with others. And we experience the works of others intersubjectively also. The gestural traces in handmade objects, like the bodily signatures in dance and song, contribute directly to another’s reception or appreciation of them.

With a wide array of newly polished forms in front of me, I began playing with the possibilities for their grouping, looking for those forms that engaged with each other on some level and, beyond that, how these discrete pairings or groups of three might then form further relationships with a broader population.

Gwyn Hanssen Pigott wrote of this aspect of her practice in a 1997 issue of *Studio Potter*, beautifully expressing the act of arranging her work and perfectly encapsulating my own experience of this:

> I have learned a few things, about the arrangements. I have to be in neutral when I place the pots together, and alert to tensions and havens of spacing. Then I might find sweet relationships, shy couplings, protecting strengths in those paired down, waiting forms. (…) And yet it has come

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slowly, out of observation, out of what can't be refuted. These forms, these assemblages and groupings and jostlings and juxtapositions sometimes have a power to move me, and others. Strange. I cannot understand.\textsuperscript{43}

Perhaps Ellen Dissanayake’s discussion of our empathic responses to objects such as these would provide an explanation to Hanssen Pigott’s musings.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{image.png}

\end{figure}
Along with the ceramic still lives of Gwyn Hanssen Pigott, Marie Torbensdatter Hermann and Eva Zeisel are two other ceramicists whose work I look to with regard to the handling of relationships between forms:


While Zeisel’s work has much to say about intimacy and anthropomorphism with regard to both form and relationship, Torbendsdatter Hermann’s work speaks more of tensions, of compression of space between forms and of forces of attraction. The complexities of interpersonal relationships between people are reflected in all three artists’ work as, each in their own way, they translate the complex human dynamics into form. Or perhaps it is the other way around: that we, as viewers, bring to their compositions our own emotions, experiences, memories and ways of relating.

Whyte’s City of Hobart Art Prize catalogue image was taken from eye-height, showing the profiles of the forms and the interactions between their curves to best advantage. Seeing them on the studio worktable, however, allowed a view across their tops, not only of the dynamics of hollow and facet, dark and light, but also of the relationships between pairs of forms and the group as a whole. In order to communicate both these aspects in the final work, I decided to place the forms not only on a large enough surface to allow for space all around the gathering, but also one high enough to facilitate a view across the top of the work, and with the slightest dip down, a vision of the forms in profile. Concurrently, I had been playing with the open/closed combinations in groupings and had two clusters of different weightings on the table. It was with these paired but disparate arrangements in mind that I decided on the form of the final work: two large white fields, each with its own gathering atop, separated by a gap and floating 1100mm off the ground.

There is, with small ceramic objects, the eternal problem of how to display them such that the object is the point of focus and not the plinth/table/shelf upon which they stand. I modelled up a variety of possibilities but, in the end, went with the one that was visually the simplest – two white cubes, floating 20mm above the floor:
C4D design process for the display of Composition of Curves.
On the day of installation at the Tasmanian Museum and Art Gallery, I took a leaf out of Gwyn Hanssen Pigott’s book, put my earphones on to attain the silence I needed and spent the day arranging the porcelain forms on their clean white plinth tops. I gathered the forms, not in the centre of each plinth, but slightly to one side, off-centre so that the works could be seen alternately from a distance, across the empty white expanse, and then up close, bringing the relationships between forms to the fore. As I moved around the work, these interactions would seem to shift and change, each new angle of vision providing a different way of seeing the individuals and their relationships to each other and to the gathering as a whole.

When it came to lighting, with Whyte’s studio image portraying the forms clothed in shadow, I asked if I could have the room as dark as possible, with only a single soft light from one side quietly illuminating each gathering. While slightly brighter and harsher than I would have liked, the end result was pleasing, with the gatherings appearing to emerge from the shadows, floating in space in two soft pools of light:
At the opening night of the 2010 City of Hobart Art Prize, I was presented with the MONA Award\textsuperscript{51} for this work, which I had by then named \textit{Composition of Curves}. The award led to the offer of a follow-up solo exhibition at the Handmark Gallery in Hobart, an opportunity that allowed me to extend this idea and play with a variety of scenarios and potentials within it.

For this exhibition I created 20 compositions, using the moulds from the initial work for \textit{Composition of Curves}. Each was a unique composition of these delicate translucent porcelain forms; some groupings were lively whilst others brought a sense of stillness, some spoke of intimacy between lovers, whilst others seemed to portray the dynamics of a large family in all its closeness and waywardness:

\textsuperscript{51} The MONA Award is bestowed upon a selected participant of the City of Hobart Art Prize, the recipient of which is given $7500.
While reading Krome Barratt’s book, *Logic and Design*, I came across the twofold notion of energy and equilibrium and found it so fitting to my vision for these works that the notion became their series title:

The stillness, the poise of perfect symmetry are not of the everyday world, [rather, we seek] variations within the theme of symmetry: a sensitive balance of dissimilar forces … we seek equilibrium, an order that permits variety yet not chaos. We seek asymmetry.

‘Equilibrium’ is defined as both a state of balance, particularly between opposing forces, and as a calm state of mind and a balance of emotions. Within these groupings, there seemed to me to be such a wide gamut of interconnections and relationships that, through careful and mostly intuitive placement, found balance in their diversity. Each of these little fellows, with their individual life and energy, when brought into a relationship with another, can produce imbalance or balance, depending on where they sit in

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54 ibid p. 251.

relation to each other and to their family: an equilibrium attained through a balance of dissimilar forces.56

In his opening speech at this exhibition, the Artistic Director of the Tasmanian Theatre Company, Charles Parkinson, spoke of these groupings as families – extended families with their often precarious balance of adults, adolescents and children. He referred to the grouping pictured below, bringing attention to the various interactions and relationships caught in a single moment, as if in a family photo, complete with reticent adolescent (on the far right), his back to the family, heading away, asserting his longed-for independence:

56 Barratt, op. cit., p. 249.
Parkinson’s speech took me to a work of Barbara Hepworth to which I have long looked for quiet inspiration: *Three Forms*.


60 Hodin, op. cit., p.19.
I find it interesting, from a female perspective, that the artists to whom I find myself drawn when considering works that speak of relationships are often women – women who, through their work, consider intimate relationships, be they those of lovers or of families. Hepworth once said, “The woman’s approach presents a different emphasis. I think that woman will contribute a great deal … to the visual arts and perhaps to sculpture, for there is a whole range of formal perception belonging to feminine experience.”

I gained so much pleasure from searching among these little porcelain fellows for those that could speak to each other, through the body language of gesture, stance, motion and attitude, flirting with the possibilities of new relationships, discovering unexpected moments between seemingly disparate forms. A shift in position or even angle of the mouth of a form would evoke a change in mood;

61 Barbara Hepworth, Two Forms, White marble on marble base, Base 16 x 9 inches, 1935, in Hodin, op. cit., image 68.
62 B Hepworth in J Chicago, Through the Flower: My Struggle As a Woman Artist iUniverse: Indiana 2006 p.144.
the addition or removal of a single piece could alter the weight, balance and feeling of a group — the possibilities were endless. The images below illustrate the subtle yet present effect that a turn in relative position, or of the addition of a form to a pair, can have on the feel of a group:

Gwyn Hanssen Pigott writes of a very similar feeling when considering her own forms:

That with only the very slightest gesture, the merest suggestion of the lip of a jug, or pouring spout, or the lightest softening of a curve, there can be expressed a sort of vulnerability, or a tenderness, or an attentiveness that causes us to pause. That the scale alone of some objects can touch us, and a small jug of open and generous form

63 Belinda Winkler, Selected works from the Energy and Equilibrium series Porcelain, glazed interiors, hand-polished exteriors Dimensions variable, 2011, Photography by Peter Whyte.

For me, as with Hanssen Pigott, to attribute anthropomorphic qualities to our ceramic objects seemed natural and, indeed, automatic. With their bellies, bottoms, gestures and attitudes it was difficult not to make these attributions. There exists a line of thought that we humans have an inherent need to find the familiar in the unfamiliar: we like to recognise things, and when we do not immediately, the mind seems to try to make sense, as best it can. The fulfilling of this need can often take the form of anthropomorphism— that is, the attribution of human characteristics or behaviour to an object.\footnote{Oxford Dictionaries Online. "Definition of anthropomorphism in Oxford Dictionaries (British & World English)." In Oxford Dictionaries Online. 2010. Accessed March 3, 2013. http://oxforddictionaries.com/definition/english/anthropomorphism.} Arthur Lane, in his book, \textit{Style in Pottery}, writes, "In using such words as lip, neck, shoulder, belly to describe the shape of a pot we acknowledge its likeness to a living thing."\footnote{A Lane, \textit{Style in Pottery}. London: Oxford University Press, 1948. p.10.} Warren Frederick, in his essay, \textit{The Inescapable, Indivisible Essence of Pottery}, follows this line of argument when he writes:

\begin{quote}
Pots reflect not only universal human character traits (...) but also the diverse shapes and protrusions of the human body. This is not false anthropomorphism, but a primary instance of pottery's unique abstracting capacity.\footnote{W Frederick, "The Inescapable, Indivisible Essence of Pottery." Artist Potters. Accessed March 4, 2013. http://www.artistpotters.com/artist_potters/frederick/wf_articles/inescapable_indivisible.htm.}
\end{quote}

My own propensity to anthropomorphise \textit{these little fellows} provoked me into reading about this very human tendency. There is a wealth of behavioural psychology revolving around our need to anthropomorphise. Adam Waytz, for instance, is a psychologist

> Although we like to anthropomorphize, we do not assign human qualities to each and every single object we encounter. What accounts for this selectivity? One factor is similarity. An entity is more likely to be anthropomorphized the more similar it appears to humans.\footnote{A Waytz, "Does the Devil Really Wear Prada The Psychology of Anthropomorphism and Dehumanization." Association for Psychological Science. Last modified February 25, 2010. Accessed May 11, 2013. http://www.psychologicalscience.org/media/releases/2010/waytz.cfm.}

The forms I had made for this work were essentially abstract and yet, equally, they suggested the body. They possessed a certain ambiguity and mystery while, at the same time, seemed somehow familiar, thus facilitating an anthropomorphic reading. It was at the time tempting to follow the road of behavioural psychology in an exploration of our anthropomorphic tendencies; however, as Blythe points out, this would have been a topological error.\footnote{Blythe, R, ‘Topological Errors in Creative Practice Research’ in Boutsen, D, (ed.), \textit{Good Practices Best Practices}, Antwerp: EPO, 2012, 51 – 55.} There was, however, within the more closely aligned art theory domain, a discourse centred on anthropomorphism and minimalism. As mentioned earlier, while attempting to locate myself contextually in my initial research, I had sought to align myself with the aesthetics and purposes of minimalism.

Robert Morris and Donald Judd, were intent on eliminating from their work. Morris and Judd disowned anthropomorphic work, seeking a non-hierarchical distribution of parts and non-anthropomorphic orientations. In 1966, at the height of the minimalist movement, Robert Morris published his views of “the new three-dimensional work” and, in doing so, articulated an intriguing connection with regard to anthropomorphism and tension:

Surfaces under tension are anthropomorphic: they are under the stresses of work, much as the body is, in standing. Objects, which do not project tensions, state most clearly their separateness from the human. They are more clearly objects.

To Morris’ mind, the form that fulfils the role of independent object best is the cube, and this of course is in direct opposition to my own, very curvaceous work. Interestingly, though, despite seeking to rid their work of anthropomorphic associations, art critic Michael Fried claims that the new three-dimensional work is in fact anthropomorphic in its theatricality. Fried argues that, “it is the relationship between the viewer and the work that is anthropomorphic and suggests a stage-like presence of every element involved.” Morris himself argues that the viewer defines the aesthetics of the new work:

The major aesthetic terms are not in but dependent upon this autonomous object and exist as unfixed variables that

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74 ibid. 
75 ibid. p 833.  
76 Ibid. 
77 ibid. p 835.  
78 Ünsal, op. cit. 

find their specific definition in the particular space and light and physical viewpoint of the spectator.\textsuperscript{79}

Susan Best, in her article \textit{The Subject of Minimalism: Krauss, de Duve and Anthropomorphism} writes of prominent art critics Rosalind Krauss and Thierry de Duve’s arguments regarding the links between minimalism and anthropomorphism. According to Best, both Krauss and de Duve:

\begin{quote}
... each produces an account of subjectivity that is both embedded in [minimalist] work and yet produced by the viewer’s interaction with it. This focus on the actions of the viewer has very curious effects. It moves art criticism away from a concern with art production and towards a concern with aesthetic reception. This leads to an unprecedented entanglement of the viewer and the work of art.\textsuperscript{80}
\end{quote}

Best goes on to argue that this entanglement cannot help but produce anthropomorphic works of art. I found this to be a very personally pertinent argument as it resonated with a conversation I had had with Kevin Perkins with regard to the viewer and these new works.

As with the originating work, I displayed these groupings at a height of 1100mm and on 1-metre-squared plinths. The height and areas of the top surface of the plinths allowed the work to be seen in profile, accentuating the interaction of forms and the spaces between them, heightening the “compressed internal relations [that pull the viewer into an] intimate relation with the work,”\textsuperscript{81} whilst concurrently enabling perception of the dynamics of dark

\begin{footnotes}
\item[79] Morris, op. cit., p 832.
\item[81] Morris, op. cit., p. 832.
\end{footnotes}
hollows and bright facets, along with the graphic landscape of ellipses and circle:

When discussing this exhibition with Perkins, he commented on the development of my practice in terms of my increasing interest in the perception of my work. He spoke in terms of my directing the viewing of the work through such devices as height, distance and lighting. Perkins saw a link between the importance given in Japan and other Asian cultures to the presentation of food, including the ritual of the Japanese tea ceremony, and the way that I was beginning to prioritise the presentation of my work to the viewer. I found this to be a very thought-provoking observation as much of what I was experimenting with in regard to presentation devices was done in an attempt to replicate my own experience of the work as I arranged its groupings. This was a very insular and inwardly-focused process, and not one that I had initially sought to communicate, although, in dictating viewing-height and distance, I was in fact ensuring some level of communication with regard to my own experience. With my attention to the "variables of object, light, space [and] body" 83 I was giving unprecedented consideration, in terms of my own practice, to the viewer and the phenomenology of viewing. This was not, however, a minimalist approach to the relationship between viewer and object. In fact, it was quite the opposite. Robert Morris believed that relationships must be removed from within artworks.84 He claimed that the act of creating relationships between forms:

(...) reduces the public, external quality of the object and tends to eliminate the viewer to the degree that these details pull him into an intimate relation with the work and out of the space in which the object exists... the sensuous object, resplendent with compressed internal relations, has had to be rejected.85

83 Morris, op. cit., p 832.
84 ibid, p 833.
85 ibid, p 832.
It was, however, precisely this “sensuous object, resplendent with compressed internal relations”\(^86\) that I wished to encompass, one that was rich in complex compositional relations and subtle nuances of form – one with the potential to communicate my experience of arranging these forms, complete with the delight found in the discovery of unexpected couplings.

While getting to know each of these forms and the ways in which they related to each other was eminently enjoyable, perhaps the most satisfying part of the whole experience was the shaping of the spaces between the forms – the near, but not quite, touching of curves creating a spatial tension, charged with anticipation. It seemed that positioned closely, where curve almost meets curve, a tension was created, activating the space between. Seeking and establishing this spatial tension became as important as the forms themselves. I still have several of these little fellows on my kitchen windowsill, and there is nothing better than finding the moment between them when the morning light pierces that sliver of space, generating the most exquisite frisson.

Finding these spaces between the *Energy and Equilibrium* porcelains took me back, once again, to Ellsworth Kelly’s *White Curve 1*, not just through the strength and vitality of its formal attributes of line and curve, shape and space, but through the visual tensions evoked by these elements. I had been looking more closely at Kelly’s works at that time and had discovered his *Colored Paper Images*, a series of 23 paper-pulp works made between 1976 and 1977. Many of the works in this series focus on the near intersection of curves, imparting an almost visceral sense of tension to that moment between the curves, where negative and positive shape and space push together – nearly.

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\(^86\) ibid.
Art critic E.C. Goossen wrote, with regard to the formal and perceptual tensions of Kelly’s work, “the lateral expansion and compression of energies and forces is one of several tension themes…developed,” describing Kelly’s portrayal of physical and perceptual tensions within these works. Indeed, in the first image above, Colored Paper Image XI (Gray Curves with Brown), for example, the brown could be read as either compression of space between two shapes or as a rectangular shape caught in the moment of stretched tension, just before break point. Here form and ground, positive and negative, alternately command attention, this interplay of the in-between activating the work. Kelly has always founded his art on seen experiences, including architectural elements, and fruits and plants and shadows he perceives around him. He produces direct – yet abstracted – replications of these shapes and contrasts, “around the actual object, or shape, I see the periphery; I take in an interplay of forms.” Through the use of oppositions such as representation and abstraction, the subjective and the impersonal, the systematic

87 Sketch of Ellsworth Kelly’s Colored Paper Image XI (Gray Curves with Brown)
88 Sketch of Ellsworth Kelly’s Colored Paper Image II, State (Green Curves)
89 Sketch of Ellsworth Kelly’s Colored Paper Image V (Blue Curves)
and the indeterminate,92 Madeleine Grynsztejn claims that Kelly has been able to “fuse this striking interplay into something like a sensual abstraction occupying a fertile realm in between is a source of his art’s finely strung tension.”93

The tension and compression in the Kelly images above hearken back to Whyte’s photographs of Their Lips Met, with their point of near touch, their kiss:

While arranging the porcelain forms for the Energy and Equilibrium series, this kiss was in the forefront of my mind. While shifting the forms, looking for their place I would move them together, and then pull them apart again, just the tiniest bit, so that the light would just break through the space between forms. While documenting this work, this space revealed itself in the photographic images of Energy and Equilibrium #17 and #19:

92 Grynsztejn, op. cit., p.11.
93 ibid.
94 Belinda Winkler, Their Lips Met, Porcelain and Glaze, 70x 70 x 70mm, 2009, Photography by Peter Whyte.
However, what was really of interest to me was the quality of space revealed in two sequential photographs that Whyte shot of *Energy and Equilibrium #15*, where I pushed the pair together for the first image and then carefully pulled them apart until only the tiniest distance showed, stopping at that exact moment when the light pierced that sliver of space:

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This process led me to ask Whyte if he would photograph some of my plasters such that the images would capture this compression of space, pulling right in on the objects until the point of near touch became the only thing in the photograph. The series of images below illustrate the photographic process of progressively tracking in closer:

![Photographs of plasters](image)

While set up in the studio for these shots, we also explored a very different relationship between forms. This interaction is not one of the tension of anticipation, but rather captures that moment of intimate touch between two bodies:

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98 Photographic studies of plasters, Photography by Peter Whyte.
99 ibid.

100 ibid.
ibid.
The final image in each of these scenarios brings a subtly different quality to the notion of the point of compression of space between forms. These images utilise the visual dynamics of line and curve, energy and equilibrium, proportion and balance, figure and ground. However, beyond these formal qualities exists something deeper, something we recognise within our own sensual experience. Although abstract, these curves and the space between take us somewhere – they have the potential to evoke sensual haptic memories. These images guide vision, directing the framing of a view, a particular view – not denying the object from which they originate, but rather, directing focus to a particular aspect of it. They explore the notion of capturing one moment in the viewer’s path around the object, in effect referencing the minimalist emphasis on the relationship between artwork, viewer and space. Robert Morris explains, “The body, the object, space: these three elements must converge…. there is the necessity for the body to move through the space, to confront the work, to actually have your body in relationship to that thing.” Each series of images tracks this movement and brings the eye in to focus on that moment in the work where space is compressed and the tension between forms is heightened, allowing me to explore this facet of my work with greater acuity.

I found it interesting that the photographic image removed orientation, that point of reference, that sense of direction and position from which the object was photographed. This, in turn, allowed me to play with the perceived orientation of the work. When the image is flipped or rotated, the sense of gravity and pressure changes emphasis, altering the feel of the images, and consequently, our reading of it:

Light, shadow and reflection impart a sense of form and gravity, and implied direction of pressure. Stepping in on the forms, however, removes the floor level and groundedness of the objects, effectively abstracting them, which in turn allows the image to speak more strongly of form and space, movement, proportion, scale and compression, tension and release. Rotating the image alters the orientation of the objects and increases a sense of suspension, pressure, weight and force.

103 Photographic studies of plasters, Photography by Peter Whyte.
The photographic image also has the ability to capture an object without its scale. This allows me to manipulate the perceived scale of the work, from ornamental to monumental\textsuperscript{104} and, in doing so, enables me to accentuate and exaggerate the tension within the work. Altering the perceived viewing distance in turn alters the perception of scale. Photographing up close to small objects simulates normal viewing distance from large objects. This technique can lend an architectural quality to the work. British ceramicist, Elizabeth Fritsch, refers to ceramic works of domestic scale as being “an architecture of the hand”\textsuperscript{105} and Danish ceramicist, Marie Torbensdatter Hermann recently named one of her pieces with a distinct architectural aesthetic, \textit{One always builds too small}\textsuperscript{106} Similarly with these images I am playing with notions of scale. While focusing upon the intimate details of my small-scale ceramic works, these images are without scale and are thus able to exist anywhere on the “continuum between the monument and the ornament.”\textsuperscript{107}

Exploring my plasters through photography led to an afternoon of experimentation with visions of these plasters at monumental scale. This was done through the inclusion of scale model people – a long established technique used by architects and artists working at architectural scales, such as Anish Kapoor:

\textsuperscript{104} Morris, op. cit., p 830.  
\textsuperscript{107} Morris, op. cit., p. 830.
As the scale of the person changes so does the perception of the scale of the work. The image on the left used a 1:100 scale person; whereas the image on the right utilises a 1:200 scale person. The perceived difference in scale is striking. The 100mm high plaster model takes on the appearance of a 100m, 33-storey structure:

Photographing a complete object in context can lend it a sense of scale. But the more one draws the focus into the object, and loses the context, the harder it is to comprehend the scale:

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110 Belinda Winkler, Design process images, 2011, Photography by Peter Whyte.
In the pair of images directly above, there is no sense of scale in the one on the left - the form could be as large as a planet or as tiny as a grain of rice. The image on the right, by contract, takes on a monumental scale as a result of the inclusion of a 1:200 scale model person. Instead of a reading as an intimate form that

111 Belinda Winkler, *Encounter* #2, Ceramic, MDF, 2-pak Polyurethane, Stainless Steel, Seat dimensions 1800 x 440 x 440mm, 2009, Photography by Peter Whyte.
112 Belinda Winkler, Design process images, 2011, Photography by Peter Whyte.
can nestle into the palm of your hand, as the previous sequence of images imply, the object in this instance takes on an overwhelming and threateningly precarious presence.

Beyond the physical use of scale model people, I also played with digital manipulations of existing images to alter the perception of scale, lending an architectural scale to the object:

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113 Belinda Winkler, exploring scale though image, 2012.
I opened this section of Chapter Two with the image above of the form-finding process plasters from *Their Lips Met*, and have proceeded to illustrate just how influential these plasters have been on the development of subsequent works, *Composition of Curves* and *Energy and Equilibrium*. The poster inserted inside the front cover of this Catalogue illustrates the impact that these plasters, and the process from which they originated, have had on my practice. This has not been an exclusively linear process, but rather, one that builds and layers, diverts and returns. The body of work that directly followed the *Energy and Equilibrium* series, for example, had its roots in these plasters and their process of becoming but were brought more strongly to my mind through other processes encountered along the way. Two of the most notable of these was an image of the point of near touch between two plaster models, while the second lay in a moment observed in the polishing of the *Energy and Equilibrium* forms:

\[114\] Belinda Winkler, Design process for *Their Lips Met*, Photography by Peter Whyte.
Photographic study of plasters, Photography by Peter Whyte.
In the process of polishing and rinsing the final forms before installation, I had all those that were completed draining, upside down, on the low long casting table. I photographed this scene as there was something wonderful, if inarticulable, about this field of white, smooth, rounded forms, the curves of which gently undulated across the space of the rectangle that seemed to frame them. Each of these forms leaned on another for balance, but some were self-supporting and so, while clustered closely, did not actually touch their neighbours. This, of course, took me immediately to the image of that mesmerising moment of near touch.

