TACTILE IMAGINATION
DESIGN RESEARCH PROCESSES

LIST OF WORKS

All works courtesy the artists
All dimensions height by width

Rina Bernabei + Kelly Freeman
Seams 2007
installation of six powder coated, aluminium sheet lights
and nine patterns of card and aluminium
dimensions variable

Tom Loveday
Infrathin: Advice for Aliens 2007
acrylic on canvas, book
52 works at 25 x 25 cm each, book A5

Andrew Macklin
Rocka 2007
gator board, wool, paint
30cm diameter

Stellation 2006
barbeque sticks
50 cm diameter

Orange Orb 2007
gartor board, paper, holographic paper
30 cm diameter

I'm just a whisper away 2007
cardboard, glitter snow, pom poms
42 x 28 cm diameter

Mellow Yellow 2007
gator board, paint, wool
30 cm diameter

Ainslie Murray
Char Dham Walk (Garhwal) 2007
acrylic, monofilament line on canvas
170 x 170 cm

Fushimi Inari Walk (Kyoto) 2007
acrylic, monofilament line on canvas
170 x 170 cm

Bill MacMahon + Matthew Johnson
Apelles' Line 4 2007
installation of LED light, glass, colour laminate
dimensions variable

Ann Quinlan + Oya Demirbilek
in association with Michael Yip and Rido Pin
reflec[emo]tions. Animating Research: flesh/contour/line
2006-2007 digital video installation

The thematic group exhibition *Tactile Imagination* at Sydney's prestigious Ivan Dougherty Gallery at the College of Fine Arts represents a path-breaking showcase of creative practice by members of the Design Research cluster in The University of New South Wales' Faculty of the Built Environment (FBE). Of all the research activities conducted by staff and students within the Faculty, design research arguably produces the most distinctive, diverse, interdisciplinary, and intellectually thought provoking expressions of individual and collaborative creative activity. This curated exhibition emerges from the cluster's focus on practice-led research and captures a diversity of artworks ranging across sculpture, video, light installation, industrial products and textile art. The forms are variously ingenious, inspired, and inscrutable, ranging from the playful to the ethereal, but all are theorised through interplays of the visual and the textual. The concerns are mostly conceptual and propositional rather than explicitly functional. At first glance, while distant from the academic concerns of built environment research, they are in fact subtly constructive gestures deeply revealing of the creativity of practice. As Katy Macleod and Lin Holdridge document in *Thinking Through Art* (2006), artworks framed as academic research demand their own rigorous protocols, although regardless of this particular context, art 'is always in and of this world' and its concerns have 'a far wider remit'. The importance of this exhibition is thus twofold. It not only captures and contributes to a vibrant design research culture within the FBE, but also initiates dialogues of critiques and creativity within the wider community.