This new body of work was for the national ceramics competition, the Vitrify Alcorso Ceramic Award.\textsuperscript{117} I had been shortlisted for this award whilst still making \textit{Energy and Equilibrium}. In fact, only two months separated the exhibition of these completed bodies of

\begin{itemize}
\item \textsuperscript{116} Belinda Winkler, Design process for Gravity #1, Photography by Peter Whyte.
\item \textsuperscript{117} The Vitrify Alcorso Ceramic Award is a $10,000 annual prize for ceramic art.
\end{itemize}
work, thus much of my design thinking for the new work was happening whilst I was in the throes of casting and polishing the *Energy and Equilibrium* series. This led to many points of intersection between the works, but also allowed for digressions and shifts.

The image of the upended porcelain forms seemed something like a long white cloud, their resolved curves being interrupted, however, by the flat facets of their bases. I could well imagine how beautiful this cloud would be if each of these curves were full and rounded – if only the narrow end of the plasters were sanded flat, allowing these forms to sit, curve up. I looked at my original design drawings from *Their Lips Met*, holding them upside down, an act that made my approach to this process clear:

![Design drawing from Their Lips Met, flipped in the development of Gravity.](image)

It was then that the basis of this new work came into being. I imagined that each of these new forms, while resting in their cloud, as part of a whole, would have the capacity to be lifted out, cupped in the hands, caressed and sipped from – their smooth, eggshell-thin rims ready to receive the touch of the lips. I hoped that some would balance on their rounded bottoms and gather, floating together as had the little bowls in *Energy and Equilibrium* #5:

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118 Design drawing from *Their Lips Met*, flipped in the development of Gravity.
I set about creating a new assortment of plasters that, rather than being intervened upon, were left to stretch and swell according to the natural geometries of the fluid plaster, the stretchy skin of the balloon and gravity. This gave me an assortment of round-bottomed plasters whose tops I could then slice through to create flat bases, allowing them to stand upright. The angle of the slice was important here as it influenced the angle of tilt of the upended form. I was looking to evoke the tension captured by the image of the two plaster models, where two forms appeared to be leaning toward each other and yet I could not allow too much tilt as the plasters would either tip over, if tall, or lose their sense of upward lift by having too large a footprint.

119 Belinda Winkler, Energy and Equilibrium #5, Porcelain, glazed interiors, hand-polished exteriors, Dimensions variable, 2011, Photography by Peter Whyte.
The exciting thing about these plasters was that, while some would fall to the side and lie down if placed on their round bottoms, others would balance, as I had hoped, rocking gently until finding their equilibrium. These wayward wobble-bowls were reminiscent of self-righting children’s toys or, closer to home, of my Droplet stools from eight years previous. They even took me to more recent works such as Alight and There, with their ability to sway and to restore equilibrium on their points of balance:

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120 Plaster models for Gravity.  
121 Belinda Winkler, Droplet Stool, 2003, Fibreglass, zircon sand, 2 pak polyurethane, 600 x 450 x 350mm, Photography by Uffe Schultz.  
122 Belinda Winkler, There, 2 pak polyurethane, ceramic, Approximate dimensions 200 x 300 x 400mm, 2008, Photography by Peter Whyte.  
123 Belinda Winkler, Alight 2 pak polyurethane, ceramic, Approximate dimensions 150 x 150mm, 2008, Photography by Peter Whyte.
Thus this new work, that I had originally envisaged to be a long white cloud of upturned porcelain forms constrained within a rectangular format, began to emerge as one comprised of glazed and polished functional vessel forms, all of which had the potential to contain fluid and to be sipped from, while others could be placed upon their round bottoms, where they would quickly find their balance point, even whilst containing fluid – an art installation for the eyes, with the potential for function.

The gamut of casting issues that Composition of Curves presented had been solved through a change to Southern Ice porcelain, making the Energy and Equilibrium series by comparison a joy to cast. This work, too, after the model and mould making process, cast well; however, the problems began as soon as it was time to high-fire these forms. Porcelain, as I have mentioned, can be notoriously difficult especially in the high temperatures needed to attain translucency. While these forms bisque-fired well, the problem of how to high-fire them was not one that presented an immediate solution. The problem was that, at high temperatures, the porcelain body begins to soften and melt. The higher one goes, the greater the translucency, however, this is followed in equal measure by a vastly increased risk of deformation through flat spotting, slumping, warping or collapse. In order that these vessel forms retain their fully rounded curves, I decided that they would need to be fired on their rims, placed on fine alumina which would act as ball bearings, allowing the porcelain to shift as it shrank with the heat. This technique, however, delivered terrible results:
My next test involved placing the bowl upright, on a nest of kiln bricks lined in kiln fibre. However, this too failed as any rise or fall, dart, cut or crease on the kiln fibre was replicated on the surface of the porcelain. My third attempt had the vessel sitting in a bed of alumina, supported by kiln bricks but, while the bottom stayed rounded and smooth, the rim warped badly:

It seemed to me at that point that both the base and the rim needed support and so I commissioned a thrower, Bill Thomas of Panogana Pottery,\textsuperscript{126} to make me some robust pots that would act as nests to support the entire vessel, from base to neck in alumina.

\footnote{\textsuperscript{124}Firing problems during the making of \textit{Gravity}.} \footnote{\textsuperscript{125}Searching for solutions to firing problems for \textit{Gravity}.} \footnote{\textsuperscript{126}Bill Thomas owns and operates Panogana Pottery a ceramics production workshop in southern Tasmania, Panogana Pottery. Accessed March 10, 2013. \url{http://www.panogana.com/}.}
This proved to be the most effective solution to date, but the alumina was a little coarse, leaving a gritty texture on the surface of the porcelain, and so I retested with fine silica sand — successfully. Time constraints and Tasmania’s island isolation and associated transport issues meant that I could not source enough silica in time and so I was left with the task of crushing the fired hardened silica and sieving it back to its fine original state after each firing. Fine airborne silica dust is, however, an extreme health hazard, as I later learnt from preeminent ceramicist Prue Venables.\footnote{Final solution for the firing of the works for Gravity.} While discussing these labour-intensive firings with Venables after the opening of the Vitrify exhibition, in which she was also a participant, she told me of the very real dangers of fired silica sand and recommended I never use that technique again, no matter how effective. As an alternative, she suggested I try a technique that she herself had used with success in the past, involving the casting of the equivalent of individual setters for each vessel, allowing for concurrent shrinkage and uninterrupted travel of the setter and, therefore, the rims. Leicester Cooper,\footnote{Conversation with Prue Venables, Battery Point, Hobart, TAS, April 2011.} who also happened to be in Hobart at that time, designed a support vessel that may also work for the high-firing of these particular forms. Two potential solutions from two technical experts in my field would make the casting of this round-bottomed vessel form easier in the future! Nonetheless, at the time I had little choice but

\footnote{Conversation with Leicester Cooper at the studio, May 2011.}
to soldier on with the silica-filled pots and complete the casting glazing, firing and polishing of these vessels:

While making all these forms I was thinking constantly of the way in which I would display them. I wanted to evoke that long white cloud I had seen while their predecessors were upended on a rectangular towel, the regular geometric framing making an interesting counterpoint to the rolling curves of the vessels. I had seen this cloud, as it were, from above, as in an airplane or from atop a mountain and thus decided to display the work on or close to the ground, rather than up at eye-height as with the previous works. The gallery floor, where this work was to be installed, was concrete so I considered the contrast of that surface to the perfection of the porcelain. It took me back to an image taken of a pair of my forms some years prior, on the floor of the Tasmanian Design Centre:

\[130\] Slip-casting process of Gravity.
I wanted the implied rectangular frame, however, and so went out to a concrete factory where I was concurrently working on another project, the details of which will follow in the next section. The factory made me a 1500 x 600 x 1500mm concrete slab, complete with polystyrene internal inserts, to make it light enough to move, and adjustable legs that would allow the slab to appear to float 20mm above the floor. I very much liked the matte, mottled surface of this slab and, while it sat in the studio, I began to wonder what one of my perfect white porcelain bowls would look like in a similar material. When photographing some works from the *Energy and Equilibrium* series for an invitation image, Whyte had taken a photo where the shadows wrapped so heavily around a small form that it almost appeared to be made from black-pigmented slip:

I was fascinated by this image, as I had never seen these works in that way before. The thought of a single dark form, slipping quietly into the gathering, was an entrancing one indeed. With this

132 Belinda Winkler, Selected works from the *Energy and Equilibrium* series, Porcelain, glazed interiors, hand-polished exteriors, Dimensions variable, 2011, Photography by Peter Whyte.
thought in mind, combined with visions of dappled grey concrete, I found myself at the Conny Dietzschold Gallery in Sydney,\(^{133}\) looking at the marvellous zinc works of German artist Jupp Linssen and having one of those light-bulb moments. What about casting one of my forms in zinc and adding it to the mass of porcelains?! Linssen’s zinc-covered panels were rich in texture with a complex surface patina that had been progressively built upon and aged with muted but quietly absorbing tones. Although the antithesis of my work in so many respects, I absolutely loved them and from that point on became determined to find a way to achieve this surface on one of my forms:


That night I happened to be at a dinner with Sydney designer and sculptor Mark McClelland, and, given his established expertise in the making of forms in metal, I discussed with him the idea of zinc in vessel-form. He explained that while hand-raising in metal would deliver the compound curves and delicacy I was looking for, zinc was too soft a metal for this process and that casting through a foundry may be a better option. Exploring the various foundries and the services they offered, I quickly discovered that none were willing to cast in zinc. Ewan Coates, of Coates and Wood Fine Art Foundry in Melbourne, took the time to explain that there are issues of contamination and therefore casting with zinc would require a completely separate set of equipment, which demand does not support. Coates then went on to suggest aluminium as a possibility, explaining that his foundry specialises in the casting of both aluminium and bronze. After some discussion, I commissioned the foundry to mould and cast two of my wobble bowls in aluminium, and the same in bronze, just to see how they would look. I flew to Melbourne with the models and watched as Mal Wood, Coates’s partner in the foundry, made their moulds and waxes:

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Time constraints did not allow me to stay on for the casting process so I discussed patina options with Coates and Wood and returned to Hobart to complete the porcelain for the Vitrify exhibition. While working in the studio and awaiting the transformation of wax casts into aluminium and bronze, I contemplated the way in which I might include them in the final work. I envisaged a possible scenario where a single aluminium form would nestle in amongst the porcelain – related but a stranger.

While handling these porcelain vessel forms in the process of casting and sanding them, it seemed almost a shame to completely hold secret their fine rims and glistening ‘wet’ interiors, as they sat, upside down in their cloud. Recalling Kevin Perkins’ words with regard to the act of presenting the work to the viewer, I decided to explore the idea of separating a small grouping bowls from the ‘cloud’ and ‘presenting’ them on their own plinth, but upright, almost as if inviting the viewer to pick one up and warm it in the hands, or bring it to the lips to sip from. I had in mind the layout of my plinths in the City of Hobart Art Prize when I decided upon the final solution for this work – two matte grey, ‘floating’ concrete slabs of the same height and width, the first being my existing rectangle and the second being a square, positioned by a 20mm break line, echoing the 20mm float off the floor.

The challenge here was how to get these round-bottomed forms to balance. The plaster models continuously tipped over onto their sides so I sanded out divots into the surface of MDF to see if I could get them to rest in a near upright position, with the slightest of leans toward each other. After some trial and error with angle of tilt and depth of hole, I arrived at the solution – one that I then proceeded to make a mould of, in preparation to its concrete cast:
Plaster models and divots in test plinth surface.
However, no sooner than that was done, the first successful vitrified bowls emerged from the kiln, and to my surprise, each could find its own balance point and in such a way that their curved bellies could nigh on meet!

I then proceeded to set up all the porcelain forms on the pair of slabs, and immediately fell in love with just one single bowl, afloat on its plinth, leaning silently toward those that were gathered in a cloud. It was very early in the day while I was arranging the forms and the morning light was shining through the studio doors, gently backlighting the work - illuminating the porcelain yet still allowing shadows to gather:

139 Initial arrangement for Gravity #1, Photography by Peter Whyte.
Belinda Winkler, *Gravity #1*, Porcelain, glazed interiors, hand-polished exteriors, concrete 2100 x 600 x 270 mm, 2011, Shortlisted for the 'Vitrify Alcorso Ceramic Award', Colville Gallery, Hobart, April 2011, Photography by Peter Whyte.
The single bowl, glowing in the morning light, had such poise and balance. Barely resting on the hard-edged, dark, rough concrete, it seemed, by complete contrast, to almost float. Formed through gravity, it now seemed unaffected by that immense force. Depending on the direction of tilt, the form would either lean forward, as if wishing to gravitate toward the gathering, or, if facing away, seemed to be leaving, either with disregard or sadness. The gathering, by contrast, clustered together, quietly sharing the space, silently communicating with the slightest of gesture, with a gentle inclination toward, sharing a familial closeness. Light and distance could alter this reading, the gathering transforming into puffer mushrooms on the verge of bursting, or bubbles about to pop – a contrast to the weight and permanence of the concrete base, whilst concurrently referring back to the near-bursting point of the pressure of the fluid plaster combined with gravity, pushing against the tensioned skin of the balloon. Gravity seemed a very appropriate title indeed for this work with its forms and materials working with and against this force. Each vessel had its place in the group; each had its own relationship with those surrounding it, not one touching another at any point, yet each, very nearly doing so, held apart by the slightest whisper of space. As part of a single work, each had a role to play in the total composition, and yet, as vessels, each retained the ability to rest in the hand, its shining wet void filled with liquid and sipped from – allowing every aspect of their form to be experienced, imparting both visual and tactile pleasure to the already sensual act of eating and drinking. Their gloss-glazed interiors were shared by all but revealed only by one; as was the quality of their translucency, light shining into and through the porcelain skin of the single upturned bowl, floating alone. Delicately balanced, this single form was in a state of stable equilibrium, where the slightest touch will cause it to rock and spin, but only for a while, as it would soon return to a state of balance, of equilibrium.
A tension is generated by this work with regard to the ambiguity provoked by placing ceramic objects with potential utilitarian function within the context of an installation intended for viewing. Each form within the grouping is an internally glazed, externally polished, vitrified vessel, capable of and appropriate for daily use, and yet each denies that function through its considered placement within a carefully orchestrated composition. Gwyn Hanssen Pigott writes of this quandary, explaining that she finds it … alarmingly contradictory; to make pots that are sweet to use and then to place them almost out of reach. To make beakers that are totally inviting and then to freeze them in an installation. Worse still, to take so much time with each piece, carefully trimming and turning and removing most marks of the throwing, to glaze with exacting precision, waxing inside even the simplest, smallest beaker to ensure a sharp, drawn edge.¹⁴¹

Despite that contradiction, Hanssen Pigott quite clearly gains enormous satisfaction from the artworks she creates from her otherwise functional forms. Indeed, one could argue that such works, in the hands of the very adept Hanssen Pigott, begin to function on a level other than a utilitarian one, bringing a quiet beauty and serenity to whoever sees, or is lucky enough to live with, them. There is often a distinction drawn between designing “for needs” and designing “for delight”¹⁴² and while works such as Hanssen Pigott’s straddle both, her groupings lean more strongly toward the delightful experience. Potter and writer Warren Frederick considers another subtle function of such works in his essay The Inescapable, Indivisible Essence of Pottery:

¹⁴¹ Hanssen Pigott, op. cit.
As a metaphor for the human body and as an object typically sized to fit the embrace of our hands, pottery is a close, manipulable presence (...) Touch is inescapably vital for experiencing all pottery because of the centrality of its use. Yet this pottery seems to additionally beckon, to demand even more intensive contact when conveying heretofore-unseen expressive constellations. Touch unlocks nonvisual dimensions: heft, warmth, or the wet evaporative seepage of an earthenware water jar. Turning a pot in our hands creates tactile sensations of three-dimensional rhythms, the syncopation of irregularity in form. Full creative encounters entail repeated but nonduplicative use. Interaction transforms both the object and us.\(^\text{143}\)

Both Hanssen Pigott and Frederick speak of the ceramic form beckoning, inviting touch and, similarly, works such as Composition of Curves, Energy and Equilibrium and Gravity flirt, tempting touch and yet, in the same breath, denying it. This dilemma causes tensions to arise in the viewer and, looking at the finger-marks that appear on the surface of the works when in galleries, illicit touch frequently occurs, in effect, relieving this tension.

Frederick’s words hearken back to those of Marie Torbensdatter Hermann with respect to the privilege of making functional ware that is able to be explored through touch,\(^\text{144}\) this embodied perception increasing one’s visual and tactile awareness of the form. Whilst the works in Their Lips Met, Composition of Curves, Energy and Equilibrium and Gravity oscillate between the functional and non-functional, they share a scale, medium and familiarity of form that invites both an empathic and embodied response. This demonstrates the value within my practice of the intersection of art and design, of function and non-function; the

\(^{143}\text{Frederick, op. cit.}\)

cross-fertilisation providing both dynamism and friction to the design process and resulting works.

The bronze and aluminium vessel forms encapsulated the notion of the disparate combination of function and non-function, with their roots in non-functional sculptural form that progressed incrementally to porcelain cups, then closed vessels that denied function, to bowls that, while functional, were placed “almost out of reach.”¹⁴⁵ Both metals and their surface treatments made utilitarian function unsafe and yet they were balanced vessels in form. This seemed to lend them a sense of latent function. These metal casts held a certain fascination – the aluminium, with its matte-grey, imperfect surface, looked to be made from concrete and yet had a visual and physical lightness that belied this first impression. The bronzes, by comparison, were marvellously heavy to hold, possessing a weight and permanence to their full rounded volumes. They exerted a presence as each occupied and enveloped space, creating an impenetrable darkness, emphasised by the use of a deep black internal patina. Light cannot permeate these walls, making it difficult to perceive the depth of the void within. This quality was so unexpected, such a contrast to the translucent, light-gathering porcelain. Given that the original plaster forms, for both the porcelain and bronze works, were the same, the contrast in the way the internal space of each is perceived was fascinating. These bronzes had a sense of latent function, of unknown purpose, a sense of mystery. This was counterpointed by a lightness of touch to the ground, a poised balance and gestural, conversational nature. I could not, however, reconcile the exteriors of the bronzes. I had discussed possible patinas with Coates and Wood and had decided upon two different yet classic approaches to patination, to see what they would bring to these vessel forms. However, on seeing the results I felt that, whilst beautifully applied, the patinas were too complex and

¹⁴⁵ Hanssen Pigott, op. cit.
distracting. Their colours and patterns brought too much to the table, as it were, implying narratives that I had not wished to introduce. In addition, I found the sealing wax to be too glossy and reflective for my liking as it created a slick barrier to the tactile contact with the vessel itself:

Nonetheless, the pair was exhibited, with the name *Gravity #3*, and a Sydney-based collector bought them and then commissioned me to make some new works in bronze. This serendipitous event prompted a body of work in a material that, only a month previously, I would never have imagined I would use. While familiar with the basics of mould making and casting, with this change in tack came a steep learning curve in the difficult art of patination, a skill I needed if I was to create the surfaces on bronzes that would feel right to both my hand and my eye.

146 Belinda Winkler, *Gravity #3*, Patinaed Bronze, 200 x 100 x 100 mm, 2011, Photography by Peter Whyte.
With their origins in the plasters for *Their Lips Met* and *Gravity #1*, *Gravity #3* retained the distinct qualities that those little fellows possessed, courtesy of the gravity and pressure of their fluid beginnings and tensile, constraining skins. Designer Cecilie Manz once said,

> I view all my works as fragments of one big, ongoing story where the projects are often linked or related in terms of their idea, materials and aesthetics, across time and function.¹⁴⁷

One glance at the *Locus of Research Concepts* poster that accompanies this Catalogue will confirm that Manz’s words could well be applied to my own works, from the early *Converge* and *Diverge*, the large-scale fibreglass bench seats, through to the more recent upended porcelain vessel forms of *Gravity*.

One could track a similarly related path, beginning at the cast fibreglass *Droplet* stools from 2003 and following the point of precarious balance through to the cast aluminium vessels of 2011:

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¹⁴⁸ Points of spatial tension in *Diverge, Their Lips Met* and *Gravity #1*, Photography by Peter Whyte.
While often unrelated in terms of material or function, there is an aesthetic consistency throughout my work, a visual language composed of lines, curves and shapes that bulge and bow, dimple and swell. Perhaps another thread that winds its way through the diverse works of my practice could be that, while oscillating between function and non-function in a utilitarian sense, all are designed to delight. That sense of delight is delivered to some through the simple act of use, where the lips encounter the smooth rounded surface of a cup while sipping from it, or a delight in the formal aesthetics of scale and proportion, asymmetry and balance, energy and equilibrium. Delight for some may arrive by virtue of a light-filled vessel through which one can see the shadow of one’s fingers, or through that sliver of light between forms that nearly, but not quite touch. There also exists, within these works, the potential to evoke a moment of recognition of something familiar, something seen, felt or encountered, something that transports us through sudden recall from our eidetic archives,¹⁵⁰ be that a vivid mental image or a sensual haptic memory – an empathic response, called to mind through identification.

Mathew Collings gives a passionate defence of art that delights. While reviewing of a book by art theory heavyweights Hal Foster, Rosalind Krauss, Yve-Alain Bois and Benjamin Buchloh, Collings claims that:

> Any art that is promoted by the artist's gallery as liberal and progressive is taken at face value to be exactly that. But art that delights, or is supposed to delight, in apolitical hedonism is shunned …This grates, because it makes the authors seem stuck in a rut of social responsibility, able to respond to art only if it allows them to award credits for academic content.¹⁵¹

¹⁵⁰ M Stamm in van Schaik, op. cit., p.36.
An interesting counterpoint to this can be found in the work of one of Australia’s most respected fine art photographers, Pat Brassington. Of her images, author Blair French writes:

Brassington’s work is embedded within intimate, private encounters between participants (subjects, artists and viewers) and the many small psychological and emotional transferences and reactions that are triggered in those encounters, rather than in broader social or political contexts.\footnote{B French & D Palmer, \textit{Twelve Australian Photo Artists}, Annandale, N.S.W.: Piper Press, 2009, p 13.}

And indeed, my groupings speak of such encounters, of the many ways we move together and share an intimate moment, a moment that is captured, as a still frame from a movie freezes an instant in time, thereby creating the potential for recognition, for identification, for empathy.
2d. The Voice on the Shoulder: the second iteration of the research (Part Two)

The more efficient compression-tension principles generally involve the organic form of the compound curve. In some way this form indicates its high efficiency – i.e., the ‘work’ involved in the design of stressed forms is somehow projected. The compound curve works, whereas planar surfaces – both flat and round – do not give an indication of special strength through design. Surfaces under tension are anthropomorphic: they are under the stresses of work much as the body is in standing. Objects which do not project tensions state most clearly their separateness from the human. They are more clearly objects.¹

In 1966 minimalist sculptor and theorist Robert Morris published a series of essays in which he defined the formal elements and conceptual framework for his own practice and that of his contemporaries. Morris’s theories articulated those things that he wished to avoid in his work, and yet for me, they describe exactly that which I had intuitively sought. Looking back on Morris’s essay, with the benefit of hindsight, his meaning is clear, and yet, on an initial reading it was only some aspects of his theories that seemed to have relevance to my practice. “We see things not as they are, but as we are ourselves”² and this could not be more true in this instance. Morris’s theories of stress forces at work and their link to projected tensions (and thus an anthropomorphic reading of the object) seemed to have little relevance to my practice on an initial reading, and yet, as this account of my research journey details, his theories increasingly gained traction. The role of tension in the creation and embodied perception of the object was

not an understanding that dawned immediately; rather, it occurred through the making of work, in the interactions with physical materials, with fabricators and engineers and through research into related concepts that were beginning to emerge through the work, thus demonstrating the inextricable link between knowledge creation and active practice.

It is possible, however, to isolate a particular moment in my research where the essence of Morris’s theories collided with the work of my practice, where the “voice on my shoulder,”³ (as his words had become) started to speak louder, as it were, and began to make sense, provoking an insight that would deliver the understanding I had been searching for. This moment arrived through the process of designing and making a series of sculptures, a Public Art Commission for a Primary School in Southern Tasmania. The client required the design, fabrication, engineering and installation of six large-scale, child-friendly, child-safe, graffiti-proof sculptures that could double as play equipment and all this was to be achieved with a relatively small budget – all in all, quite a challenge.

I am sure that Robert Morris was not the first to observe that, when it comes to industrial fabrication that is necessary for large-scale jobs such as this, “the most accessible types of forming lend themselves to the planar and linear.”⁴ Indeed, during my June 2012 PRS presentation when we were discussing this very same issue, Prof. Richard Goodwin commented, “we all know as makers, to doubly curve surfaces is a pain in the neck and really – unless it’s a tensile surface – it’s very frigging hard!”⁵ With this in mind, I decided to revisit the possibilities in planar curves for the design of this commission.

⁴ ibid., p. 834.
⁵ Professor Richard Goodwin, June 2012 PRS Presentation, RMIT University, July 2, 2012.
The paper, card and foam form-finding tests back in 2007 for Curva, with their dynamic bends and twists, had stayed with me, so I decided to pursue them once again. In the back of my mind there was a niggling thought regarding Morris’ claims that the planar curve does not project the tensions of work; however, I dismissed them, believing that it may well be possible to create planar curves that projected tensions, thereby having the potential to evoke the body. Indeed, Santiago Calatrava’s Twisted Spine Sculpture and drawings and subsequent HSB Turning Torso tower in Malmö, Sweden, effectively capture the muscular twist of the human torso:

Alexander Tzonis writes of Calatrava’s ability to “capture the abstract morphology of moving figures,” and asserts that these “analogies and metaphors in his architecture and engineering projects (...) make the unfamiliar familiar.” I began to question the validity of Morris’ take on planar curves, Calatrava’s works

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10 ibid. p. 216.
seeming to disprove Morris’ theory. Perhaps the source of my dissatisfaction with earlier planar curved furniture-based works lay in the lack of dynamism within the curves, which needed not only to bend, but to twist as well. This twist was readily apparent in the giant planar curves of Richard Serra, their dynamism created through the twist and torque of steel plates two inches thick. Whilst I did not wish my works to possess their massive, disorienting, nigh on threatening power, I did seek the dynamic tension of their accelerating and continually changing curves. Thus I began the search for the right planar twist with springy plastic strips, physically bending and twisting them, looking for curves that seemed to sing:

I followed these initial plastic strip investigations with dozens of form-finding tests, playing with similar bends and twists, over and over again.

11 Belinda Winkler, physical investigations of bend and twist in plastic strips. Photography by Peter Whyte.
over, in a variety of materials, moving progressively toward those that gave thickness to the plane, potentially imparting greater eventual structural integrity. During this process, I was searching for those forms that seemed to have life and energy, and lightness of touch to the ground as if about to spring into movement and life – seeking for the often elusive “beautifully shaped curve”\(^\text{12}\). I also looked for a certain simplicity, avoiding too many twists and convoluted forms, searching instead for clean, strong and simple yet dynamic forms.


\(^{13}\) Form-finding using a variety of materials as planar strips and using bending and twisting to create curved forms.
While seemingly simple, I was advised by an extremely experienced and skilled fabricator, Peter Hodoniczky,\textsuperscript{14} that the complex twists in these initial forms would be very expensive to fabricate at large scale. The same applied to the simpler, more lineal twists if I wanted to follow through with the torsion box structure, which, given its playground context, seem safer as the edges could be given a slight round-over. Given my relatively small budget, I simplified the nature of the forms, removing the three-dimensionality of the foam tests and reducing the twist to a minimum:

\textsuperscript{14} Peter Hodoniczky, production manager, Weatherfoil, Tasmania.
\textsuperscript{15} Simplified form-finding tests with planar curves and their visible relationship to past works with compound curves.
These simpler shapes were reminiscent of my plaster models and slip cast vessels in cross section, the true, fully-rounded curves of the balloons being mirrored in them all. Despite their simplicity, the models had an undeniable spring and energy to them so I presented them to the client who was happy with the idea of these forms translated into large-scale cantilevered loops. To attain the planar strip at scale, consulting engineer Jim Gandy recommended that I use 150 x 50mm DuraGal RHS set into specially engineered footings to support the cantilever. Gandy’s concern was that the extreme cantilever might cause the sculptures to deform or fracture when interacted within a playground context and thus he took care to specify RHS dimensions and particular footings to ensure the integrity of the structure:

From: "Jim Gandy" <jimgandy@netspace.net.au>
Date: 8 May 2010 1:39:03 PM
To: "Belinda Winkler" <belwinkler@bigpond.com>
Subject: Re: Belinda Winkler’s models

Belinda,
A 150x50x50RHS loop should be proof against boypower. I’ll have to design the base & the connection to it so that the boys jumping on the end can't tip it over. But that's certainly feasible.
Cheers,
Jim

A local specialised steel rolling company agreed to fabricate three pairs of loops by running the 150x50mm DuraGal RHS section through a series of giant rollers. The fabricator required detailed CAD drawings showing the various radii and transition points for each form so friend and architect, Misko Vasiljevich suggested I contract expert draftsman, Csaba Moldan, to produce these drawings from the scale models I’d made:

16 Email from Structural Engineer, Jim Gandy, to Belinda Winkler May 8, 2010.
17 Csaba Moldan CAD drawings and measurements for Lauderdale Primary School Sculptures 2010.
The results of the first roll revealed that, while the outside face of the RHS was delightfully concaved, the inside curve had experienced serious deformation due to the tight radii required.

While induction bending would have provided the solution, the budgetary constraints would not allow for this, so it was decided to use steel pipe instead which would accommodate the compression and tension of the tight curve. From a visual perspective, I was unhappy with this decision as I felt the planar curve had inherently more dynamism than the effectively lineal curve created by the pipe. Nonetheless, the work had to proceed and so the process of fabrication and installation commenced:

18 Deformation at initial roll of RHS.
Fabrication of loops through the cold rolling process.
20 Fabrication, installation and engineering certification of the works.

21 Completed Red Loops prior to landscaping.
While some of the rolled steel curves were fabricated according the length, radii and twist detailed in the CAD drawings, others were not. What should have been clean, true curves were instead kinked, flaccid and lifeless. When I asked the fabricator what had gone wrong, he said that he had been unable to attain the dimensions in the drawings and models due to the steel pipe’s inability to be bent and twisted to the degree required. However, due to time and budgetary constraints, some of the less severely kinked curves had to be installed regardless of my dissatisfaction with them.

After the installation of this project, I discussed the above problems with Peter Hodoniczky and he explained that steel, while ductile, has its own set of constraints with regard to elastic and plastic range, and yield-strength under stress. According to Hodoniczky, to attain the smoothest curves one has to work within the constraints of the material, varying angle of entry, length, thickness and width of the steel, along with the radii settings of the

\[22\] The sagging curves of two Red Loops.
rollers, until the desired curve is attained. He followed this with the advice that it is best to be fluid with the final form, rather than have a predetermined outcome that may well work in more flexible materials at small scale but will not necessarily translate with changes in scale and material. Despite this, Hodoniczky felt that very similar forms to some of the simpler initial form-finding models may be possible in steel plate if trial-and-error and material-based explorations were carried out on the factory floor at scale.

Hodoniczky’s approach resonates with Bob Sheil’s term “make-ability”, used as a descriptor for the approach to design within Thomas Heatherwick’s practice: “Make-ability is both knowledge and resource-based. What triggers innovation in make-ability is an instinct to deduce possibilities from previous experience, observation and curiosity.”

Hodoniczky’s willingness to “have a go” and to push the boundaries of perceived fabrication limits meant that I could actively pursue these forms across materials and scales. Thus began a series of rolling sessions where we

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23 Simpler form-finding tests in planar curves with the potential to be translated into a larger scale.
trialed a variety of steel thicknesses and widths, entering each into the rollers at different angles and with the rollers themselves set to a range of radii:
Some terrific curves ensued, each its own unique combination of angle of twist and radii. The forms with the cleanest lines, most fluid curves and the greatest asymmetry seemed, to my eye, to be the most successful. It was these that I took through to completion, which for me, meant matte, white and flawless, reminiscent of cast porcelain:

25 Form-finding at scale with Peter Hodoniczky and his team using planar strips of steel to roll smooth, uninterrupted curved planes.
Belinda Winkler, *Contrapposto #1*, Steel, Polyurethane, Approximate dimensions 5000W x 600H x 3000D mm, 2011, Photography by Peter Whyte.

Ibid.
There was an energy and dynamism to these works, made all the stronger in its reading when gathered together: their curves, sweeping in and out of the composition, alternately compressing space and releasing it. The angle, the tilt and the asymmetry of these forms follow the principle of contrapposto (hence the name), that of the dynamic balance that can lend form a sense of life. Although made from steel, they have the visual lightness of paper-curls and a sense of movement that belies their inherently static nature. Contrapposto cannot be understood from a single viewpoint and thus compels one to move around the work. In doing so, Contrapposto appears to continually shift, altering perspective and transforming lines and curves, unfurling a different vision at any given point in the journey around the work.

The complications inherent in the bending, twisting and rolling process, along with the specialised vocabulary used by fabricators, draftsman and consulting engineer to describe what was happening, or needed to happen, in the design and fabrication of the Red Loops, Contrapposto, and beyond, prompted me to research the language of structural and mechanical engineering and physics. I felt that if I could understand what was happening from a physical and mechanical perspective, I might have a greater chance of achieving the forms for which I was searching. While far from the domain of fine art, there was much that even the most cursory foray into the domains of engineering and physics could bring to my comprehension of stress forces and steel. Revolving around concepts of energy and forces, engineering and physics explained terms such as kinetic energy, elastic potential energy, elastic and plastic strain, deformation and fracture along with the term stress forces as it applies to compression, tension, bending and torsion. I found diagrams, such as the ones below, inordinately useful in that they provided a visual explanation of these concepts without the often impenetrable scientific explanations:
These diagrams, which are still on the wall of my studio today, enabled me to understand and articulate the role of stress, strain and stored energy in the processes and results of my form-finding investigations. Of particular note was the term elastic potential energy, which, in layman’s terms, refers to the potential energy of an elastic object that is deformed through the transfer of energy by

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28 Sketch of stress Forces diagram with explanations.
stress forces. If the stress is released, the energy is transformed into kinetic energy, causing the object to return to its original shape. However, if taken beyond its elastic limit, a material is no longer storing all of the energy from work performed on it. The material is then said to be in a state of plastic deformation, an irreversible form of strain in which the material does not return to its original shape after the force has been removed. As I contemplated the failure of many of the steel pipe curves, the concept of plastic deformation took on a particular relevance. It also helped explain emails from the consulting engineer, Jim Gandy, as he referred to “boy power”\(^\text{30}\) and fears of deformation and fracture at the bending moment of the sculptures if, as Gandy explained, a group of ten exuberant 100 kg boys were to simultaneously bounce on the work.

Whilst many of the words used in physics and engineering, such as stress and moment, were familiar to me, they took on in the context of those domains different meanings or they shifted in emphasis. Physicists, for example, define the word work as the transfer of energy by forces,\(^\text{31}\) and define energy as the ability to do work. When transferred, the work becomes stored as potential energy.\(^\text{32}\) This was an extremely exciting revelation for me, as the words work and stress took me back to Robert Morris’ essay Notes on Sculpture 1-3:33 As I re-read Morris’ words they immediately made sense and took on a sudden relevance and importance. Morris had linked compression-tension principles, projected tensions and our anthropomorphic reading of the resulting curves – and, for me, the penny had dropped.

\(^{30}\) Email from Jim Gandy to Belinda Winkler 08/05/2010.


\(^{33}\) Morris, op. cit., p. 835.
Morris’ work projected instantly made sense in terms of the notion of stored potential energy and explained to me why I had found many of the lineal and planar tests and models so engaging. To me, some had seemed dynamic and lively, while others were quite the opposite, yet I had been unable to understand why this was so and now, finally, it all fell into place. Contemplating these ideas, it occurred to me that I constantly receive immense satisfaction from creating curves that hold elastic potential energy. Such curves appear to be alive, as if by their own volition they might burst forth at any moment. Brancusi once said that “Art must give suddenly, all at once, the shock of life, the sensation of breathing,”\textsuperscript{34} and indeed those forms that captured energy seemed to be holding their breath, caught in a moment in time – one cannot help but anticipate their next move. Previous to this realisation, when I sensed the work was lacking in some respect, I would often attempt to articulate the problem by saying that I felt the curve had died, that it had no spark, no energy, or that the curve had become limp and flaccid. On reflection, this occurred when I had not captured elastic potential energy. For the first time, I was able to understand and articulate these intuitive feelings.

The re-reading of Morris’ words prompted a further insight into the nature of my practice, one concerning the role of the compound curve. I have always had an attachment to bodily, compound curves and have constantly sought them in my work and yet, of the many compound curves found in form, it was only some that captivated me. Morris’ linking of the compound curve, the body, surfaces under tension, and the projection of that tension enabled me to see and understand these connections – his theories articulating relationships that I had not previously grasped. Ironically, his process of explaining why he sought to avoid compound curves in his work clarified exactly why I intuitively sought them. The act of visualising Morris’ theories diagrammatically both linked and crystallised these ideas:

I placed this drawing on the studio wall, (adjacent to the stress and strain diagrams), where it became a constant reference point – a checklist, in effect, that I could refer to, prompting me to ask if my works past, present and future could ‘claim’ to meet each of these new-found ‘criteria’. It was here, in the act of reflecting upon past and current works through this new ‘lens’, that I encountered a dilemma. It had become readily apparent that Morris was correct when he surmised that “the ‘work’ involved in the design of stressed forms is somehow projected.” However, I found Morris’ additional statement that “planar surfaces – both flat and round – do not give an indication of special strength through design,” problematic. Of the planar surfaces I had been exploring, some, to my mind, did project tension and energy, especially when still held in tension and thus filled with elastic potential energy. Those held in tension by the hand, sticky-tape or pins in model form, and by human strength, bolts or clamps at large scale, effectively captured elastic potential energy and that energy was easily read.

35 Diagram from studio wall linking the three major elements of Morris’ argument.
36 Morris, op. cit., p. 835.
On the other hand, I found myself having to agree with Morris’ logical conclusion that it is the compound curve, with its inherent tension projection, that is anthropomorphic, whereas the lineal and planar curves are not. Perhaps then, through this logic, while the planar surface is held in tension, compression and torsion (three stress forces applied simultaneously), it may well project those tensions, but that reading of tension will not necessarily promote an anthropomorphic reading.

I began, at this point, to suspect that I had been confusing the lively acceleration and dynamism of the planar curves with the anthropomorphic reading of life and the body in my works involving the compound curve – a subtle yet important distinction. There was a further complication to this line of argument however, one that lay in the works of Santiago Calatrava. When I looked back, again through Morris’ ‘lens’, the works of Calatrava to which I had been looking for inspiration and confirmation were both planar and anthropomorphic. These forms were anthropomorphic in the sense that they were based on, and evocative of, the actions of the body and movements of muscles.

Similarly, Wassily Kandinsky, in his drawings based on Charlotte Randolph’s photographs, abstracts the movements of dancers down to a series of lines that capture “energetic movement and dynamism.” Christopher Wilk describes these drawings in Modernism: Designing a New World, 1914-1939 as “documentations of movement rather than illustrations of a dance and/or dancer.” Likewise, the lively, gestural curves of Contrapposto seem to echo those of a dancer, an impression that is reinforced though the delicate balance of the forms themselves as they touch the ground ever so lightly, at only two small points:

38 ibid.
Belinda Winkler, *Contrapposto #1*, Steel, Polyurethane, Approximate dimensions 5000W x 600H x 3000D mm, 2011, Photography by Peter Whyte.

Reflecting upon this, it seemed to me that the technique of cold rolling had imbued the flat, ‘lifeless’ plane of steel with sprung tension, dynamism and a sense of life and movement. This then prompted me to ponder the question: if planar curves are capable of eliciting an anthropomorphic reading, but this reading is subtly different to that elicited by the compound curve, then what is the nature of the anthropomorphic reading that I seek in my work?

At the October 2011 GRC, in response to my presentation of the development of Red Loops, Contrapposto and the associated planar form-finding tests, Dr Paul Minifie asked me to “define the nature of the empathic engagement” that I seek through my work. He felt that there was “a dimension other than a purist quest” to consider and that, while I had “developed a more sophisticated concept for understanding [my] relationship to the curve, [I should] think about other modes of engagement and that
can develop through the project as well.\footnote{44} Minifie’s question regarding the nature of the empathic engagement I sought was intimately entwined with those provoked by Morris’ theories. Morris’ “challenge”\footnote{45}, to use Richard Blythe’s expression, had sensitised me to the notion of projected tensions evoking the body, and from that point onwards, Morris’ words became “a kind of subconscious alter ego for the work in progress, the voice on the shoulder”\footnote{46} that was present as I conceived of, designed and made the works that followed. My emerging awareness of the role that tension had been playing in my practice and its connection to the evocative curve began to “speak to the challenge from the design act.” Dr van Schaik’s notion of the gap,\footnote{47} combined with Dr Stamm’s concept of the hermeneutic driver,\footnote{48} are both applicable to the dilemma prompted by my viewing of past and present works through the lens of Morris’ theories. The knowledge gap, the gap in my understanding with regard to the nature of the anthropomorphic reading and type of empathic engagement that I sought, drove the next body of work in my research journey as I attempted to “fill that gap”\footnote{49} through the design and production of works that addressed the questions with which I was wrestling.

\footnote{44} ibid. 
\footnote{45} R Blythe, in van Schaik, op. cit., p. 20. 
\footnote{46} ibid. 
\footnote{47} van Schaik in van Schaik, op. cit., p. 8. 
\footnote{48} M Stamm in van Schaik, op. cit., p. 46. 
\footnote{49} van Schaik in van Schaik, op. cit., p. 8.
Communities of Practice
2nd Iteration of the Research

1. City of Hobart Art Prize + Energy & Equilibrium + Vitrify Alcorso Ceramic Award
- Ellsworth Kelly
- Kevin Perkins
- Eva Zeisel
- Marie Torbensdatter Hermann
- Gayo Hansen Fitigli
- Jenny Topfer
- Peter Whyte
- Leicester Cooper
- Jupp Linssen
- Prue Venables
- Mal Wood & Ewen Coates

2. Lauderdale Commission and Contrapposto
- Fred Fisher
- Robert Morris
- Mark West
- Richard Serra
- Peter Hodoniczky
- Santiago Calatrava

On the periphery of my mental space
- Peter Adams
- Constantin Brancusi
- Juhani Pallasmaa
- Barbara Hepworth
- Jean Arp
- Isamu Noguchi
- Pat Cleveland
- Les Blakebrough
- Anish Kapoor
- Ron Arad

Image credits in Appendices
2e. A New Lens: the third iteration of the research

The third iteration in the research emerged with the realisation that the curves I intuitively sought were those that appeared to project tension and energy. As Dr Marcelo Stamm notes, “We labour to ascend through error,”¹ and indeed, after the disappointment of aspects of the fabrication of the Red Loops project, I had laboured to understand the mechanics and physics behind my perceived failure of some of those curves.

The past talks back differently to us depending on what we experience in the present and what we foresee of the future; an important advance, step, or insight now – be it positive or negative – may cast a wholly different light on and even ‘give meaning’ to an entire past.²

I opened the first part of this chapter, The stages of the journey, with these words from Stamm, developed in conversation with Dr Richard Blythe,³ and here, at a point where much of my research journey has been related, I am calling on them again. As I reflected upon the implications of Robert Morris’ theories, I soon realised that they applied not only to the steel sculptures but also to the works resulting from my balloon/plaster form-finding technique. The connection I had made between my plaster models and the sprung curves of the form-finding tests for the playground sculptures was not simply a visual one as I had initially supposed. Rather, the link lay in the use of stress forces at their respective

¹ Dr Marcelo Stamm, October 2011 RMIT CRC.
³ R Blythe, R, A Terroir of Terroir (or a brief history of design-places), Doctor of Philosophy, RMIT University, 2008, pp. 46 - 54.
points of creation. Both methods of form-finding were reliant of the application of stress forces:

However, what these stress forces brought to the respective forms was, in fact, quite different. Where the elastic balloon brought volume to form, the plastic strip delivered planar bends and twists. My initial uncertainties regarding the actual similarities of these forms had been increasing progressively. While the planar curves – when they successfully captured elastic potential energy – were undoubtedly lively and dynamic, they were not, to my mind, sensually evocative. Morris’ “challenge” 5 re-entered my conscious thought:

4 Material based form-finding tests utilizing stress forces.
5 R Blythe, in van Schaik op. cit., p. 20.
The compound curve works, whereas planar surfaces – both flat and round – do not give an indication of special strength through design. Surfaces under tension are anthropomorphic: they are under the stresses of work much as the body is in standing. Objects which do not project tensions state most clearly their separateness from the human. They are more clearly objects.  

Having experimented at length with planar curves in a variety of ways, Morris’ theories took on an even greater significance as I began to see reasons to differ as well as to concur. Where Morris claimed the planar curve to be incapable of tension projection, I would argue that, under certain conditions, it is, in fact, capable of projecting the tensions of ‘work’ and, by means of that projection, has the potential to elicit an anthropomorphic reading, thereby opening up the possibility to evoke an empathic response with regard to, for example, kinaesthetic memories. However, it is not those kinds of memories that I seek to evoke. Rather, my intentions lie more in the realm of sensuality and could perhaps be more accurately described as a desire to evoke something that we inherently recognise as part of our own sensual experience, to engender a response of felt-knowing, of inarticulable identification.

While discussing this with friend and mentor Kevin Perkins, he agreed with my concerns regarding my lineal and planar works, explaining that, while curved, these forms did not speak of the body nor tempt the touch of the hand as my compound curved forms did. Perkins also brought up an additional concern regarding the planar works, suggesting that they, by nature of their materials and scale, need to be fabricated away from the studio. Perkins felt that, as a maker, I would receive much greater satisfaction from the making of works of a scale and of materials where I have

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7 Conversation with Kevin Perkins at his home in Huonville, Tasmania, September, 2012
control and where I can experience the inherent pleasure in making for myself once more.

These developing insights, initially instigated by the *Red Loops* and *Contrapposto* projects, began to “cast a wholly different light on and even 'give meaning' to an entire past.” They explained my disappointment in works such as the 3.2 where the planar curve firstly failed to capture elastic potential energy, and beyond that resisted any sensually evocative reading. Similarly, the successful forms in the *Red Loops* project and the curves of *Contrapposto*, while achieving a lively and engaging dynamism through the accurate replication of their tensile models, did not form any haptic connections nor evoke sensual bodily form. Thus, I began to realise that the line of enquiry I had been pursuing with these planar curves had ceased to hold any substance. While providing me with insights regarding the true nature of the empathic reading I seek through the work, it was time to shift the direction of my investigations with regard to the curve.

Earlier in my research, Krome Barratt’s book *Logic and Design in Art, Science and Mathematics*, had provided knowledge and understanding with regard to notions of equilibrium and asymmetry. As I revisited this text, with my emerging understanding of the role of stress forces in my work, I discovered that Barratt had much to bring to the table in this area, his words immediately taking on a significance that had previously eluded me. At once enlightening and conformational, Barratt combined the laws of physics, of stress and strain, with theories of perception, effectively melding the two research domains and forming a fascinating reflective hinge.

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10 Blythe in van Schaik, op. cit., p. 34.
Under normal conditions of plasticity if the internal and external stresses are not balanced the form will either expand or contract until equilibrium is achieved. The strain absorbs the stress. When the body is elastic the strain converts kinetic into potential energy, like drawing the string of a long bow (...) or filling a balloon with hot air. It looks to be alive. (...) An equilibrium achieved by balancing the internal and external forces along a continuous boundary will reveal the qualities of the skin."

While still on the topic of stress and strain, Barratt followed the above observations with a description of a balloon as a "positive stressed skin structure." While Barrett’s use of the term skin in this context was drawn from a description of pneumatic structures, with my embodied understanding of the bulge and swell of warm fluid plaster constrained by balloon skin, combined with the actions of my own skin as it stretches, bulges, dimples and swells in an effort to contain my predominantly fluid interior, it was easy to make the leap from one “positive stressed skin structure” to another:

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11 Barratt, op. cit., p. 268.
12 ibid., p. 272.
13 ibid.
14 Balloon/plaster form finding process
15 The dimple and subsequent swell of pressure on skin. Photograph by Peter Whyte
16 ibid.
In the discussion of creative practice research, Dr Richard Blythe notes that a "particular subject/topic may accommodate a number of different research domains," and indeed, Barratt links the domains of Art, Science and Mathematics through a discussion of, amongst other things, stress and strain and energy and equilibrium. These topics can be easily associated to each of these domains, and while the creative practitioner researcher would not want to make the topological error of "immersing themselves into those extra-territorial authoritative spaces," these spaces or domains, these "fields of research endeavour," may be borrowed from, and in doing so, they may "open up a space of possibility (a crack in the surface of the existing condition) in the creative work itself."

My intuitive approach to form-finding with fluid plaster inside balloons is one that captures elastic potential energy and, in doing so, projects those tensions, thereby opening up the potential to evoke the body, and even a sense of life. It stood to reason, therefore, that Morris’ theories of projected tensions could be applied to all my works, thereby explaining my perception of their success or failure. I began to see and understand why I had been fundamentally unhappy with some of my works – left cold by them, as it were – while others continually intrigued and entranced me. Similarly, my re-reading of Krome Barratt’s words opened up "a crack in the surface of the existing condition," whereby I could see a world of possibilities in not only the balloon/plaster process, but also related methodologies that utilised the continuous boundaries of elastic skins.

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17 Blythe, op. cit., p. 33.
18 Stamm, ibid., p. 37.
19 Blythe, ibid., p. 36.
20 ibid., p. 35-36.
21 ibid.
I began experimenting with a range of different skins, applying compressive forces to soft, responsive polyurethane foam, exploring the dimple and its resultant swell, and stretching bandage skins over the steel curls, creating compound, double curved surfaces inside planar curves. Concurrent to these explorations, I investigated the capturing of these tension/compression moments through the mechanical means of clamps, staples, stitching and screws and through the use of fast setting resins, working with the principles of the setting plaster and the capturing of the stress forces on the skin of the balloon:

22 Initial form-finding process of the emerging Stretch project.
These explorations utilised external skins and explored the curved concavities and convexities that they created under compression and tension. Those that utilised soft polyurethane foam and hard ellipses pointed back to earlier works, such as the *Drift* and *Encounter #2* bench seats, where I had explored the interruption of surface (although, at the time, I was, albeit indirectly, looking more to erosion than to the action of the *push* per say). By contrast, my new explorations were made through compression, using real-time compressive and tensile forces to create compound bodily curves, rather than emulating a physical process, as was previously the case:

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23 Initial form-finding process of the emerging *Dimple and Swell* project.
Looking at the visual similarities of these works, both past and present, the words of Alvar Aalto sprang to mind: "Nothing that is old is reborn. Nor does it ever entirely disappear. And that which once was will always return in a new form." Aalto’s thoughts here resonate with those of Dr Marcelo Stamm, some ninety years later when he described the “dynamic realm of possibilities embedded in ongoing and past practice.”

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24 Belinda Winkler, Drift and Encounter #2 bench seats, (details), 2009, Photography by Peter Whyte. (refer to 2b. Shifting Sands: the first iteration of the research for discussion of their development) and Initial form-finding process of the emerging Dimple and Swell project.


benefit of hindsight, I realised that while creating Drift and Encounter #2, I was intuitively searching for the compression of form and the resultant swell of surface under tension. However, without actually being able to identify what it was I was emulating, the ensuing works were unable to manifest that physical push I intuitively sought.

My re-examination and re-assessment of past works through a newfound lens delivered insights with regard to my approach to emerging works, prompting a change in investigation methods, from form-making to form-finding, as I experimented with the application of stress forces – of tension, compression and torsion – on elastic skins and responsive surfaces. The implications of this subtle difference in approach meant that instead of working toward preconceived notions of a desired form and subsequently working out the materials and processes to achieve them, I could instead experiment more open-mindedly with materials and stress forces in order to discover the possibilities.

In addition to the exploration of the notion of elastic skins, Barratt’s discussions of internal and external skins, of closed versus open forms, had left me wanting to investigate this notion further as well. Within a chapter section evocatively titled Boundary, skin and lip, Barratt notes that “an open form, with even the tiniest of openings, invites entry and permits a continuity of inside and outside space.”27 The idea of “continuity of inside and outside” resonated in several ways, taking me immediately to that moment on my vessel forms where the lip is shaped to the finest of edges and where the exterior ends and the interior begins. The void within can be seen and felt. As with the body, the lip of the form is

Here Stamm is discussing a notion developed in conversation with Blythe. Blythe first referred to this concept in:

Blythe, R, A Terroir of Terroir (or a brief history of design-places), Doctor of Philosophy, RMIT University, 2008, pp. 46 - 54.


27 Barratt, op. cit., p. 269.
that point between interior and exterior. The surface continues from one to the other, uninterrupted. The interiors of the porcelain forms are gloss glazed, right to the very top of the edge, where their wet shine is reminiscent of the lips of the body. Interestingly, with the foregrounding of the interior at this point in time, yet another intersection appeared or re-appeared, as seems often to be the way. During my presentation at the October 2011 GRC, Dr Jon Tarry referred to this notion:

> What I’ve enjoyed or found interesting about your work is this continuity of the surface (…) When I was looking at the vessels, when you talked about the lip, the edge, really, the vessel then is a continuous surface. The outside and the inside are the same.28

An opportunity arose to explore surfaces, or skins, under tension and the “continuity of inside and outside space,”29 with an invitation to hold a solo exhibition at the Bett Gallery in Hobart, one that had the potential to address some of the questions and insights that had emerged through the reflective process. My chosen methodology for this work involved the use of my balloon/plaster form-finding process, due firstly to the capacity of this technique to deliver forms imbued with the tension and pressure of their creation, and secondly, because these forms lent themselves to being either open or closed, thus allowing an investigation of Barratt’s notion of Boundary, skin and lip.30 The most recent works I had made using this technique were the Gravity series, originally designed and made for the Vitrify Alcorso Ceramic Award. I decided to revisit their forms with a view to further exploring their potential. The plaster models, from which the Gravity series emerged, were all formed through the pressure of liquid plaster pushing against the skin of the balloon containing it. The action of this pressure, combined with gravity, places the

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28 Dr Jon Tarry, October 2011 RMIT GRC during Belinda Winkler’s presentations.
29 Barratt, ibid.
30 ibid.
balloon membrane under tension and, as the plaster sets, this tension is retained in the form. This physical tension is added to when the plaster form is placed on its rounded face where it finds its balance and rests in a state of stable equilibrium, the slightest touch sending it rocking and spinning into disequilibrium once again. The tentative balance introduces a further level of tension to the work, as does the perceived tension between forms when they are placed close together, nearly but not quite touching – a space charged with anticipation. Thus I proceeded to create a wide range of plasters, from which I could select to cast, either in bronze or in porcelain.
I felt I needed to pursue the bronzes of Gravity #3 at greater length, believing that this new material (new for my practice) had distinct possibilities with regard to their dark internal spaces, their strangely reassuring weight, and a sense of mystery, of age and history – certainly there seemed something there worth pursuing. In Chapter Two (c), The Possibilities in Plaster, I related my dissatisfaction with the high-on patterned, decorative nature of the patina of Gravity #3. I wanted that same matte/low-sheen, skin-like feel to their surfaces without the distraction of surface pattern. I also knew that I did not want to introduce colour to the work as that, too, is distracting. I wanted, as with the porcelain, to have a surface that did not interrupt the sense of form, one where the form has precedence and its subtleties and nuances are read through the play of light and shadow alone. There is a vast array of options when it comes to bronze patina but the one that was most instantly appealing was the chalky white patina, as used to great effect by, for example, George Segal (overleaf). White was, of course, familiar territory for me, but did not offer the impenetrable darkness that is possible in bronze. Looking to the work of Isamu Noguchi, I decided to try the diametrically opposite approach of deep black.

31 Plaster model making.
Local sculptors Chris Edwards, Frances Watkins, Sally Brown and Linda Fredhiem each generously showed me how they use Ferric Nitrate and Birchwood Casey, amongst other things, to achieve black patinas in their own work, sharing with me their various methods of application and giving me the chemicals with which I could experiment myself. However, it was the warm brown-black of Liver of Sulphur (potassium sulphide) that sculptor Curtis Hore favours, which seemed closest to what I was searching for.


Curtis Hore, *Still Life 1*, Bronze, 2008, Photograph by Peter Whyte.
Hore very generously offered to teach me the art of patination and thus ensued my steep learning curve in this difficult, largely tacit and often frustrating process (referred to in Chapter One (c), The Nature of the Journey).

Having decided on the Liver of Sulphur as my preferred patina colour, the next problem was achieving the surface qualities I wanted, i.e. one that was reminiscent of smooth, damp skin. I discovered that, without a coat of wax, the patina is very fragile and will abrade off, exposing a disturbing glint of bronze with the slightest of wear. However, the wax inevitably leaves a gloss on the patina, creating a visual and physical barrier to the form itself. Through a very long process of trial and error I developed, with the advice and assistance of Hore, a technique that delivered both the surface I sought and the robustness required. After much perfecting of this process, the many steps of which must be

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35 Progressive bronze patina tests.
worked through in the correct order, I could achieve the desired, sensually evocative finish:

Juxtaposing these weighty, solemn, dark bronzes were the translucent, delicate, floating porcelain bowls. Despite their shared beginnings inside the tension-filled space of the balloon, the cast, glazed and polished porcelain forms were the antithesis of the bronzes. These light-filled, almost weightless porcelain bowls beautifully complemented the rich dark bronzes that, by contrast, seemed to gather shadows and darkness. Nonetheless,

36 Patina process developed to attain a damp, skin-like finish.
regardless of their differences, all these vessels possessed a life and personality that was rich in possibilities. In the quietness of the studio, these forms could gather into intimate pairs, small, almost conspiratorial groups or solemn gatherings. They seemed to share a quiet comfort, a whispered tête-à-tête or a vibrating frisson. They could be intimate, conversational, silent or animated, depending on their proximity to others, and their direction of gesture.

37 Belinda Winkler, *Gravitate #1*, Porcelain, Glazed Interiors, hand polished exteriors, 240W x 120H x 120D mm, 2011, Photography by Peter Whyte.

*Gravitate #1* (detail), Photography by Peter Whyte.

Belinda Winkler, *Gravity #6* (detail), Porcelain, glazed interiors, hand-polished exteriors, 400 x 180 x 300 mm, 2011, Photography by Peter Whyte.
Belinda Winkler, *Encounter #3*, Porcelain, Glazed Interiors, hand polished exteriors, 110 x 350 x 200 mm, 2011, Photography by Peter Whyte.
Appearing at once as both body and vessel, these forms brought to mind Antony Gormley’s concern with the body as vessel, one that both contains and occupies space. As a body of work they simultaneously contained, occupied and compressed space. Their openings, drawn by fine elliptical rims, provided entrance into the form, allowing access to the interior, to a space where shadows and darkness gather. As a counterpoint, I was curious to see how these vessels would look and feel if closed – all function denied, all space displaced, interiors refused. Simpler than the lost wax method of bronze casting that was used for the hollow vessels is solid casting into sand moulds. Curtis Hore and Folko Kooper put me onto a local foundry in Hobart that was able to cast one for me as a trial:

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Belinda Winkler, *Gravitate #2*, Porcelain, Glazed Interiors, hand polished exteriors, 850 x 300 x 300 mm, 2011, Photography by Peter Whyte.
Belinda Winkler, *Gravity #6* (detail), Photography by Peter Whyte.
Belinda Winkler, *Gravity #7*, Bronze, 240W x 120H x 120D mm, 2011, Photography by Peter Whyte.
Belinda Winkler, *Encounter #4*, Bronze, 350W x 110H x 200D mm, 2011 Photography by Peter Whyte.


40 Sand moulds for solid casting and solid bronze cast made at Bennett and Kingston Foundry, Hobart.
Recalling *Composition of Curves* from 2010, the ensuing cast, when paired with a hollow form, seemed silent and resolute by comparison. As light reveals the dark, these closed, mute forms brought added awareness to the interiors of their open counterparts. The physical weight of this form was astounding, especially given its small stature. It seemed to be drawn to the earth by massive gravitational forces. I was so taken by this quality that I created a mass of these forms that gathered silently together, immovable.

41 Belinda Winkler, *Counterbalance*, 12 x 24 x 12 cm, Bronze, 2011, Photography by Peter Whyte.
This silent gathering took me, once again, to the work of Gwyn Hanssen Pigott. While her work most certainly has movement and rhythm, one would on the whole describe Hanssen Pigott’s ceramic still lives as exactly that: still. They are quiet, contemplative, silent congregations. Of her own work Hanssen Pigott says, “Hopefully there is a presence in my work which can emanate calmness and quiet presence as well as strength and certainty.” In his illuminating essay Keeping Quiet and Finding a Voice: Ceramics and the Art of Silence, Jeffrey Jones observes the domain of ceramics as being “not only a site where silence happens, it is somewhere where different silences happen and, in particular, it is a place where the relationship between the silence of people and the silence of things can be apprehended and

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42 Belinda Winkler, Gravity #5, Solid Bronze, Composition of 7, 450W x 210H x 350D mm, 2011 Photography by Peter Whyte.
explored.\textsuperscript{44} In the same way, the bronzes of Gravity #5 explore silence, at times intimate and at others isolated, where a single form stands alone: no implicit communication, no quiet closeness, silent and inscrutable. These silent stable bronzes are a complete contrast to their mobile, conversational cousins.

With the exception of the solid cast grouping, I had placed all the forms in this body of work on their rounded bases, an act that lent them an animated lightness and expressiveness. Each piece would find its own point of balance, precarious as it may be. Delicately poised, each was in a state of stable equilibrium, where the slightest touch would cause it to rock, spin or even fall. The moment where each touches the 'ground' was, for me, a point of fascination: an intriguing space where the curve of the vessel kissed the surface upon which it gently rested. Similar, though never quite touching, the space created between the curves of the forms spoke of distance or of intimacy, both in a physical and emotional sense. These moments in space and time were, for me, the essence of the work. I wanted to bring the eyes of the viewer to this space and endeavoured to do so by elevating these diminutive works on raised surfaces, their balance points and the spaces between readily perceivable.

I commissioned professional photographer Peter Whyte to photograph this body of work and, using those images, design the catalogue that would accompany this exhibition. Sharing a studio with Whyte meant that a two-way exchange of knowledge could be brought to this process: my awareness of the possibilities of the photographic process in relation to my work, along with Whyte’s understanding of my ideas and directions. Following in-depth discussions with me around the title of the exhibition, *Balance Point*, Whyte found a graphic representation of this premise in the following image:

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45 Belinda Winkler, *Align*, Bronze, Composition of 5, 650W x 120H x 120D mm, 2011, Photography by Peter Whyte.
Thus, the concept of the *balance point* was encapsulated in the cover image for the exhibition catalogue – the poised vessel, gravitating toward one side, seemingly in motion and ripe with life.

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46 Belinda Winkler, *Balance Point*, Bronze, 130W x 130H x 130D mm, 2011, Photography by Peter Whyte.
Within this chapter, *The Stages of the Journey*, I have fought close to the bull. Stamm advises the creative practitioner researcher to,

> Get close to the phenomena! – as up-close as possible, with all sensitivity to detail: only then do differences emerge; one will realise that what matters are nuances.

To do this, Stamm advises that one step into the very practice and this I have done, walking the reader through the design processes of significant works in my practice and the key shifts that these works either triggered or manifest. What these detailed reflections demonstrate is the non-linear process of design in action, where the three modes of reflection operate concurrently. Reflections on, in and for design are seen in operation during the design process. To use Dr Richard Blythe and Dr Leon van Schaik’s Theatre of Research metaphor, the works of my practice, detailed within this chapter, were placed upon the stage of the theatre. Foregrounding them were previous works, including those described in *The Backstory* and *Shifting Sands: The first iteration of the research*. Whilst upon the stage, each in turn has been examined in terms of the three reflective frames through which I, as the practitioner researcher, can reflect upon the works on the stage. The detailed account provided of the development of these works illustrates reflective research on the existing body of work and research in the work of the practice where current projects take place alongside the R-o research. The third form of reflective research revealed in the above account is one that projects forward to future possibilities that come to light as a result of the reflective process. Mentors, authorities, challengers and

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48 ibid.

49 ibid., p. 3.

50 Blythe in van Schaik, op. cit., p. 13.

51 ibid., p. 18.

52 R-o: Reflection on the existing body of work in the practice, ibid., p. 13.
peers look onto this Theatre of Research, each shaping the mental space through which I design, as do reflections on, in and reflections for the work of the practice. This account of my research journey has brought attention to each of these elements as they are manifested during the design act, each playing its role in the process, each influencing the mental space in which these works are conceived. The Theatre of Research metaphor allows the creative practitioner researcher to, as Blythe explains,

... represent what we see actually going on reflectively in the act of designing – a kind of synthesised, synthetic space in which these three moves of reflection are happening in a simultaneous way in something that we might begin to think about as a synthesised reflection model.

And indeed, as has been revealed, the three modes of reflection are not sequential but rather, occur simultaneously. My reflective account exposes the reality of past projects speaking to current and future projects, and of past works being re-cast by new insights attained through current works - revealing the nature of past and present works to be protean, shifting and changing in the light of new projects and thus providing a wealth of potential where future works are concerned.
Communities of Practice
3rd Iteration of the Research - Part 1

1. The use of stress forces in the creation of the curve

Robert Morris
Mark West
Richard Sierra
Peter Hodoniczky
Mårten Nettelbladt
Santiago Calatrava
Peter Whyte
Ellsworth Kelly
Kevin Perkins

On the periphery of my mental space

Fred Fisher
Peter Adams
Eva Zeisel
Constantin Brancusi
Juhani Pallasmaa
Barbara Hepworth
Jean Arp
Heinrich Noguchi
Pat Cleveland
Eva Zeisel
Marie Torbenbdatter Hermann
Gwyn Hanssen Pigott
Jenny Topfer
Leicester Cooper
Prue Venables
Les Bkiekrogh
Anish Kapoor
Ron Arad
Mal Wood & Ewen Coates
Jupp Linssen
1. Vitrify Alcorso Ceramic Award

Ellsworth Kelly
Jenny Topfer
Kevin Perkins
Eva Zeisel
Marie Torbensdatter Hermann
Gwyn Hanssen Pigott
Les Blakebrough
Peter Whyte
Leicester Cooper
Prue Venables
Ron Arad
Bridget Riley
Mal Wood & Ewen Coates
Jupp Linssen

2. The use of stress forces in the creation of the curve

Fred Fisher
Robert Morris
Mark West
Richard Serra
Peter Hodobostsky
Mårten Nettelbladt
Anish Kapoor
Heinz Isler
Santiago Calatrava

On the periphery of my mental space

Peter Adams
Constantin Brancusi
Juhani Pallasmaa
Isamu Noguchi
Barbara Hepworth
Jean Alp
Pat Cleveland

Communities of Practice
RMIT PRS October 2011
Communities of Practice
3rd Iteration of the Research - Part 2

1. Balance Point Exhibition
Curtis Hore
Ellsworth Kelly
Isamu Noguchi
Mid Wood & Ewen Coates
Folke Kooper
Jenny Topfer
Kevin Perkins
Marie Torbinsdatter Hermann
Gwyn Hanssen Pigott
Peter Whyte
Robert Morris
Mark West
Bridget Riley
Ron Arad
Anthony Gormley

On the periphery of my mental space
Fred Fisher
Richard Serra
Peter Hodkinson
Mårten Nettelbladt
Anish Kapoor
Ernesto Neto
Heinz Isler
Santiago Calatrava
Peter Adams
Eva Zeisel
Constantin Brancusi
Juhani Pallasmaa
Les Blakeborough
Leicester Cooper
Barbara Hepworth
Jean Arp
Pat Cleverland
Prue Venables
Jupp Linssen

Image credits in Appendices

Communities of Practice
3rd Iteration of the Research - Part 2

1. Balance Point Exhibition
Curtis Hore
Ellsworth Kelly
Isamu Noguchi
Mid Wood & Ewen Coates
Folke Kooper
Jenny Topfer
Kevin Perkins
Marie Torbinsdatter Hermann
Gwyn Hanssen Pigott
Peter Whyte
Robert Morris
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Image credits in Appendices
Conversations along the way
3. Conversations along the way

Those outside the necessarily introspective process of making art are capable of bringing objectivity to that process and its intentions and results. They can also bring new perspectives that can take a practitioner’s mind laterally into new territory not previously conceived. Accompanying my 2012 solo exhibition *Balance Point* at the Bett Gallery, Hobart was an exhibition catalogue, photographed and designed by professional photographer Peter Whyte and including an essay by the Senior Curator of Decorative Arts at the Tasmanian Museum and Art Gallery, Peter Hughes. Additionally, while the exhibition was installed in the gallery, arts writer, artist and architect Judith Abell was commissioned to write a critical review of the exhibition – a slightly alarming process, from the artist’s perspective, in which one’s work, and therefore oneself, is left vulnerable, open to opinion and criticism. On seeing the *Balance Point* catalogue, my supervisor, Dr Richard Blythe, suggested I annotate the catalogue and the review and make those annotations the basis of my next PRS presentation. The photography of Whyte and the texts of Hughes and Abell were so rich and thought-provoking that my annotations for each filled a four-metre poster, the display of which, at the PRS presentation, provided the panel with many thoughts, intersections, images and questions, resulting in much fruitful discussion.

 Presentation poster focusing on Peter Hughes’ catalogue essay, *Minimum Curvature* – designed by Belinda Winkler for the June 2012 PRS.
Of particular note from the panel’s feedback were the responses of Dr Marcelo Stamm who, through conversations and communications both during and beyond the PRS, brought new insights with regard to crucial aspects of my practice. Combined, the four external observers (Whyte, Hughes, Abell and Stamm) enabled me to attain significant breakthroughs in the understanding of my practice.

One of the most important benefits of practice-based research is the opportunity to be concurrently the practitioner, the researcher and the object of the research. When combined, the journals that one keeps, the photographs one takes (and has taken) in the

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3 Presentation poster focusing on Peter Whyte’s photography, especially with regard to his photography of the works for Winkler’s *Balance Point* exhibition – designed by Belinda Winkler for the June 2012 PRS.

4 Presentation poster focusing on Judith Abell’s critical review of Winkler’s *Balance Point* exhibition – designed by Belinda Winkler for the June 2012 PRS.
midst of the creative process, and the artifacts brought into the world through explicit and tacit knowledge, are invaluable tools for reflection. And yet there remains the need, in this inevitably solitary, inward-looking process, for assisted reflection, because objectivity and distance can illuminate unseen aspects of one’s practice, or can identify entrenched but misleading trails, “categorial dependencies, false dependencies, [and] misleading reconstructions based on understanding authorities the wrong way round or voting for the wrong authorities.” 

The external analysis of the works in Balance Point, provided by Hughes and Abell and then combined with assisted reflection from Stamm, at times confirmed what I strive for and, at others, cast doubt – prompting new insights primarily through their identification and/or questioning of possible motivations, intentions and outcomes. There is much to be gained in the addressing of a point of difference. There are too many points to share in this context, however I will relate the most significant in order to illustrate the development of my understanding of the deep structures of my practice that, at the outset of the reflective process, were intuitive and implicit, but have become progressively articulable and thus explicit.

The processes of developing the Balance Point catalogue began with Whyte’s ‘hero’ image for the cover, one that captured the essence of the exhibition, the notion of the balance point. Having been accustomed to seeing this piece in the working chaos of the studio, to observe the acts of both photographing the piece and seeing the image, which jumped immediately from the camera to the computer screen, allowed me to explore this work with fresh eyes. This had been the case since Whyte first began documenting my work for me, some six years ago. Often, when Whyte is in the process of photographing my work, moments of

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realisation, recognition or understanding occur. These moments arise when the work has been lit in the studio; I see it as if for the first time. Leaving the role of maker, I become the viewer. At this moment my work seems brand-new, almost foreign, which can be either an experience of *la jouissance*\(^6\) or of extreme disappointment – but, either way, I am compelled to pause and to reflect upon what is in front of me and how I got there. Edmund de Waal describes the “epiphany when you see what you have made and it is different from what you had conceived”\(^7\) and, for me, that epiphany occurs during the photographic process. It is then that I can begin to glimpse the work’s potential and can see, with new clarity, those aspects that I want to focus on and explore.

Beyond opening up completely new ways of exploring my work, photography is a very effective tool to communicate the essence of the work. Depending on the intended context, the image can be one of documentation or can be more evocative than descriptive. The first time I became aware of the suggestive power of an image of my own work was during the shooting of *Their Lips Met*. As Whyte progressively pulled in tighter and lower with the camera, the small, delicate, eggshell-thin forms took on a monumental quality, his documentation becoming interpretation – a subtle but important difference:

\(^6\) *La jouissance*, in this context, describes that feeling one gets having worked and worked at something and finally landing on it, getting it right, just-so, perfect... that joy, that shiver. *La jouissance* describes both a physical and an emotional response to that moment.

Whyte’s photographs offer a different way to view my works, a specific attitude, vision, mood, or feel. The images he takes of my work are an invaluable tool for my own reflections as they capture a particular quality or perspective, assisting contemplation and reflection, even when away from the studio, or when some time has passed and the studio-based activities have changed focus. They re-present the work and, in doing so, highlight specific aspects of the work that I wish to experience in a more focused and intense manner. In collaboration with Whyte, I guide the gaze to particular aspects of my work, harnessing the capability of photography to “bring forth or make manifest that which would otherwise go unnoticed.” This process provokes questions of what it is that I want the image to convey, hearkening back to Paul Minifie’s observations in the October 2011 PRS. Abell, in her critical review, refers to this aspect of the photography of my work:

8 Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70x 70 x 70mm, 2009, Photography by Peter Whyte.
[Winkler] is also working to establish a kind of frisson. Peter Whyte consistently reflects this aspect of the work in the photographic documentation created in collaboration with the artist. These moments are often isolated from the whole, such that scale and material are ambiguous and this sense of tension is heightened (…) we are encouraged to imagine sensual contact, but only with our eyes.¹⁰

Sharing a studio meant that not only was Whyte exposed to my practice, becoming very conversant with my ways of working, but I became equally familiar with the photographic process and the very particular way Whyte approaches photography, including the importance he places on the controlling of light-shaping. Whyte builds form with light and shadow, a tradition established by Rembrandt and Caravaggio, who favoured the use of *chiaroscuro* to lend a sense of volume and dimension, and by Duret, who used *chiaroscuro* to great dramatic effect in the photographing of Rodin’s sculptures.¹¹ Likewise, Pallasmaa’s discussion, while focused on the use of *chiaroscuro* in architecture, could well be applied to the lighting of sculpture:

> The shadow gives shape and life to the object in the light (…) it provides the realm from which fantasies and dreams arise (…) there is a constant, deep breathing of shadow and light; shadow inhales and illumination exhales light."¹²

Through having spent time with Whyte in the studio and having watched the way he lights my work, I have become more aware of the way light falls and shadows build. In my home I have a long hallway. The early morning light filters through the narrow glass panes in the front door, illuminating that which it falls on and

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¹¹ Marcoci, op. cit., p.86
accentuating the shadows where light has yet to reach. I am reminded of that particular quality of light, emerging through a single window, which Vermeer depicted. My work is often waiting in this hallway, large forms leaning against the walls, and small forms gathered along dark narrow plinths that run down the length of the hallway. In this quiet half-light the work is at its most beautiful. I would love for others to see what I see here. Perhaps it is possible to light a gallery in the same way that Whyte lights the work in the studio...

Sculptor and theorist William Tucker describes the primary condition of sculpture as “subject to gravity and revealed by light.” Similarly, during a PRS presentation, Dr Jon Tarry made some very astute observations regarding the lighting of my works in the context of their photography and beyond – observations that point to the developing role of light and photography within my practice and the possibilities inherent in an active exploration of that role:

I think the other material you’re working with is light. The way these are photographed is very much about illumination. That might be a way of reinvestigating the work, where light becomes material. Perhaps this could lead toward a re-examination of the pieces in the process.

Working in the same studio space as Whyte allows insight into his approaches, processes and ways of thinking. I could watch, for example, Whyte’s development of a unique process designed to allow him to capture a series of images that formed the body of work Imagined Landscapes. To create these images, Whyte set

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14 Dr Jon Tarry, at Belinda Winkler’s October 2011 RMIT PRS Presentation.
up a stochastic\textsuperscript{16} model in which chance variation within selected parameters plays a major role. Despite a known starting point (in Whyte's case a pool of water and controlled studio lighting) there exists an infinite number of ways in which the process may evolve, none of which can be precisely predicted. Experience allows one to anticipate the results, but only to a certain extent as, ultimately, there is from each variable a multitude of possibilities – although, for those with a “prepared mind”,\textsuperscript{17} the serendipity inherent in this process can deliver magical results.

Whyte's methodology for creating his \textit{Imagined Landscapes} demonstrates the spontaneous potential in process, and it is here that we intersect. Discussing Whyte's methodology with him brought to my attention the stochastic nature of my own processes, in particular the process of the balloons and plaster. The variables of this methodology consist of fluid plaster, balloons, and the intervention of my body, along with gravity, as it impinges its force on my plaster-filled balloons – a process of form-finding through the use of tension/compression-based stochastic processes. As detailed in Chapter Two (b), \textit{Shifting Sands: the first iteration of the research}, my cumulative experience with this process has developed very specific tacit and explicit knowledge that informs the inclusion and exclusion of parameters and variables.

The awareness and understanding of the stochastic model, attained through the intersection of Whyte's practice and my own, reinforced for me my increasing appreciation of the power of form-finding as opposed to form-making, a subtle but critical difference. Picking up on this quality within my work in his catalogue essay


Minimum Curvature, Hughes wrote of my use of “experiment, repetition and serendipity”.

The life seemingly inherent in the curves and shapes of her forms is far from the anaemic, indeed Platonic, perfection of cyberspace. To achieve her minimum curvature Winkler’s methods are emphatically analogue; she experiments with metal, foam, creepy fabrics such as Lycra®, water-filled balloons and other materials; compressing, stretching, running them through industrial bending and rolling machines. At this stage, roughly cut plywood shapes bolted through sheets of foam, water-filled balloons distorted with string and scaly bands of rolled steel are far from the smooth, sensuous and sometimes erotic surfaces that Winkler achieves in the finished work, yet it is these processes that, through experiment, repetition and serendipity, produce curves and surfaces with the spring and tension that gives them life.

At the outset of the research, in the design and making of works such as Curva, Diverge, Converge, the 3.2, Drift and Encounter #2, (the bottom row of images on the Locus of the Research Concepts Poster inserted inside this Research Catalogue), I used computer modelling to decide on the outward appearance of the work and would then set about finding ways to achieve that preconceived form. While this approach often produced aesthetically pleasing results with formal dynamism and a clean, reductive sensibility, the process itself did not have any room in it for serendipity. Most importantly for me, however, the closed, preconceived approach to design and making did not have the capacity to evoke a sense of life in form. Tom Porter in

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19 ibid.
Archispeak\textsuperscript{20} uses the term \textit{journey} to describe “the passage of a design idea from genesis to realization.” He notes, “The expedition is either preconceived (…) or open ended. The latter is a much more exciting excursion.”\textsuperscript{21} He goes on to describe the open-ended journey as “an adventure into the unknown, one filled with risks but offering the exhilaration of the unexpected.”\textsuperscript{22} Thus, Porter exposes the benefit of form-finding instead of form-making. For me, it would seem that physical, hands-on, material-based form-finding using ductile, responsive, elastic materials subjected to tension, compression and torsion provides the experimental pathways that give life form and the possibility of an object. This playfully experimental process allows for the unexpected, for chance and serendipity.

Beyond the discovery of the form that sings, \textit{the one} that will be taken forward, is the physical process of making. It is within the actions of making that further discoveries can be made and where serendipity can occur once again. The physical handling of materials, as the object at hand begins to take shape, provides often unexpected opportunities for the design process to move laterally, delivering unanticipated yet elevating aspects to the final form. During the sanding of the vessel forms of \textit{Their Lips Met}, for example, I realised I could remove most of the material from the top edge, leaving the finest of rims. I pushed these heavily sanded forms through the firing process to see if they would survive the high temperatures required for translucency. They emerged from the kiln, glowing with translucency and with rims so fine they seemed to almost melt into light. Sadly, this wonderful moment did not translate well across the much larger forms of \textit{Gravity #1}, their open mouths being so much more vulnerable to the warpage and splitting that is the constant danger of porcelain. However, when I applied a similar method to the bronze bowls, grinding the rims to


\textsuperscript{21} ibid., p. 105.

\textsuperscript{22} ibid.
fine sharp edges, the seemingly contradictory delicacy lent them an almost mysterious, unknown quality and a perceived fragility that belied their strong metal materiality. While talking with collectors at the gallery, one commented that he had never seen bronze casting treated as slip casting before and that these bronzes were clearly made by a ceramicist. Despite the serendipitous finds that occur in the making, Abell, in her review, questioned the need to take the forms I make beyond their plaster origins:

The creases left from the balloon skin will be edited from the shape in order to cast the mould. The seams left from the mould will be polished from the resulting vessel. Any irregularities in the lip of the vessel will be ground or sanded away. A perfect result is a completely regular curve, an utterly smooth surface, with nothing left to snag the eye as it maps the final object. It is as though she is attempting to remove the evidence of the ‘hand’, which is an interesting paradox, considering her obvious enjoyment of the haptic qualities of the finished work (…) There are many steps of editing and mediation that take the work from a raw state, such as wet plaster in a balloon, to the polished, smooth, hard, finished objects. The idea of truth is definitely muddied in the process (…) Given that the idea of applying force and experiencing the result is so satisfying for Winkler, I do query why the works need to be taken so far away from their origin. Could her more ephemeral plaster casts, which are generally just generating forms, be the work? In the context of Winkler’s preoccupations with directness, are they actually more perfect than the final outcome? Where does any one particular object stop being part of the process and start being ‘finished’?23

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23 Abell, op. cit., pp. 1–2.
While it is true that the plasters have a beautiful directness, they become elevated through their translation/transformation into porcelain or dark, ancient bronze. The hollowness, the space within, does not occur in the solid plasters, nor does translucency or the opportunity to interact with these forms in a functional sense. As Abell points out, I remove all irregularities from the forms to ensure that there is “nothing left to snag the eye as it maps the final object.”

This is, however, not in an effort to “remove the evidence of the ‘hand’” and nor is it a search for so-called ‘perfection’. Rather, I would argue that anything made using a manual process is going to retain some aspects of its making. There is so much invested in the process of making, in the holding, the sanding, the polishing, grinding and patination. That is where the beauty to the eye and the hand is generated. Indeed, as Martina Margetts claims, corroborated by Peter Dormer and Mihaly Csikszentmihalyi, the act of making in itself produces “happiness, ‘flow’ and pleasure, experienced by the maker and transmitted through the work to the viewer.”

Aside from the conveying of the inherent pleasure of making, I also seek, through the so-called removal of “evidence of the ‘hand’”, particular visual and tactile qualities. While the balloon-skin leaves a beautiful, uninterrupted surface on the full, rounded curve at the base of the form, the top section reveals the unavoidable air bubbles and inevitable puckers of stretched latex. These inescapable qualities speak of force, of stress and strain; however, I would argue that the full, swollen, rounded lower sections of the balloon cast do so as well. The difference lies in the fact that while the uninterrupted curves readily imply the body, the puckers and folds speak more of latex and of process. Hughes would seem to

24 ibid.  
25 ibid.  
26 ibid.  
31 ibid.
agree on this point as he writes, “the smooth, perfect finish of Winkler’s work serves both to emphasise the skin-like qualities of the surfaces and to eliminate a competing narrative of fabrication.”32

32 Hughes, op. cit.
33 The making process leading to the discovery of the porcelain’s ability to be reduced to the finest of rims and yet hold the curve, without distortion, providing that the mouth of the vessel remains relatively small. Photography by Peter Whyte.
Both the forms and surfaces I seek are those that are inherently related to the (female) body. The curves and undulations speak of the body, the sheen of polished porcelain and the dewy lustre of the barely-waxed patina on bronze, have a certain visual and tactile sensuality, a skin-like quality. There is an intimacy and familiarity to these forms that is reminiscent of something we recognise inherently as part of our own sensual experience – a felt knowing. Even when we do not touch, we have a memory of touching something similar that is called into play simply by looking; we recognise these objects through touch. Simultaneously, we can recognise these forms as vessels we have encountered before. It is easy to imagine a physical relationship with the work. Then, when we finally do get to touch, the temperature, the porosity, the smoothness and the fragility all

34 *Energy and Equilibrium #2* (detail), Porcelain, glazed interiors, hand-polished exteriors, Dimensions variable, 2011, Acquired by the Tasmanian Museum and Art Gallery, Photography by Peter Whyte.

35 Hughes, op. cit.
add to that first visual stimulus. Juhani Pallasmaa, in his essay *Hapticity and Time – Notes on Fragile Architecture*, connects vision, memory and touch when he writes:

We are not usually aware that an unconscious element of touch is unavoidably concealed in vision; as we look, the eye touches, and before we even see an object we have already touched it. Touch is the unconsciousness of vision, and this hidden tactile experience determines the sensuous quality of the perceived object.36

Abell seems to imply that the perceived illegality of touch in the context of a gallery – i.e. where my work is often exhibited – detracts from the viewer’s experience of that work. In this scenario,

the haptic exchange then becomes an act of the imagination. We see the surface, we understand its smoothness and we have a direct connection to the dimensions, suggesting something that would fit to our palm, but we cannot complete the exchange.37

Abell does, however, qualify this when she writes, “Irrespective, we establish a relationship with the object through this process.”38

Abell goes on to discuss the establishment of relationships between the objects and their context, describing how “curves just touch supporting surfaces, objects either ‘hug’ each other or they almost ‘kiss’.”39 Hughes elaborates on this hug and kiss when he writes, “The spaces between, where the surfaces draw infinitely close, sing with potential energy.”40

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37 Abell, op. cit.
38 ibid.
39 ibid.
40 Hughes, op. cit.
The “potential energy”\textsuperscript{42} referred to by Hughes is, I would suggest, what enables the reading of “life and movement in the curve”.\textsuperscript{43} Abell refers to this connection but expands it, linking the tension within forms – derived from the application of stress forces at the point of making – to the tension between forms and, beyond that, to the tension between form and viewer:

While the artist uses the word tension in a way that is predominantly intended as an expression of a physical force, it is a property that could be ascribed to every aspect

\textsuperscript{41} Belinda Winkler, \textit{Gravitate} #2, Porcelain, Glazed Interiors, hand polished exteriors, 850 x 300 x 300 mm, 2011, Photograph by Peter Whyte.
Belinda Winkler, \textit{Energy and Equilibrium} #20, Porcelain, glazed interiors, hand-polished exteriors, 240W x 120H x 120D mm, 2011, Photograph by Peter Whyte.
\textsuperscript{42} Hughes, op. cit.
\textsuperscript{43} ibid.
of her practice. Currently she builds forms by placing materials in tension, establishes tension between objects through spatial arrangement and generates tension between the viewer and the artworks. And I would argue that the sense of haptic connection or tension that she creates between the viewer and the object is the most fertile ground with the deepest connection to her process of making and her own descriptive language.44

Within this brief paragraph, Abell succinctly articulates three ways in which I utilise tension in my practice; however, it was Stamm who very eloquently linked these three aspects, devising the term “triangulated tension”.45 Abell describes the haptic connection, or tension, between object and viewer as being initiated through the viewer’s visual recognition of the smoothness of surface and bodily dimensions of the object. Stamm goes one step further here by arguing that it is not simply visual recognition that allows us to connect with the object, but rather that this connection is instigated through the tension that we perceive in the object itself. Stamm’s argument is that these forms, having been generated through the use of tension, become “charged”46 with that tension, “each a distinct space of ‘tension formation’, [of] ‘embodied tension’”.47 These charged objects are then sliced through and cast, effectively creating “tension prints”,48 which, when placed in relation to one another, create a different kind of tension, a “relational tension”;49 a charged void, the tension of the in-between. I had been exploring spatial tension for some time, describing it in Chapter 2c, *The Possibilities in Plaster*; however, the significance of these notions of tension gained clarity and significance through this dialogue.

44 Abell, op. cit.
45 Email from Dr Marcelo Stamm to Belinda Winkler, July 9, 2012.
46 ibid.
47 ibid.
48 ibid.
49 ibid.
Stamm triangulated the embodied tension of the object and the tension of the in-between with a third, the tension between the object(s) and the viewer, created through our perception of the tension between and within forms – a second form of relational tension. Stamm argues that we perceive this tension as we are ourselves objects of embodied tension, echoing Morris' theory that "surfaces under tension are (...) under the stresses of work, much as the body is in standing", whilst also resonating with notions of tension expressed by artist Michael Ayrton:

> The quality of tension at which I aimed...is a muscular tension but it is, I think, closely related in a sense to the tension which seems to me continually to be set up by human beings in relation to one another... Tension is to me the quality which excites me most in a work of art...It has nothing to do with undesirable nervous strain.

Tension and compression, torsion and stretch, dimple and swell, pressure and gravity: we have direct, physical experience with these sensations and, as such, when we read them in an object they find resonances in our own bodies. Stamm’s notion of “triangulated tension” helped me to draw essential connections between my investigations of embodied process, embodied form and embodied perception, in a way similar to my diagrammatic representation of Morris’ theories (referred to in Chapter 2d, The Voice on the Shoulder) and recalling Abell’s concluding sentence, “the sense of haptic connection or tension that she creates between the viewer and the object is the most fertile ground with the deepest connection to her process of making…”

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52 Abell, op. cit.
The process of reflection, through an examination of the four external voices of Whyte, Hughes, Abell and Stamm, enabled me to attain significant breakthroughs in the understanding of my practice, as evidenced by my emergent understanding of the interconnected nature of physical and perceptual tensions and their role in the activation and apprehension of the object. Thus my research, which began as an investigation of the evocative curve, evolved to become an inquiry into the conditions for the possibility of the curve as it appears in my work – a study of the genesis of the curve, rather than simply the curve in itself – and thus an investigation of the becoming. “Here is a sufficient field for exploration to last a lifetime…”53

Communities of Practice
RMIT PRS June 2012

1. Balance Point Exhibition
Peter Hughes
Judith Abell
Curtis Hore
Ellsworth Kelly
Isamu Noguchi
Jenny Topley
Kevin Perkins
Malte Tolksdorfer Herrmann
Gwyn Hanssen Pigott
Peter Whyte
Robert Morris
Mark West
Malcolm Wood & Deven Coates
Antony Gormley

2. Thoughts on possible future work - the interior of bodily space
Juz Kitson
James Evans
Wouter Dam
Anish Kapoor
Fred Fisher
Ron Arad
Peter Huston
Juhani Pallasmaa
Les Blakebrough
Lester Cooper
Bart van Heugden
Jean Arp
Pat O’Keeffe
Phil Verbeke
Judy Linson
Folko Kooper
Richard Serra
Bridget Riley

Image credits in Appendices
4

Reflections on the journey
4. Reflections on the Journey

The idea danced around the periphery of her vision, never long enough to be clear. When she attempted to make a sketch, it became diminished, wooden, inelegant. Sometimes, in her dreams, she felt she had discovered its form, but if she had, it was like an improperly fixed photograph, which fades when exposed to daylight. She was wise enough, or foolish enough, to believe this did not matter, that the form would present itself to her in the end.¹

Peter Carey so beautifully describes the search for that elusive form, for that moment when all things collide and a form sings, that moment of jouissance.² His description of Lucinda’s creative dreaming resonates with me in its evocation of my own creative process where sketching on paper cannot capture the fluid, shifting, intangible vision of a new work before it physically manifests itself, before the form presents itself to me.

From a philosophical perspective, Ramon Lemos echoes Carey’s words when he wrote of the art object being an embodiment of an idea or intention and,


Shifting Gilbert and Cixous’ definition and applying it to the aesthetic appreciation of art, Michael Owen argues, "Jouissance can be considered as the postmodern equivalent of the modernist concept of aesthetic experience. Jouissance, in postmodern usage, refers to a viewer being enraptured in almost orgasmic enjoyment of a work of art to the point where self-awareness and objective distance is lost. The modernist concept of “aesthetic experience” however requires a distanced and disinterested view of an artwork.”


I would also claim that the viewer, in Owens’ explanation of jouissance, could be transposed with the artist experiencing this sensation on the conclusion of a work.
until that idea or intention is actualized or embodied in the object it is more or less amorphous, indeterminate, vague, schematic or general – a more or less unformed matter to be formed and actualized through making the object. The artist does not know fully, concretely, precisely or in detail what his idea is until he succeeds in expressing, forming, or embodying it in the object.³

Lemos goes on to explain that, assuming technical proficiency, if the artist is dissatisfied with the resulting art object then it must follow that the artist is “dissatisfied with the idea he intended to express.”⁴ This theory, while arguable, is, when applied to my own work, true insofar as the cause of my past dissatisfaction with many of my works could be traced to my originating urges for that work, as “improperly fixed”⁵ and slippery as these ideas often were. When I thought these urges were manifest in the work – when the idea, such as it was, became embodied in the object – that idea seemed suddenly off-target, misdirected. And yet, I was unable to land on the idea that I really sought, on the form that slipped constantly to the very edges of my vision. In a constant drive to find that elusive form, to allay my uncertainty and discontent, I continuously created new works, and some of those would deliver that shiver of delight, that deep felt knowing that the stars had aligned and the form was right. In retrospect, the works from which I gained the greatest satisfaction were those where I had allowed the possibility of discovery to enter the creative process – where I did not seek to represent a fixed concept. When I found that nothing was discovered in a work, it became, in effect, a dead-end, leading nowhere, hence my feeling of intense dissatisfaction. However, if the starting point of a new work lay in informed exploration and discovery, in form-finding instead of form-making, then the possibility remained for the discovery of the

⁴ ibid.
as yet unknowable. The models for the *Red Loops* project, for example, were the result of an extended exploration of the possibilities of line and plane under the tension and compression of a bend and twist. I had intuitively sought a sprung tension within these models and proceeded with those that I intuitively felt held this tension. While draftsman Csaba Moldan had painstakingly taken an exact “tension print”\(^6\) from those models, the fabricator had translated this information poorly when rolling the loops. Thus, Lemos’ theory of technical proficiency (or lack thereof) is the reason why some of these forms failed, as the initial models both embodied and expressed the underlying urges of the work – a discovery revealed through the work itself.

A pertinent counterpoint to this situation can be found in the work of German sculptors Julia Venske and Gregor Spanle. The pair carve white Lasa marble into organic, anthropomorphic forms that appear to stretch, drip, slide and ooze. Many look as if they have been created with the tension and compression of plaster in balloons rather than chiseled and hewn from stone. The technical adeptness of the sculptors in translating a drawing into three dimensions is breathtaking:

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\(^6\) Email from Dr Marcelo Stamm to Belinda Winkler, July 9, 2012.


Although Venske and Spanle’s ability to successfully translate idea into form, to embody their idea in the object, is indisputable, it seems to me that their methodology of translating a preconceived form into physical reality is a far less intriguing and exciting process than that of physical form-finding with materials, tension and compression – a practice that leaves open the possibility for discovery and for the serendipitous find, a practice that takes time and requires attentiveness and a receptive frame of mind in order to perceive a moment of discovery. While within my stochastic form-finding processes there are a multitude of possibilities, the parameters of those processes can be set wide, or narrow, depending on the purpose of the exploration. Broad parameters promote the possibility for discovery – with a let’s see what happens if approach there is the potential for new forms to manifest themselves, some of which may contain the seed of something, a moment of recognition, of something seen or felt, nameless yet somehow familiar. Having found this moment, and analysed the specific parameters that delivered that form, the exploratory form-finding process continues, working within the boundaries of those narrowed parameters; a new series of explorations takes place.

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10 Lemos, op. cit.
11 Stochastic form-finding processes of Their Lips Met, and the emerging Dimple and Swell and Stretch projects.
The progressive narrowing of variables allows for directed investigations, and sees the form-finding process subtly shift to one of form-making, a process exemplified in the development of *Balance Point*\(^{12}\) in which extensive experimentation, within the parameters of the compressive/tensile balloon/plaster form-finding technique, led to the discovery, over time, of that very particular form. Having discovered the potential of some of the round-bottomed vessel forms of *Gravity #1* to balance upright, I then proceeded to specifically explore the curves and relative proportions of the forms resulting from the action of gravity on a variety of sizes and thicknesses of round balloons filled with differing densities of liquid plaster. The pendulous plaster model that resulted from my explorations had ‘just-right’ proportions of height to width to allow it to balance in a near-upright position but with an expressive and gestural tilt, and the ability to rock and sway precariously and then to find its equilibrium in its point of balance. The ‘just-right’ proportions also allowed it to have an open mouth – open, but falling short of gaping. These specific qualities possessed by the plaster model for *Balance Point* were not known at the outset of the explorations but rather were revealed in the process. Knowing, but not with any certainty, what it was for which I was searching, the ‘right’ form *presented itself to me in the end.*\(^{13}\)

The site of discovery can also exist inside the process of making a work, where realisation can lead to innovation, an experience described by Dr Richard Blythe as reflection *“in the act of actually designing the thing itself, (...) while fully immersed in the creative process.”*\(^{14}\) The physical handling of materials as a new work begins to take shape can reveal the unforeseen and provide often unexpected opportunities for the design process to move laterally.

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\(^{12}\) The bronze bowl featured on the first page of Chapter 3. *Conversations along the way*


I recounted a pertinent example of this occurrence in Chapter 2c: *The Possibilities in Plaster*, in which I described the development of *Gravity #1* where reflection in\textsuperscript{15} in the midst of the creative process led to the discovery of the precariously balanced form. This discovery caused a significant shift in the outcome of that particular work and was the springboard for many future works, some of which, as I write, are themselves in the midst of the design process. The making process can also open up the possibility for technical discoveries with the potential to elevate the end work, as related, for example in Chapter 2e: *A New Lens*, with the development of a unique, gently lustrous, black patina, and in Chapter 3: *Conversations Along the Way*, in which I discussed the pushing of technical boundaries in the creation of eggshell-thin porcelain rims. These discoveries were the result of material-based exploration and research, referring back to Hughes’ statement: “it is these processes that, through experiment, repetition and serendipity, produce curves and surfaces with the spring and tension that gives them life.”\textsuperscript{16}

The reflective practice process has challenged my established notions that the fabrication of the object was preceded by design, and that making is an end itself, where no further design ideas are contemplated. Through the research, I have come to embrace a hybrid methodology in which the investigation of ideas is fully engaged with the tactile, physical, embodied nature of form-finding, the making process and the object. These very particular form-finding and making approaches require expertise in the physical and the tactile, a capability that has been developed through explicit and tacit knowledge, experience and informed intuition. Integral to this approach is the awareness that the design process does not stop at the form-finding stage; rather, it continues into the making phase where, for the watchful, opportunities and possibilities continue to present themselves. It is

\textsuperscript{15} Referring to Blythe’s notion of the three reflective frames, ‘R-o’, ‘R-i’ and ‘R-f’, reflections on, in and for the work of the practice, in van Schaik, op. cit., p. 13.

\textsuperscript{16} Hughes, op. cit.
worth noting here that the bias toward the inherent value of making in this approach is not a sentimental one that hearkens back to the revered craftsmanship of days gone by. Rather, there exists within creative practices “practical, experiential, personal, and tacit knowledge”\(^\text{17}\) that is difficult to articulate verbally or in text. Nevertheless, this type of knowledge is extremely valuable in research terms, especially in regard to research process and outcomes. Kristina Niedderer argues that tacit knowledge “is essential for the ability to execute and understand certain research tasks (skill associated with expertise) as well as to making discriminatory judgments (skill associated with connoisseurship).”\(^\text{18}\) There is a growing movement that laments the erosion of tacit knowledge and the rich skill-base of craft traditions,\(^\text{19}\) and, while embracing a resurgence of these skills and practices, I would further argue that new aspects to the design process can emerge through their revival. An example of this can be found in the transition from first form or model to finished object. In this transition, some essential qualities are retained while others are lost. Observing and noting these qualities and their departure or arrival instigates questions, raises possibilities and provides material for further investigation, generating opportunities for future works. These moments are rich in potential, with possibilities radiating out in many directions. As London architect Mark Prizeman writes, in an essay concerning changes in architectural design education:

> [it is] a question of how hard one looks at something …

Designing by making takes observation to a greater emotional and intellectual involvement with the developing


\(^{18}\) ibid.

\(^{19}\) For example the thought provoking texts of:
product of one’s musing than the distancing of a drafting process."^{20}

In a sense, Prizeman is echoing Louis Pasteur’s observation that “chance favours the prepared mind“^{21} but, in another sense, his words resonate with those of Mark West, in West’s privileging of experimentation with physical matter and material intelligence over computer-modelling."^{22} Likewise, within my practice potential designs are generated through material explorations, a process that combines form-finding and form-making. Some of these forms lend themselves to translation into translucent porcelain, or to darkened bronze; to hollow forms with a lip or edge that lead to hidden recesses where shadows gather, or to glowing, translucent, light-filled interiors. Some may also carry the potential for digital design to work in tandem with physical processes and hand-craft techniques to attain “tension prints"^{23} at a larger (even architectural) scale.

This fundamental shift in my approach to design has revealed material-based form-finding and the making process to be central to my practice, providing an ongoing resource for inspiration, experimentation and research. While this is one key outcome of the reflective process, there is an important link to be made between this tactile, physical, embodied approach to design and the haptic connection to objects resulting from it – a link beautifully articulated by Dr Marcelo Stamm’s notion of *triangulated tension*. As described in the previous chapter, triangulated tension refers in this context to the tension embodied in an object that has been generated *through* tension: the *relational tension* between two of these charged objects, and the relational tension between the


\(^{23}\) Stamm, op. cit.
object(s) and the viewer, created through the perception of the tension between and within forms.

The very physical making process, wherein the tensions and pressure of my body are transferred into the material to which these stress forces are applied, could well be described as the *embodied process of making*. As described earlier in this account of my research journey, this process is one that I have developed over time and with which I have experimented broadly. The resulting knowledge gained from the directness and longevity of this process is both explicit and implicit, thereby developing very specific and tacit, embodied knowledge. The embodied process of making has the capacity to *charge* the form with tension or perhaps, more specifically, the form becomes charged through the elastic potential energy of a material held in tension, thereby delivering an object of embodied tension. This, in turn, I have argued, creates the possibility for the viewer to read this tension and thus perceive this *object of embodied tension* in an embodied way: that is, through the interplay of both body and mind in the perception of that object.

There is an immense and ever-growing body of knowledge and associated discourse around phenomenology and embodied perception, with its roots in the philosophical theories of Maurice Merleau-Ponty, John-Paul Sartre, Edmund Husserl and Martin Heidegger. Connections were drawn in the 1960s and 1970s between phenomenology, embodied perception and the viewing of sculpture, and a prominent proponent of a phenomenological interpretation of sculpture during this period was art critic and theorist Rosalind Krauss. Included in her theories of a bodily and sensory viewing of sculpture was the evocation of implicit memories. Krauss, in her seminal text *Passages in Modern Sculpture*, writes of the transformation of sculpture from “a static, idealized medium to a temporal and material one”,24 and

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discusses the potential for a deeply reciprocal encounter between sculpture and viewer, analogising the “modes of cognition formulated by modern sculpture” to Proust’s famous encounter with the madeleine and the involuntary memories it evoked. Krauss uses Proust’s writing to illustrate the evocative power of “the material object (or the sensation which such an object arouses in us)” to bring memories and experiences of sensuous phenomena to the surface. Similarly, I would suggest that an encounter with an object of embodied tension, a charged object – charged in the sense that the work of the tension and compression applied is retained within the form as elastic potential energy, effectively charging the object – has the potential to evoke sensuous haptic memories in a way similar to Proust’s synaesthetic experience with the madeleine. Thus, there is the possibility here to link embodied and synaesthetic perception. I would suggest that the synaesthetic perception of a form that has been generated from and imbued with tension is reliant upon our implicit memories of such tensions within our own bodies and our experience and memories of the bodies of others. Herbert Read, in his book The Art of Sculpture, refers to this connection between experience and sensation in perception when describing the viewing of an artwork, be it two- or three-dimensional:

(...) what actually takes place, in any given experience, is a chain reaction or Gestaltkreis in which one sensation touches off and involves other sensations, either by

25 ibid. p. 287
28 Synaesthesia is a physiological and psychological term that refers to “the production of a sense impression relating to one sense or part of the body by stimulation of another sense or part of the body.” synaesthesia”. Oxford Dictionaries. Oxford University Press. Accessed June 02, 2013http://oxforddictionaries.com/definition/english/synaesthesia.
memory association or by actual sensory motor connections.  

Without wanting to delve too far into the realm of psychology, it is pertinent here to note the research of Prof. Soledad Ballesteros into the existence and veracity of “implicit and explicit memory effects in haptic perception”. It is her investigation into the unconscious evocation of implicit memories that is of particular interest here, especially those elicited through touch. Ballesteros’ theories intersect with Jamie Ward, Michael J. Banissy and Clare N. Jonas’ theories of the connection between Haptic Perception and Synaesthesia. Ward, Banissy and Jonas discuss similarities between “synaesthetic perception and multi-sensory perception involving vision and touch”, describing synaesthetic perceptions as,

> “conscious percept-like experiences that are involuntary and are elicited by a stimulus that is not normally associated with this experience. The synaesthetic percept coexists with the percept of the inducing stimulus rather than over-riding it.”

This statement could apply to an encounter with one of my charged objects, which has the potential to elicit haptic memories of sensual bodily form whilst continuing to exist as an inanimate object. Vittorio Gallese, in his essay *Seeing art... beyond vision: Liberated embodied simulation in aesthetic experience*, brings a

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32 ibid., p. 184.  
34 ibid.  
further layer to this notion of embodied perception. Gallese claims that, within the creative process of the artist, “the artwork becomes the mediator of the sensory-motor and emotional resonance that establishes between the artist and the observer, thus allowing beholders to feel the artwork in an embodied manner.”

Therefore, following on from Gallese’s argument, the embodied perception of the charged object is a direct result of the embodied process of making or, to quote Stamm, “the condition for the possibility of [the impact of the charged object] is: those tension spaces [created] in the first instance, those ‘tension moulds’ (vulgo: balloons, or: the bending of material).”

What these combined studies of embodied and synaesthetic perception confirm to me is that the possibility exists for sensual haptic memories to be evoked through both tactile and visual encounters with the charged object. If, however, one cannot “complete the exchange” through physical touch, then it is possible for sight alone to evoke implicit haptic memories or, as Freedberg and Gallese suggest, “a fundamental element of aesthetic response (...) consists of the activation of embodied mechanisms encompassing the simulation of actions, emotions, and corporeal sensations.” Gallese describes how the German philosopher Robert Vischer was the originator of the notion of empathy, Einfühlung, in aesthetics. According to Vischer,

… particular forms aroused particular responsive feelings, depending on the conformity of forms to the design and function of the muscles of the body, from those of the eyes, to our limbs, and to our bodily posture as a whole. […] These] forms acquire their meaningful nature first and

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36 ibid.
37 Email from Dr Marcelo Stamm to Belinda Winkler, October 16, 2012.
38 J Abell, Belinda Winkler - exploration in text. 2012.
40 Gallese, op. cit.
foremost because of their intrinsic anthropomorphic content.  

Vischer wrote these words in 1873 and nearly a century later, in 1966, Robert Morris articulated these very same ideas by way of an example of exactly what he hoped to circumvent in the perception of his own work:

Surfaces under tension are anthropomorphic: they are under the stresses of work much as the body is in standing. Objects which do not project tensions state most clearly their separateness from the human. They are most clearly objects.

Compound curves that project the work of the stress forces used to create them, thereby forming anthropomorphic associations that promote empathic responses, are rejected by Morris who considered the cube, along with other regular forms involving the right angle, to be the form that best fulfils the role of independent object. Within my own work, however, it is the tension-projecting object that I seek, one that inevitably involves “the organic form of the compound curve”, one that embodies the tension and pressure of its creation and thereby holds the possibility of eliciting an embodied response.

Juhani Pallasmaa spoke in a recent lecture of the connection between the experience of reality and embodied perception. Whilst he is speaking specifically of architecture, his propositions can be applied to sculptural forms and designed objects:

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43 ibid.
The power of architecture is in its ability to strengthen the experience of the real, and its imaginative dimension arises from this strengthened and re-sensitized sense of reality. Experiencing, memorizing and imagining spatial settings, situations and events, all engage our imaginative skills; even the acts of experiencing and memorizing are embodied acts in which lived embodied imagery evokes an imaginative reality that feels similar to actual experience.44

We search for the familiar as we seek to make sense of the world. Our lived experiences stay with us as memories, sometimes receding into distant, subconscious, half-forgotten memories. But these can be brought into the present when, in an instant, we recognise something, be it ever so subtle, and can experience a response of felt knowing. Such associations can go beyond, I would suggest, an anthropomorphic response, to a more abstracted and nameless but deeply felt experience. It is within encounters such as these that we find meaning and where, as Alexander Potts expressed, “there can emerge modes of self-positing, or of being there, that have a sustained and even sustaining presence, and with which certain positive – if inarticulable – identifications are possible.” 45

5
Where to next? - the forward story
5. Where to next? – the forward story

You can find out how to do something and do it, or do something and then find out what you did. 

Isamu Noguchi

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3 Hands of the Maker, Photograph of Belinda Winkler’s hands, 2012, Photograph by Peter Whyte.
Creative practice research builds knowledge (both explicit and implicit) through the process of art-making. The knowledge gained through my practice-based research contributes to the field in which I locate my practice, a field of creative practitioners connected through an engagement with concepts of embodied perception, haptic connection, physical and perceptual tensions, and sensuous phenomena. The research documented in this Catalogue firmly positions my creative activities and practice outcomes within the wider context of my peers and associated research of this field, and provides documentation of, and critical reflection on, my own creative practice. In doing so, this Catalogue offers a means by which knowledge, established through my practice-based research, may be communicated. In addition, this Catalogue seeks to make evident the immediate and substantial positive impact that the research has had on my practice.

My research journey was initially instigated by a search for an understanding of the curve within my work. I had always been curious to know why it was that I found some of these curves evocative, while others, fundamentally disappointing – why some engendered within me a response of felt knowing, of inarticulable identification, while others left me cold and emotionally disconnected. The process of reflective practice-based research has brought insight to my intuitive and implicit ‘feel’ for ‘the right curve’, bringing clarity to the previously indeterminate. My progressive understanding of the inherent links between the embodied act of making, haptic connection, and embodied perception, has enabled me to progress in my practice with greater awareness, surety and confidence. The active explorations of these intrinsic connections that my research has initiated will continue to evolve through the combined process of making and my reflections on, in and for future projects.

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Through the reflective process I have come to understand the mental space in which I practice, which has, in turn, enabled me to become a more conscious practitioner, more able to position myself and differentiate my practice from those of other practitioners, and more able to draw on my own inner resources. Indeed, the process of reflective practice-based research has revealed the nature of past and present works to be protean – shifting and changing in the light of new projects, re-cast by new insights attained through current works, and thus providing a wealth of potential where future works are concerned. Some time ago, while in my studio and looking at shelves filled with plaster forms, Dr Richard Blythe observed that, “these plasters sit there because they have some immediate quality and they’re full of potential.... past projects are constantly used as a source of new projects.”\(^5\) And, without doubt, the seminal process that delivered the plasters has been central to the emergence of four new directions for my practice, whose processes of design development are illustrated through both the central Locus of the Research Concepts schematic and through four foldout diagrammatic explanations that appear at the end of this chapter. “In the mode of showing rather than saying,”\(^6\) the four schematics illustrate the influence that my past works have had on current design processes and point to the development and influence of the mental space in which these works are designed. This Research Catalogue, along with each of these schematics, reveals that within my practice knowledge creation sits in the interactions and resistances between different enquiries – where intersections occur between the processes of making; reflections on, in and for the work of the practice; technical resistances; philosophical texts; and the practices of mentors, authorities, challengers and peers – all leading to shifts in perception and to new understandings. The initial stages of the development of four

\(^5\) Dr Richard Blythe, Supervisory discussion at my studio, 06.07.2012
bodies of work are tracked within these schematics, each pointing to future possibilities and directions for my practice. The reflective practice-based research from which these new projects have sprung, and from which many more are emerging, has brought about fundamental shifts in my practice, first and foremost of which is a deep-seated shift in understanding that my processes of thinking and making are not hierarchically separated but rather are intimately intertwined. While initially my research was centred on an exploration of the evocative curve within form, it became apparent as the research progressed that it was not simply the evocative curve that I was exploring but rather the genesis of that curve. The research thus evolved into an investigation of the becoming, thereby revealing my growing understanding of the interconnected nature of physical and perceptual tensions and their role in the activation and apprehension of the object – my intuitive, implicit, felt knowledge becoming explicit, and thus communicable.

Through the explication of this research I seek to contribute to art and design discourse in three connected but distinct areas; firstly, the research seeks to contribute to a body of knowledge that is focused on embodied perception, memory and meaning within the realm of the object, while concurrently participating in and adding to a dialogue revolving around the potential that lies within material-based form-finding and the physical act of making, exploring the inherent connections of these processes to an embodied perception of the object. I also seek, through this research, to add to the body of knowledge that surrounds creative practice and the way that creative practices actually work. This Research Catalogue, in conjunction with the exhibition and associated presentation, presents a specific, instantiate study and an enduring record of an active creative practice, and reveals its internal and implicit operations within the wider context of a community of practice.
My research journey has been both challenging and revelatory and has opened up and transformed my mental space and the very way in which I think – design – make – practice. I began this account of my research with the poetic words of author David Malouf:

What else should our lives be but a continual series of beginnings, of painful settings out into the unknown, pushing off from the edges of consciousness into the mystery of what we have not yet become, except in dreams that blow in from out there bearing the fragrance of islands we have not yet sighted in our waking hours...7

Malouf’s words have long struck a distinct chord and yet, with the benefit of the reflective process, their meaning for me has now shifted. While embarking upon new work will no doubt remain an experience filled with trepidation, and the future will remain a mystery, the “pain” of pushing off has been replaced with anticipation as directions in which to travel emerge, as the “fragrance blown in from out there” becomes more distinct and the “islands” begin to come into view.

Future work 1 - *Brink*

A re-investigation of the tension of the balance point
Future work 1: *Brink* ... a re-investigation of the tension of the balance point

Re-examining the exploration of the tension of the point of balance, where space is compressed and balance precarious.

Looking to the work of other artists who explore pressure, risk, gravity, balance and equilibrium through their work - where physical and perceptual tensions are manifest...

The exploration of the tension of the point of balance changes, in meaning and mood, when a second form comes into play - the balance point + the point of near touch - the tension of the in-between - intimate, but filled with risk...

The Japanese word 'ma' refers, "not just to spaces but to the way those spaces are activated by the objects that surround them." Through these I am exploring this notion.

Permit too, in this scenarios, I could play with the surface that the vessel forms the they penetrate or bronze set on. Perhaps this surface could read the compression of the weight of the bowl as it pushes down into that surface...

...as the pressure of the form creates a dimple and swell in the surface...

...this 'push' could be right on the edge, enhancing the perception of risk...? or gravity...?

...explore this with polyurethane and resin, and with zinc sheeting - the surface as part of a 'block' or as a plane (shelf?)...

The space of tension where gravity and precarious balance find a tentative equilibrium - there is room to explore this moment further.

The angle of tilt of my existing round based vessel forms is established through the proportion of height vs width, thus, I cannot use taller forms in these kind of works... unless they are base heavy... weighted...

**BUT**... what if I was to melt glass into these forms, having first set them at specific angles (to control angle of tilt/perturbation) in the kiln...?

Perhaps too, in this scenario, I could play with the surface that the vessel forms the they penetrate or bronze set on. Perhaps this surface could read the compression of the weight of the bowl as it pushes down into that surface...

...as the pressure of the form creates a dimple and swell in the surface...

...this 'push' could be right on the edge, enhancing the perception of risk...? or gravity...?

...explore this with polyurethane and resin, and with zinc sheeting - the surface as part of a 'block' or as a plane (shelf?)...?

The exploration of the tension of the point of balance changes, in meaning and mood, when a second form comes into play - the balance point + the point of near touch - the tension of the in-between - intimate, but filled with risk...

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...this 'push' could be right on the edge, enhancing the perception of risk...? or gravity...?

...explore this with polyurethane and resin, and with zinc sheeting - the surface as part of a 'block' or as a plane (shelf?)...?
Future work 2 - *Spaces of Tension*

An exploration of *Spaces of Tension* - between and within
Looking at the intersections of the practices of other artists who explore visual tension and compression of space - … converges with that of another practitioner, and then exploring where we diverge again, each in our own direction.

The constant influence of forces is one of several tension compression of energies and constriction, pressure.

Through these new explorations, my practice, by definition and image, a moment, a moment of the pregnant moment does not capture the most intense expression of a particular emotion or the pregnant moment is that which frees the imagination of the viewer; perhaps, within this work, there lies the possibility of tension and anticipation. In 1766 Gotthold Lessing described such a moment, introducing the notion of the "pregnant moment". A moment similar in nature to that of the pregnant moment, Donald Kuspit describes a moment of "tension". Kuspit describes a moment similar in nature to that of the pregnant moment, introducing the notion of the "pregnant moment". A moment similar in nature to that of the pregnant moment, Donald Kuspit describes a moment similar in nature to that of the pregnant moment, introducing the notion of the "pregnant moment". A moment similar in nature to that of the pregnant moment, introducing the notion of the "pregnant moment".

Ellsworth Kelly

Kelly's work is about tension, compression and visual tension.

The lateral expansion and constriction, pressure.

Potential new work

Potential new work

Looking in the dimensions of the awareness of other artists into explore visual tension and compression of space - looking for related ground and form for glass that seems "a zone of possibility" is different to mine.

Drawing on my techniques, the exploration of this new technique will allow me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. This grant will enable me to design, make and exhibit new works in porcelain. 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Future work 3 - *Dimple and Swell*

Exploring the *Dimple* of compression and the *Swell* of surface under tension
Seminal process

New work

"dimple", the concavity, the negative space: convexity, the positive shape, while the "fingerprints" become the bulge, the swell, the push. These designs looked to the ellipses and the spaces between them.

Intersections of my practice with those of others', but at a vastly increased scale: elastic skins, to create the dimple and swell in the foam.

Form finding research of compression and tension - the pressure of fingers onto a soft skin surface.

Testing with resin to capture the tumbling ellipses, I incorporated them into the design: polyurethane and MDF plates, nuts and bolts:

Potential held in the foam - as Mark West's approach would, no doubt, be more appropriate if I was working at a smaller scale.

Looking to the work of other artists who explore the relationship between fingerprints and tumbling ellipses, I designed tests with resin to capture the resulting swell in the foam: so, the resin sets the curve of the dimple and swell.

As long bench seat:

Initial prototype for Dimple and Swell

Reflecting on past works where touch squeeze caress - haptic connection to sensual bodily form - emulating the softness of "the wings of a moth" to pursue these forms at large scale and Louis Kahn's volcanic ash based concrete with the gray supple foam...

Potential new work - polyurethane and MDF.

Future work 1: Dimple and Swell

Potential held in the foam: so, the resin sets the curve of the dimple and swell.

Depth and tension - the pressure of fingers onto a soft skin surface.

New work

Past works

The potential held in the foam - as Mark West approached a scale of this magnitude. While effective on a small scale, Mark West's approach would, no doubt, be more appropriate if I was working at a smaller scale.

These architecturally scaled concept designs could be realised in foam, or concrete or...?

It would also be valuable to continue to explore the responsive surfaces of Lycra skin over soft, flexible materials.

Intersections of my practice with those of others'...
Future work 4 - Stretch

Investigating the push into and out of stretched Lycra ‘skin’
Past works:

Seminal process - the stretched skin stretching the Lycra refers back to past works. The realisation that the process of compression and torsion: planar curves under tension, bend metal sheets into curves that mimic the tension, compression & bend metal sheets into curves that mimic the tension, compression of lycra acting, under the stress and strain of tension and pressure, in a very similar way to that of the latex:..."}

Potential new work:

"Past works:

Considering the past works, between lycra and porcelain - allowing one to become immersed within soft, responsive interior spaces..."

Potential new work:

"Past works:

Looking to the work of Ernesto Neto and Richard Sweeney. Experimenting with resin and compression: 'splines' as a way to attain the stretch between two walls: 'walls': through interaction with the form - work - how to use soft seating secreted behind, discovered only secret internal spaces and translucent interiors both with gently glowing, porcelain..."

Potential new work:

"Past works:

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Belinda Winkler, *Community of Practice 1-7 Positional Diagram (1)*, 2013.


**Image Credits for Community of Practice Development – 1st Iteration of the Research**

Kevin Perkins, *The Rape of Tasmania’s Forests*, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.


Patricia Cleveland OAM, Photograph by Peter Whyte.

Les Blakebrough, *Bowl (Macdonald Ranges gum)*, 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.


Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.


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27. Ibid.


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41. Ibid.
Belinda Winkler, *Community of Practice 1-7 Positional Diagram (2)*, 2013.


Image Credits for Community of Practice Development – 
2nd Iteration of the Research


Kevin Perkins, *The Rape of Tasmania’s Forests*, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.

Eva Zeisel (American, born Hungary, 1906-2011). *Baby Oil Pourer*, ca. 1940. Glazed earthenware, 3 1/4 x 6 x 3 in. (8.3 x 15.2 x 7.6 cm). Brooklyn Museum, Gift of Eva Zeisel, 85.75.3a-b. Creative Commons-BY,
http://www.brooklynmuseum.org/opencollection/objects/112519/Baby_Oil_Pourer/image/1

http://mariehermann.dk/to_the_legion.html.


Jenny Topfer, *Stone winter. Number four*, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.

Peter Whyte, Photographic Designer, Photograph by Belinda Winkler.

Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.


Les Blakebrough, *Bowl (Macdonald Ranges gum)*, 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Mal Wood & Ewen Coates – Mal Wood making moulds and waxes at Coates and Wood Fine Art Foundry Northcote VIC 2011, Photo by Belinda Winkler.


Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.


http://www.flickr.com/photos/wallyg/5746876690/sizes/z/in/pool-329396@N20/.

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This work is licensed under a Creative Commons License: Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0)
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Belinda Winkler, Community of Practice 1-7 Positional Diagram (3), 2013.


Image Credits for Community of Practice Development –

3rd Iteration of the Research – Part 1


Eva Zeisel (American, born Hungary, 1906-2011). Baby Oil Pourer, ca. 1940. Glazed earthenware, 3 1/4 x 6 x 3 in. (8.3 x 15.2 x 7.6 cm). Brooklyn Museum, Gift of Eva Zeisel, 85.75.3a-b. Creative Commons-BY,
Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.


Jenny Topfer, *Stone winter. Number four*, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.


Kevin Perkins, *The Rape of Tasmania’s Forests*, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.

Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.

Les Blakebrough, *Bowl (Macdonald Ranges gum)*, 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.


Patricia Cleveland OAM, Photograph by Peter Whyte.


Peter Hodoniczky – Production manager, Weatherfoil, Tasmania, Photograph by Belinda Winkler.

Peter Whyte, Photographic Designer, Photograph by Belinda Winkler.


Image Credits for Community of Practice Development –
*RMIT PRS October 2011*


Curtis Hore, *Still Life 1*, Bronze, 2008, Photograph by Peter Whyte.


Fred Fisher, Button Seat, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.


Jenny Topfer, Stone winter. Number four, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.


Kevin Perkins, The Rape of Tasmania’s Forests, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.

Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.

Les Blakebrough, Bowl (Macdonald Ranges gum), 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Mal Wood & Ewen Coates – Mal Wood making moulds and waxes at Coates and Wood Fine Art Foundry Northcote VIC 2011, Photo by Belinda Winkler.


Patricia Cleveland OAM, Photograph by Peter Whyte.


Peter Hodoniczky – Production manager, Weatherfoil, Tasmania, Photograph by Belinda Winkler.
Peter Whyte, Photographic Designer, Photograph by Belinda Winkler.


Belinda Winkler, *Community of Practice 1-7 Positional Diagram (5)*, 2013.


Image Credits for Community of Practice Development –
*3rd Iteration of the Research – Part 2*


Curtis Hore, *Still Life 1*, Bronze, 2008, Photograph by Peter Whyte.


Folko Kooper, Sculpture for Aspire Estate, Corten Steel, 2012, Photograph by Folko Kooper.

Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.

Gwyn Hanssen Pigott, *Still life with seven bottles*, Porcelain, 2005, In the collection of the


Jenny Topfer, *Stone winter. Number four*, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.


Kevin Perkins, *The Rape of Tasmania’s Forests*, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.
Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.

Les Blakebrough, Bowl (Macdonald Ranges gum), 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Mal Wood & Ewen Coates – Mal Wood making moulds and waxes at Coates and Wood Fine Art Foundry Northcote VIC 2011, Photo by Belinda Winkler.


Patricia Cleveland OAM, Photograph by Peter Whyte.


Peter Hodoniczky – Production manager, Weatherfoil, Tasmania, Photograph by Belinda Winkler.

Peter Whyte, Photographic Designer, Photograph by Belinda Winkler.


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Chapter 3 – Conversations along the way

All images by Belinda Winkler unless stated otherwise.

2. Presentation poster focusing on Peter Hughes’ catalogue essay, *Minimum Curvature* – designed by Belinda Winkler for the June 2012 PRS.
3. Presentation poster focusing on Peter Whyte’s photography, especially with regard to his photography of the works for Winkler’s *Balance Point* exhibition – designed by Belinda Winkler for the June 2012 PRS.
4. Presentation poster focusing on Judith Abell’s critical review of Winkler’s *Balance Point* exhibition – designed by Belinda Winkler for the June 2012 PRS.
8. Belinda Winkler, *Their Lips Met*, Porcelain and Glaze, 70 x 70 x 70mm, 2009, Photography by Peter Whyte.
33. The making process leading to the discovery of the porcelain’s ability to be reduced to the finest of rims and yet hold the curve, without distortion, providing that the mouth of the vessel remains relatively small. Photography by Peter Whyte.
41. Belinda Winkler, *Gravitate #2*, Porcelain, Glazed Interiors, hand polished exteriors, 850 x 300 x 300 mm, 2011, Photograph by Peter Whyte.

Belinda Winkler, *Community of Practice 1-7 Positional Diagram (6)*, 2013.


Image Credits for Community of Practice Development –

*RMIT PRS June 2012*


Curtis Hore, *Still Life 1*, Bronze, 2008, Photograph by Peter Whyte.


Folko Kooper, sculpture for Aspire Estate, Corten Steel, 2012, Photograph by Folko Kooper.

Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.

Gwyn Hanssen Pigott, *Still life with seven bottles*, Porcelain, 2005, In the collection of the


Jenny Topfer, *Stone winter. Number four*, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.


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Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.

Les Blakebrough, *Bowl (Macdonald Ranges gum)*, 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Mal Wood & Ewen Coates – Mal Wood making moulds and waxes at Coates and Wood Fine Art Foundry Northcote VIC 2011, Photo by Belinda Winkler.


Patricia Cleveland OAM, Photograph by Peter Whyte.


Peter Hodoniczky – Production manager, Weatherfoil, Tasmania, Photograph by Belinda Winkler.

Peter Whyte, Photographic Designer, Photograph by Belinda Winkler.


http://www.flickr.com/photos/wallyg/5746876690/sizes/z/in/pool-329396@N20/.

http://www.flickr.com/photos/rocor/6776077216/.


http://www.flickr.com/photos/28481088@N00/2495616276/sizes/z/in/photostream/.

http://www.flickr.com/photos/47051377@N00/8017906587/in/photolist-ddvShK.
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All images by Belinda Winkler unless stated otherwise.

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Belinda Winkler, *Brink #1*, Bronze and Steel, Approximate dimensions 300 H x 170 D x 170 L mm, 2013, Photograph by Peter Whyte.


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All images photographed by Belinda Winkler and Peter Whyte with the exception of the following:

3. ibid.
4. ibid.
5. ibid.


17. Belinda Winkler’s work *Brink* received the Highly Commended Award at the *City of Hobart Art Prize 2013, National Contemporary Art Survey.*


5. Ibid

6. Sean Scully, *Floating Grey Wall* (detail), Oil on canvas, 160.02 x 320.04 cm, 2002, Photograph by Anthony Easton, Retrieved from Flickr. "sean scully detail | Photo Sharing!" Accessed January 29, 2014. http://www.flickr.com/photos/82072056@N00/3511560943/in/photolist-6miEJc-dx8udG-dx8sUy-dx2UHX-aa9yGe-p1BQA-p1DL8-p1F8y-p1F8x-83Qyov-5DoG6g-8wJDS1-4wNdZF-25WRa5-25WR9C-25VHDG-25VHFS-66Crh2-24V8Si-yJkz7-24V8S2-7xrgSh-dx2UNT-dx8tFo-dx2W7p-dx8t3j-dx8oUC-dx2UBD-dx2WkR-dFQqn-p1AZH-p1HHEea2aWX-6x4um-762L3E-aFjuk7-8wFDGB-8wFDUP.


10. Sketch of Ellsworth Kelly's *White Curve 1*,


13. Sketch of Ellsworth Kelly's *Colored Paper Image V (Blue Curves)*

14. Sketch of Ellsworth Kelly's *Colored Paper Image II, State (Green Curves)*

15. Sketch of Ellsworth Kelly's *Colored Paper Image XI (Gray Curves with Brown)*


Belinda Winkler, *Dimple and Swell #1* (detail), Prototypes for polyurethane foam furniture forms – low table / seating project, Polyurethane foam, Lycra, steel, form-ply, 1200 x 1200 x 700 mm, 2013, Photograph by Peter Whyte.


**Image Credits and Text Credits for Future Work 3 –**

*Dimple and Swell*

All images photographed by Belinda Winkler and Peter Whyte with the exception of the following:


9. Sketch of Ellsworth Kelly’s *White bands on yellow*


Belinda Winkler, Tensioned Lycra® form-finding, 2013, Photograph by Peter Whyte.


Image and Text Credits for Future Work 4 –

Stretch

All images photographed by Belinda Winkler and Peter Whyte with the exception of the following:


10. Sketch of Marcel Wanders’s Zeppelin Pendant
Belinda Winkler, *Community of Practice 1-7 Positional Diagram (7)*, 2013.


**Image Credits for Community of Practice Development – Where to next? – the forward story**


Curtis Hore, *Still Life 1*, Bronze, 2008, Photograph by Peter Whyte.


Folko Kooper, Sculpture for Aspire Estate, Corten Steel, 2012, Photograph by Folko Kooper.

Fred Fisher, *Button Seat*, MDF, plywood, Huon Pine, acrylic paint, 400(h) x 760 (dia) mm, 2006, Photograph by Peter Whyte.


Jean Arp, *Sculpture to be Lost in the Forest*, 1932, Photo: © Tate, London (2014) cast c.
Jenny Topfer, *Stone winter. Number four*, Oil, oil stick, graphite, charcoal and pastel on canvas, Two panels, 150 x 150cm, 2009, Photograph by Peter Whyte.


Kevin Perkins, *The Rape of Tasmania’s Forests*, Huon Pine, 37.3 x 35.8cm, Finished with Danish oil, wax and acrylic, 2009 - 2010, Photograph by Belinda Winkler.

Leicester Cooper, Slip-casting moulds made by Belinda Winkler under the tuition of Leicester Cooper, Photograph by Peter Whyte.

Les Blakebrough, *Bowl (Macdonald Ranges gum)*, 18.2 h 29.0 diameter cm, 2005, Photograph by Peter Whyte.

Mal Wood & Ewen Coates – Mal Wood making moulds and waxes at Coates and Wood Fine Art Foundry Northcote VIC 2011, Photo by Belinda Winkler.


Patricia Cleveland OAM, Photograph by Peter Whyte.


Peter Hodoniczky – Production manager, Weatherfoil, Tasmania, Photograph by Belinda Winkler.


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Appendices
Minimum Curvature

The circle perfectly represents Platonic idealism: static and complete, beyond time and space. Uninfluenced by the vexatious forces and contingencies that confound the mundane, the circle symbolises heaven eternal. Rotated through 360 degree the circle produces a sphere, a figure almost as closed and inscrutable as its progenitor. The perfection, however, of circle and sphere is vulnerable. Pull it, push it, distort it—break the line or the surface—and eternity is banished and a history, however fleeting, is implied.

Belinda Winkler’s sculptural forms hover at this moment of minimal and potential narrative. The tension, compression and distortion expressed in the curvature of edges and surfaces imply a history of the application of force and therefore the passage of time, but the work itself supplies nothing more than this. The viewer reads into the contrapposto curves and twisting surfaces the strain of muscle and tendon, the tautness of stretched skin or the effects of gravitational force. It may be biophilic empathy that leads us to be read these works as organism. The larger scale of Winkler’s rolled steel pieces, renders them anthropomorphic, suggesting the surfaces and actions of a human body.

With her closed and semi-closed vessel forms Winkler explores her biotic minimalism in a different way. Their full, subtly asymmetrical shape alone renders them broadly biomorphic, especially when they are clustered as groups and pairs in implicit communion. Here, the silhouettes of the forms suggest specific relationships—intimacy, tension, need, maybe nurturing. The spaces between, where the surfaces draw infinitely close sing with potential energy. The openings in the forms, which we cannot help but read as mouths, extend this biomorphism, its size alone transforming their characters. Poised between organism and vessel, large openings suggest generosity or hunger, smaller ones perhaps disregard or sufficiency. Forming these openings with a precise, planar slice through the form, Winkler references Euclidean geometry and emphasizes the illusory nature of our biophilic readings.

The smooth, perfect finish of Winkler’s work serves both to emphasise the skin-like qualities of the surfaces and to eliminate a competing narrative of fabrication.
The life seemingly inherent in the curves and shapes of her forms is far from the anaemic, indeed Platonic, perfection of cyberspace. To achieve her minimum curvature Winkler’s methods are emphatically analogue; she experiments with metal, foam, creepy fabrics such as Lycra®, water-filled balloons and other materials; compressing, stretching, running them through industrial bending and rolling machines. At this stage, roughly cut plywood shapes bolted through sheets of foam, water-filled balloons distorted with string and scaly bands of rolled steel are far from the smooth, sensuous and sometimes erotic surfaces that Winkler achieve in the finished work, yet it is these processes that, through experiment, repetition and serendipity, produce curves and surfaces with the spring and tension that gives them life.

Twentieth century Minimalist sculptors sought to eliminate the anthropomorphic and with it extraneous narrative from their work. At the edge of the minimal, Winkler’s work conducts a stripped down potential for narrative, exploiting our almost inevitable tendency to see meaning in form and life and movement in the curve.

Peter Hughes.
Senior Curator (Decorative Arts)
Tasmanian Museum and Art Gallery
Belinda Winkler

I’ve often thought that minimalism is a misnomer. Be it art, architecture, music, dance or even engineering, if we scratch the surface of any of the forms categorised under this descriptor, we discover a complex array of motivators and meanings that seem ill matched to the reductivism of the nomenclature. Belinda Winkler’s work could be described as minimal, but it could also be described as a distillation of energetic forces and a dance (or sometimes a wrestle) between truth and perfection. It could be discussed in terms of anthropomorphism, or biomorphism, and perhaps most importantly, there is considerable potential to discuss the ways that it promotes haptic communication.

While her core medium has been slip-cast porcelain for quite some time now, Winkler extends her hand to a range of other materials including bronze, steel, timber and stretch textiles such as lycra. The work is exclusively monochromatic – predominantly white, but sometimes black – which undoubtedly contributes to the categorisation of ‘minimal’. Her forms range from small porcelain vessels with seemingly flawless, curved surfaces, to large, epoxy-finished plates or sections of steel exhibiting compound curves.

If you were to ask Belinda to describe her work, her immediate response would include the words tension, torsion, stretching and bending. These words come into play when she describes the way that she makes the work and the excitement that she gets from particular forms that ring true with her aesthetic sensibility. Generally, even the simplest and smoothest of her forms has come from a process that might involve casting or mapping impressions made by her own body or from materials subjected to forces. Her best-known porcelain vessels (see images 1, 2, 3) originate from a base of plaster, cast into hanging balloons, where the act of gravity creates a very true curve. Her steel works are made by replicating the effect of sheet material subjected to torsion, through a process of machine rolling (refer image 4). She talks about wanting to replicate the simple exploration of taking a springy material, like a plastic ruler, and twisting the ends towards each other, such that there are taut curves and twists.

In his book of the same name, well known British architect John Pawson suggests that ‘the minimum could be defined as the perfection that an artefact achieves when it is no longer possible to improve it by subtraction.’ This aspect of paring back towards a perceived perfection is definitely a key part of Belinda’s process and it is particularly evident in her porcelain work. The creases left from the balloon skin will be edited from the shape in order to cast the mould. The seams left from the mould will be polished from the resulting vessel. Any Irregularities in the lip of the vessel will be ground or sanded away. A perfect result is a completely regular curve, an utterly smooth surface, with nothing left to snag the eye as it maps the final object. It is as though she is attempting to remove the evidence of the ‘hand’, which is an interesting paradox, considering her obvious enjoyment of the haptic qualities of the finished work.

Words and expressions like ‘kissing curves’, ‘bellies’, ‘bums’, ‘the feel of damp skin’ pepper Winkler’s descriptions of her work, yet it is when the conversation turns to the idea of touch, that these descriptors find their home. And to some extent, the idea of minimalism dissolves. It is at this point that I understand that even in her own mind, there are at least two distinct readings of her work. Beginning with her process, the idea of haptic communication arises when Belinda talks about the most pleasing parts of the
casting process when she carefully holds the warm, damp, cast porcelain in her hands, 'it is like holding a little creature.' She quickly passes off this pleasure as being something that helps her through all of the hard labour, but one baseline to her aesthetic is captured within her observation. When she picks up one of her vessels, turning it from hand to hand, she talks about recreating an effect of damp skin and she describes the way that filling the vessels with a warm drink is a ghost of that original, pleasurable feeling. She passes me a small, solid bronze form (see image 5) and suggests that it has been made to sit into the palm, creating a perfect resting space for the thumb within the subtle indentation in its surface.

What is interesting about the haptic properties of the work is that generally, Winkler’s pieces are presented in a gallery context where touch is not permitted. The haptic exchange then becomes an act of the imagination. We see the surface, we understand its smoothness and we have a direct connection to the dimensions, suggesting something that would fit to our palm, but we cannot complete the exchange. Irrespective, we establish a relationship with the object through this process. Further to this, Winkler establishes similar relationships between the objects and their context. Curves just touch supporting surfaces, objects either ‘hug’ each other or they almost ‘kiss’. Small vessels cluster but do not touch (refer images 3, 6, 7, 8). Winkler describes the way that she arranges her pieces to suggest relationships or conversations. Large pieces of steel balance on their ‘bellies’, with opposing curved surfaces sitting just millimetres apart. In bringing these curves so close to each other, she is enjoying the formal qualities of the rolling lines and the positive and negative spaces, but her descriptive language suggests that she is also working to establish a kind of frisson. Peter Whyte consistently reflects this aspect of the work in the photographic documentation created in collaboration with the artist. These moments are often isolated from the whole, such that scale and material are ambiguous and this sense of tension is heightened (refer images 9, 10, 11). Once again, we are encouraged to imagine sensual contact, but only with our eyes.

While it seems too strong to suggest that this work strays into the territory of erotica, there is definitely an aspect of the finished pieces that is about generating and portraying desire. Winkler works with an idealised form of beauty, be it anthropomorphom or biomorphic. She regularly talks about skin, but with its pore holes, fine hair and wrinkles, no one’s skin is this perfect. She also establishes a sense of distance with the viewers through the delicacy of the objects, the gallery context and the photographic documentation. Subtle as it may be, there is a note of titillation present.

When Winkler strays away from a scale that stimulates the haptic sense, I think the work loses some of its strength. In her recent show at Bett Gallery Hobart, she had a number of rolled steel works that sat at around knee height on the floor of the gallery. They were neither small enough to hold in the palm or large enough to feel as though one might occupy the space created by their opposing curves. Given that there was already an aspect of artifice in the mimicry of the rolled steel, the works seemed to have strayed a little too far from the artist’s core aesthetic.

Winkler talks about truth in a range of ways when discussing her practice. She searches for a true curve within all of her works and finds the outcome most satisfying when there is a direct connection still evident between the originating forces used to establish
the form and the finished object. But as we discuss the technical detail of the process of fabrication, I realise that none of Winkler’s current work could really be considered true in terms of the directness to which she aspires. There are many steps of editing and mediation that take the work from a raw state, such as wet plaster in a balloon, to the polished, smooth, hard, finished objects. The idea of truth is definitely muddied in the process, but as in Pawson’s description of the minimum, the works that are most successful are those that when pared back to something essential, still reveal a core of the generating energy within the final form.

Given that the idea of applying force and experiencing the result is so satisfying for Winkler, I do query why the works need to be taken so far away from their origin. Could her more ephemeral plaster casts, which are generally just generating forms, be the work? In the context of Winkler’s preoccupations with directness, are they actually more perfect than the final outcome? Where does any one particular object stop being part of the process and start being ‘finished’?

At this point it’s important to touch on the idea of the commercial imperative, as it is definitely a contributing factor to Winkler’s current idea of a finishing point for works. Over the last few years, through various exhibitions, prizes and gallery representation, she has built an audience of collectors. As such, she is forced to consider her output in terms of relative permanence and commercial acceptability. A porcelain skin cannot be unfired, or thin enough to break in the hand. A surface with applied patina cannot leave marks on its resting place. Steel plate cannot have clamps to hold true torsion in place. Or can it?

While the artist uses the word tension in a way that is predominantly intended as an expression of a physical force, it is a property that could be ascribed to every aspect of her practice. Currently she builds forms by placing materials in tension, establishes tension between objects through spatial arrangement and generates tension between the viewer and the artworks. And I would argue that the sense of haptic connection or tension that she creates between the viewer and the object is the most fertile ground with the deepest connection to her process of making and her own descriptive language.

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Image 1
Title: *Their Lips Met*
Year: 2009
Detail: Porcelain, glazed interiors, hand-polished exteriors

Image 2
Title: *Their Lips Met*
Year: 2009
Detail: Porcelain, glazed interiors, hand-polished exteriors

Image 3
Title: *Energy and Equilibrium #2*
Year: 2009
Detail: Porcelain, glazed interiors, hand-polished exteriors
Image 4
Title: Contrapposto #1
Year: 2011
Detail: Steel, polyurethane

Image 5
Title: Encounter #6 (detail)
Year: 2012
Detail: solid bronze

Image 6
Title: Gravity #1
Year: 2011
Detail: Porcelain, glazed interiors, hand-polished exteriors, concrete
Title: Gravity #6 (detail)  
Year: 2011  
Detail: Porcelain, glazed interiors, hand-polished exteriors

Title: Gravitate #2 (detail)  
Year: 2011  
Detail: Porcelain, Glazed Interiors, hand polished exteriors

Title: Gravitate #2  
Year: 2011  
Detail: Porcelain, Glazed Interiors, hand polished exteriors
The public behaviours used to support my design practice during the PhD:

**Solo Exhibitions**
'Balance Point', Bett Gallery, North Hobart, January – February 2012  
'Energy and Equilibrium', Handmark Gallery, Hobart, February 2011  
'Imagining Hellas', Handmark Gallery, Hobart, May – June 2008

**Selected Group Exhibitions**
'City of Hobart Art Prize', Tasmanian Museum and Art Gallery, Hobart, July – Sept. 2013  
'The Research Life of Objects', University of Tasmania, March 2012  
'Woollahra Small Sculpture Prize', Sydney, October – November 2011  
'Vitrify Alcorso Ceramic Award', Colville Gallery, Hobart, April 2011  
'Furnished', Ten Days on the Island (Curator - Joe Pascoe), Mawson Place Waterside Pavilion, Hobart, March, 2011  
'Trajectories' (post-graduate students of the Tasmanian School of Art, University of Tasmania), Long Gallery, Hobart, August 2010  
'City of Hobart Art Prize', Tasmanian Museum and Art Gallery, Hobart, July – August 2010  
'Furniture and Sculpture by Sally Brown, Stuart Williams, Belinda Winkler and Sara Wright', Handmark Gallery, Hobart, January 2010  
'DOT: Port of Departure', Designed Objects Tasmania, Mawson Place Pavilion, Hobart, Nov 2009  
'Design Island Furniture', Handmark Gallery, Hobart, May 2009  
'Tidal Zone', touring Australia, July 2007 – October 2008

**Competitions**
Highly Commended Finalist in the City of Hobart Art Prize, National Contemporary Art Survey, Tasmanian Museum and Art Gallery, Hobart, 2013  
Finalist in ‘Bay of Fires Art Prize’, Tasmania, 2012  
Finalist in ‘Woollahra Small Sculpture Prize’, Sydney, 2011  
Finalist in ‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, 2011
Finalist in the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2010
Tasmanian Design Awards 2009, Design Centre, Launceston, Tasmania
Selected participant in ‘Behold & Note’, a 3-day design workshop led by Finnish designer Harri Koskinen, Tasmania, May 2006

**Grants and Awards**
Highly Commended Finalist in the City of Hobart Art Prize, National Contemporary Art Survey, Tasmanian Museum and Art Gallery, Hobart, 2013
Arts Tasmania, Assistance to Individuals Grant for Visual Arts, Crafts and Design, November 2012
MONA Prize within the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2010
Tasmanian Design Awards, Design Centre, Launceston, Tasmania, 2009
Australian Postgraduate Award, University of Tasmania, 2007

**Private Commissions**
The Alcorso Foundation, Lesley Alcorso Editions, 2009

**Public Art Commissions – Arts Tasmania, Art for Public Buildings Scheme**

Exterior Artworks for the two main entrances to the Clarence Integrated Care Centre + GP Super Clinic
Client Department of Health and Human Services
Location Clarence Integrated Care Centre + GP Super Clinic, Rosny Park
Installed 2012
Artwork Budget $72,000

Exterior Artworks for the entrance to Lauderdale Primary School
Client Department of Education - Tasmania
Location Lauderdale Primary School
Installed 2011
Artwork Budget $35,000

Exterior Artworks for the entrance to Oral Health Services
Client Department of Health
Location Oral Health Training Facility, New Town
Installed 2007
Artwork Budget $25,000
Belinda Winkler  
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Current PhD Candidate by Invitation at RMIT University’s School of Architecture and Design under the supervision of Professor Richard Blythe  
Bachelor of Fine Arts (Honours – First Class), University of Tasmania, 2006  
Bachelor of Fine Arts, University of Tasmania, 2004  
Bachelor of Education, University of Tasmania, 1985

Forthcoming Solo Exhibitions  
Anita Traverso Gallery, Melbourne, December 2013  
Bett Gallery, North Hobart, October 2014

Solo Exhibitions  

Collections  
Tasmanian Museum and Art Gallery, Hobart, Tasmania  
Tasmanian Government, Department of Economic Development, Tourism and the Arts (Arts Tasmania), Hobart, Tasmania  
Private Collections – Hobart, Melbourne, Sydney, Adelaide

Private Commissions  
The Alcorso Foundation, Lesley Alcorso Editions, 2009  
Mammography Unit, Rush, Taylor and Partners, 2002
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Tasmanian Design Awards, Design Centre, Launceston, Tasmania, 2009
Australian Postgraduate Award, University of Tasmania, 2007
Graduate Research Scholarship, University of Tasmania, 2007
Object Award for Studio Based Practice 2005
Monument Magazine Australia’s Top 40 Design Graduates 2005
Dean’s Role of Excellence for the Faculty of Arts for 2003
Dean’s Role of Excellence for the Faculty of Arts for 2001

**Competitions**
Highly Commended Finalist in the City of Hobart Art Prize, National Contemporary Art Survey, Tasmanian Museum and Art Gallery, Hobart, 2013
Finalist in ‘Bay of Fires Art Prize’, Tasmania, 2012
Finalist in ‘Woollahra Small Sculpture Prize’, Sydney, 2011
Finalist in ‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, 2011
Finalist in the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2010
Tasmanian Design Awards 2009, Design Centre, Launceston, Tasmania
Selected participant in ‘Behold & Note’, a 3-day design workshop led by Finnish designer Harri Koskinen, Tasmania, May, 2006
Finalist in The Skin Of Corian International Design Competition, 2006, Milan
Finalist in Object: New Design 2005 National Graduate Exhibition, Sydney
Finalist in the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2004

**Selected Group Exhibitions**
‘City of Hobart Art Prize’, Tasmanian Museum and Art Gallery, Hobart, July – September 2013
Images of Tasmania 15, Long Gallery, Hobart, December 2012
‘MONA ista 2012’, (MONA Invigilators Showcase Their Artwork) Stable Gallery, Hobart, September 2012
‘The Research Life of Objects’, University of Tasmania, March 2012
‘Woollahra Small Sculpture Prize’, Sydney, October – November 2011
‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, April 2011
‘Furnished’, Ten Days on the Island (Curator: Joe Pascoe), Mawson Place Waterside Pavilion, Hobart, March 2011
‘Trajectories’ (post-graduate students of the Tasmanian School of Art, University of Tasmania), Long Gallery, Hobart, August 2010
‘City of Hobart Art Prize’, Tasmanian Museum and Art Gallery, Hobart, July – August 2010
‘Furniture and Sculpture by Sally Brown, Stuart Williams, Belinda Winkler and Sara Wright’, Handmark Gallery, Hobart, January 2010
‘DOT: Port of Departure’, Designed Objects Tasmania, Mawson’s Place Pavilion, Hobart, November 2009
‘Intimate Connections’, (Curator: Dr Astrid Wootton) Design Centre, Launceston, Feb– April 2006
‘Collectors Cabinet’, Object Gallery, Surry Hills, NSW, March – April 2006
‘Belinda Winkler and Adrian Read’, Metalab Gallery, Sydney, NSW, November – December 2005
‘Fellow Anthropoid’, (Curator: Philip Watkins) CAST, Hobart, September – October 2005
‘Luminous’, Handmark Gallery, Hobart, February – March 2005
‘City of Hobart Art Prize’, Tasmanian Museum and Art Gallery, Hobart, July – August 2004
‘Harvest 2: The Newest Talents in Glass & Ceramics’, Quadrivium,
Sydney, April 2004
‘Contemporary Furniture Design’, Handmark Gallery, Hobart, April – May 2004
‘Glow’, Handmark Gallery, Hobart, July – August 2001

**Professional Development (Art and Design)**

‘Reflections on Design Practice Research’: Panel discussion with Professor Jules Moloney, Professor Richard Blythe, Professor Martyn Hook, Professor SueAnne Ware, Professor Marcelo Stamm and Dr Gretchen Wilkins, RMIT University, Melbourne, 8 June 2013

Lecture by Professor Jules Moloney, ‘STATECHANGE’ RMIT University, Melbourne, 7 June 2013

RMIT Architecture and Design, Practice Research Symposium, ‘Research in the Medium Itself’, RMIT University, Melbourne, 5 – 9 June 2013

‘Reflections on Design Practice Research’: Panel discussion with Professor Richard Blythe, Professor Jeremy Diggle, Professor Martyn Hook, Professor Toomas Tammis, Professor SueAnne Ware, RMIT University, Melbourne, 19 October 2012

Lecture by Professor Toomas Tammis, RMIT University, Melbourne, 21 October 2012

‘Reflections on Design Practice Research’: Panel discussion with Professor Shelley Fox, Professor Richard Blythe, Professor SueAnne Ware, Professor Martyn Hook, Professor Sand Helsel and A/Professor Robyn Healy, RMIT University, Melbourne, 1 June 2012
Lecture by Professor Shelley Fox, ‘After fashion?’ RMIT University, Melbourne, 1 June 2012


Specialist teacher in model and mould making, slip-casting with porcelain, The Friends’ School Year 11–12, Hobart, 2012

Artist Talk, The Friends’ School Year 11–12, Hobart, March 2012

Artist Talk, The Friends’ Junior School, Hobart, October 2011

‘Reflections on Design Practice Research’: Panel discussion with Leon van Schaik, Nat Chard, Mette Thomsen, Sand Helsel, Martyn Hook and SueAnne Ware, RMIT University, Melbourne, 22 October 2011

Lecture by Professor Mette Thomsen, ‘Material and representation: towards a sensitive architecture’, RMIT University, Melbourne, 21 October 2011

Lecture by Professor Nat Chard, ‘Uncertain Precision’, RMIT University, Melbourne, 21 October 2011


Invited Judge with Bill Bleathman and Jan Peacock for the 127th Art Society of Tasmania Annual Selected Exhibition, Lady Franklin Gallery, Hobart, August 2011
‘Reflections on Design Practice Research’: Panel discussion with Leon van Schaik, Richard Blythe, Marcelo Stamm, Johan Verbeke and Li Shiqiao, RMIT University, Melbourne, 4 June 2011

Lecture by Dr Marcelo Stamm, ‘Constellating Creativity’, RMIT University, Melbourne, 3 June 2011

RMIT Architecture and Design, Graduate Research Conference, RMIT University, Melbourne, 1 – 5 June 2011

Professor Kees Dorst, Individual Examination of Design Prototypes, Designed Objects Tasmania, April 30 2011

Emerging Architects Tasmania (EAT) Launch with Peter Poulet (State Architect) & Kees Dorst (Professor of Design, UTS) and the architecture offices of CIRCA + DOCK 4 + JAWS, Australian Institute of Architects, RAIA Tas Chapter Hobart, 29 May 2011

Professor Kees Dorst, ‘Bringing a Design Prototype into Production’, Professional Development Workshop, Designed Objects Tasmania, 29 May 2011

Invited Judge with Peter Battaglene for the Tasmanian Ceramics Association 2010 Annual Exhibition, Old School House Gallery, Rosny, 2010

Alexander Lotersztain, Derlot Master Class, Professional Development Workshop, Designed Objects Tasmania, 26 Sept 2010

Artist Talk for the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2010

Paper Presented at the Australian Institute of Architects TAS for Architecture Week, 28 October 2009 (Title of paper: ‘The Complexity of Simplicity’)
Pecha Kucha Night with International and National design speakers for Design Island, May, 2009


Architecture Week, Australian Institute of Architects TAS, Hobart, October 2008

Artists talk for ‘Imagining Hellas’ Exhibition at Handmark Gallery, Hobart, 22 May 2008

Architecture Week, Australian Institute of Architects TAS, Hobart, October 2007

’hatched 07 arts research symposium’, arts research conference, 20 April, held in conjunction with the Edith Cowan University, the WA Academy of Performing Arts and ECU's School of Communications and Contemporary Arts, Perth WA, 2007

’hatched 07 Industry Symposium’
21 April, a forum exploring the interrelationship between business and the visual arts, presented in partnership with the Australia Business Arts Foundation, Perth WA, 2007

Smart Works Symposium’, a 3-day Design Symposium at the Powerhouse Museum, Sydney, 30 March – 1 April 2007

‘Behold & Note’, a selected 3-day design workshop led by internationally renowned Finnish designer Harri Koskinen, Tasmania, May, 2006

‘Beneath the Surface Forum’, exploring the impact for designers and crafts people working in relative isolation and in regional locations, Hobart, Friday May 5, 2006
'Hands on introduction to Cinema 4D', 2 day workshop, Melbourne, 2006

2005 Sasha Wardell, Slipcasting Workshop, Ceramics Studio, Jam Factory, Adelaide SA

Artist Talk for 'Contemporary Furniture Design' exhibition, Handmark Gallery, Hobart, April 2004

'Artists Working Live in the Gallery' program at the Tasmanian Museum and Art Gallery, Hobart, March 2004

Bibliography

*Design Island* Publication by the Design Centre Tasmania to support the 2012 Design Island Program

*The Mercury*, 'Style', May 4, 2012


*Vogue Living*, September/October, 2011

*Craft Arts International*, Issue 82, 2011

*Ceramics: Art and Perception*, Issue 84, 2011

*The Journal of Australian Ceramics*, 49/3, November, 2010

*DQ Design Quarterly*, Issue 39, 2010

*The Mercury*, Saturday Magazine, August 7, 2010

*Craft Arts International*, Issue 79, 2010

*Azure Magazine*, Canada, May 2010


*The Mercury*, December 2009

*The Mercury*, October 2009

*The Mercury*, September 24 2009

*Hobart Design Index* (2007) ed. Sarah King, Hobart: books @manic

*Urbis*, Issue 33, 2006

*Belle*, June/July 2006

*Monument*, New Generation Feature, Issue 70, December 2005

*Object Magazine*, Issue 46, 2005

*SDQ (Sydney Design Quarterly)*, Issue 18, Winter, 2005
The Australian Financial Review, June 10–12, 2005
Art Monthly Australia, April 2005
Vogue Living, May/June, 2005
The Sydney Morning Herald, 24 March 2005
Ceramics: Art and Perception, Issue 59, 2005
The Journal of Australian Ceramics, Volume 43#3 2004
The Journal of Australian Ceramics, Volume 43#2 2004
Pottery in Australia, Volume 41, No. 3, Spring 2002
Pottery in Australia, Volume 40, No. 2, June 2001

Membership of, and involvement with, Professional Organisations

Member of the Steering Committee for the Australian Ceramics Triennial
RMIT University – Current PhD Candidate by Invitation at RMIT
University’s School of Architecture and Design
MONA (Museum of Old and New Art) – Gallery Invigilator and winner of
the MONA Prize within the City of Hobart Art Prize, Tasmanian Museum
and Art Gallery, Hobart, 2010
Bett Gallery Hobart – Represented Artist
TATA (Tasmanian Art Teachers Association)
FDA (Furniture Designers Association)
DOT (Designed Objects Tasmania)
NAVA (National Association for the Visual Arts)
TCA (Tasmanian Ceramics Association)
CAST (Contemporary Art Services Tasmania)
Catalogue of Works

The Research:  Works from 2007 – 2013
The Backstory

Works from 2002 – 2006
2002

Trouée
Glazed ceramic
Approximate dimensions 400 x 700 x 800 mm, 2002

Stretch and Swell
Glazed ceramic and decals
Approximate dimensions 400 x 600 x 400 mm
Les Plombiers
Glazed ceramic and decals
Approximate dimensions 400 x 600 x 400 mm, 2002
Exhibited in 'Winkler and Millen', Handmark Gallery, Hobart, June – July 2002

Lush and Blush
Ceramic and automotive 2 pak paint
Approximate dimensions 400 x 300 x 300 mm, 2002
Exhibited in 'Winkler and Millen', Handmark Gallery, Hobart, June – July 2002
La Nombril
Glazed ceramic
Approximate dimensions 350 x 350 x 350 mm, 2002
Exhibited in 'Winkler and Millen', Handmark Gallery, Hobart, June – July 2002

In the Half Light
Glazed ceramic
Approximate dimensions 1350 x 1850, 2002
2003

*Illumination Enhancers*
Breast implants, acrylic LED lights, stainless steel wire
100 x 100 X 100mm, 2003

*Droplet Stool*
Fibreglass, zircon sand, 2 pak polyurethane
600 x 450 x 350mm, 2003
Shortlisted for and exhibited in the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, July – August 2004
2004

*Float*
Glazed ceramic, Corian
1800 x 450mm, 2004
Finalist in The Skin Of Corian International Design Competition, 2006, Milan
Winner of the Object Award for Studio Based Practice 2005
Gather
Blown acrylic, plywood, 2 pak paint
3000 x 2400 x 500mm, 2004
Right Here #1, #2, #3
Plaster, MDF, 2 pak paint
260 900 x 360mm 2004
Exhibited in 'Luminous', Handmark Gallery, Hobart, February – March 2005
'Intimate Connections', The Design Centre, Launceston, February – April 2006
2005

*Suspended Echo*
Acrylic Mirror, MDF, 2 pak polyurethane
Approximate dimensions 400 x 4400 x 3000mm, 2005
Exhibited in ‘Intimate Connections’, The Design Centre, Launceston, February – April 2006

*Achromatic Wrap*
Lycra, MDF, foam
9000 x 3000 x 1500mm, 2005
2006

_Swell_
Lycra, MDF, foam
5400 x 4500 x 2800mm, 2006
Exhibited at the Plimsoll Gallery, Hobart, November 2006
Closer
MDF, epoxy resin, 2 pak polyurethane
Approximate dimensions 400 x 4500 x 3500m, 2006
The Research

Works from 2007 – 2013
2007

Curva
Fiberglass, 2 pak polyurethane
1000 x 530 x 200mm, 2007
Exhibited in 'Imagining Hellas', Belinda Winkler & Lindsay Broughton, Handmark Gallery, Hobart, May – June 2008

Curva Installation
Fiberglass, 2 pak polyurethane, stainless steel, LED lights
1000 x 530 x 200mm, 2007
Commissioned by Arts Tasmania, Art for Public Buildings Scheme, Oral Health Services Tasmania
Curva Seating
Marine ply, polyurethane foam, fiberglass, stainless steel, 2 pak polyurethane
150 x 2300 x 650mm, 2007
Commissioned by Arts Tasmania, Art for Public Buildings Scheme,
Oral Health Services Tasmania
2008

Converge
Marine ply, polyurethane foam, fiberglass, 2 pak polyurethane
2000 x 450 x 500mm, 2008
Exhibited in 'Imagining Hellas', Belinda Winkler and Lindsay Broughton, Handmark Gallery, Hobart, May - June 2008
Acquired by Arts Tasmania

Diverge
Marine ply, polyurethane foam, fiberglass, 2 pak polyurethane
2000 x 450 x 500mm, 2008
Exhibited in 'Imagining Hellas', Belinda Winkler and Lindsay Broughton, Handmark Gallery, Hobart, May – June 2008
Acquired by Arts Tasmania
Swerve
Marine ply, polyurethane foam, fiberglass, 2 pak polyurethane
2000 x 450 x 500mm, 2008

Perhaps
2 pak polyurethane, ceramic
Approximate dimensions 200 x 300 x 400mm, 2008
Exhibited in ‘Imagining Hellas’, Belinda Winkler & Lindsay Broughton, Handmark Gallery, Hobart, May-June 2008
Encounter #1
2 pak polyurethane, ceramic
Approximate dimensions 500 x 500 x 500mm, 2008
Exhibited in 'Imagining Hellas', Belinda Winkler & Lindsay Broughton, Handmark Gallery, Hobart, May – June 2008

There
2 pak polyurethane, ceramic
Approximate dimensions 200 x 300 x 400mm, 2008
Exhibited in 'Imagining Hellas', Belinda Winkler & Lindsay Broughton, Handmark Gallery, Hobart, May – June 2008
*Alight*
2 pak polyurethane, ceramic
Approximate dimensions 150 x 150mm, 2008
2009

3.2 Bench Seat
Marine ply, polyurethane foam, fiberglass, 2 pak polyurethane
3200mm x 355mm x 500mm, 2009
Exhibited in 'Design Island Furniture', Handmark Gallery, Hobart, May 2009

Drift
MDF, 2 pak polyurethane, ceramic, stainless steel
Seat dimensions 1900mm x 450mm x 460mm, 2009
Exhibited in 'Design Island Furniture', Handmark Gallery, Hobart, May 2009
Encounter #2
MDF, 2 pak polyurethane, ceramic, stainless steel
Seat dimensions 1900mm x 450mm x 460mm, 2009

Their Lips Met
Porcelain and Glaze, 70x 70 x 70mm, 2009
Commissioned by The Alcorso Foundation, Lesley Alcorso Editions
Sip
Porcelain and Glaze, 90x 90 x 90mm, 2009
Shortlisted for the Tasmanian Design Awards 2009, Design Centre, Launceston, Tasmania
2010

_Energy and Equilibrium #1 (Composition of Curves)_
Porcelain, dimensions variable, 2010
Shortlisted for the City of Hobart Art Prize, Tasmanian Museum and Art Gallery, Hobart, 2010
Winner of the MONA Award 2010

[Image]

_RED LOOPS_
Steel, Concrete, Polyurethane
2010 – 2011
Commissioned by Arts Tasmania, Art for Public Buildings Scheme, Lauderdale Primary School, Tasmania

[Images]
2011

Energy and Equilibrium #2
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Acquired by the Tasmanian Museum and Art Gallery

Energy and Equilibrium #4
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Energy and Equilibrium #5
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011

Energy and Equilibrium #6
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Energy and Equilibrium #7
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Exhibited in 'Energy and Equilibrium - new works in porcelain by Belinda Winkler', Handmark Gallery, Hobart, February 2011

Energy and Equilibrium #12
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Exhibited in 'Energy and Equilibrium - new works in porcelain by Belinda Winkler', Handmark Gallery, Hobart, February 2011
*Energy and Equilibrium #13*
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011

*Energy and Equilibrium #15*
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Energy and Equilibrium #16  
Porcelain, glazed interiors, hand-polished exteriors  
Dimensions variable, 2011  
Exhibited in ‘Energy and Equilibrium - new works in porcelain by Belinda Winkler’,  
Handmark Gallery, Hobart, February 2011

Energy and Equilibrium #18  
Porcelain, glazed interiors, hand-polished exteriors  
Dimensions variable, 2011  
Exhibited in ‘Energy and Equilibrium - new works in porcelain by Belinda Winkler’,  
Handmark Gallery, Hobart, February 2011
Energy and Equilibrium #19
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011

Energy and Equilibrium #20
Porcelain, glazed interiors, hand-polished exteriors
Dimensions variable, 2011
Gravity #1
Porcelain, glazed interiors, hand-polished exteriors, concrete
2100 x 600 x 270 mm, 2011
Exhibited in and shortlisted for the ‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, April 2011

Gravity #2
Porcelain, glazed interiors, hand-polished exteriors
200 x 100 x 100 mm, 2011
Exhibited in and shortlisted for the ‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, April 2011
Gravity #3
Bronze
200 x 100 x 100 mm, 2011
Exhibited in and shortlisted for the ‘Vitrify Alcorso Ceramic Award’, Colville Gallery, Hobart, April 2011

Gravity #4
Bronze
200 x 100 x 100 mm, 2011
Exhibited in and shortlisted for the ‘Woollahra Small Sculpture Prize’, Sydney, 2011
Contraposto #1
Steel, Polyurethane
Composition of 3
Approximate dimensions 5000W x 600H x 3000D mm, 2011
Exhibited in 'Balance Point', Bett Gallery, Hobart, January – February 2012

Contraposto #2
Steel, Polyurethane
Approximate dimensions 2500W x 600H x 2000D mm, 2011
Exhibited in 'Balance Point', Bett Gallery, Hobart, January – February 2012
*Gravitate #1*
Porcelain, Glazed Interiors, hand polished exteriors
Approximate dimensions 240W x 120H x 120D mm, 2011

![Image of Gravitate #1](image1.jpg)

*Gravitate #2*
Porcelain, Glazed Interiors, hand polished exteriors
Approximate dimensions 850 x 300 x 300 mm, 2011

![Image of Gravitate #2](image2.jpg)
Encounter #3
Porcelain, glazed interiors, hand polished exteriors
Approximate dimensions 110 x 350 x 200 mm, 2011
Exhibited in 'Balance Point', Bett Gallery, Hobart, January – February 2012

Gravity #6
Porcelain, glazed interiors, hand-polished exteriors
Approximate dimensions 400 x 180 x 300 mm, 2011
Exhibited in 'Balance Point', Bett Gallery, Hobart, January – February 2012
*Balance Point*

Bronze

Approximate dimensions 130W x 130H x 130D mm, 2011


*Gravity #7*

Bronze

Approximate dimensions 240W x 120H x 120D mm, 2011

Exhibited in ‘Balance Point’, Bett Gallery, Hobart, January – February 2012 and

‘The Research Life of Objects’, University of Tasmania, March, 2012
Encounter #4
Bronze
Approximate dimensions 350W x 110H x 200D mm, 2011

Counterbalance
Bronze
Composition of 2 (one solid cast, one hollow lost wax cast)
Approximate dimensions 240W x 120H x 120D mm, 2011
Gravity #5
Solid Bronze
Composition of 7
Approximate dimensions 450W x 210H x 350D mm, 2011

Align
Bronze
Composition of 5
Approximate dimensions 650W x 120H x 120D mm, 2011
Alight #2
Bronze
Dimensions 120W x 120H x 120D mm, 2011
1/3

Encounter #6
Bronze
Composition of 2
Approximate dimensions 160W x 120H x 110D mm, 2011
1/3
Encounter #7
Bronze
Composition of 3
Approximate dimensions 180W x 230H x 160D mm, 2011
1/3
2012

_Tumble #1 and #2_
Aluminium, Polyurethane
Approximate dimensions 20,000W x 3000H x 3000D mm, 2011 – 2012
Commissioned by Arts Tasmania, The Tasmanian Government Art Site Scheme,
Clarence Integrated Care Centre + GP Super Clinic, Rosny, Tasmania
2013

*Brink #1*
Bronze and Steel
Approximate dimensions 300 H x 170 D x 170 L mm, 2013

*Brink #2*
Bronze and Steel
Approximate dimensions 300 H x 170 D x 600 L mm, 2013
Highly Commended Finalist in the City of Hobart Art Prize, National Contemporary Art Survey, Tasmanian Museum and Art Gallery, Hobart, 2013
Dimple and Swell #1
Prototypes for polyurethane foam furniture forms – low table / seating project
Polyurethane foam, Lycra, steel, form-ply
1200 x 1200 x 700 mm, 2013
Submission for ARUP/ Object Gallery design project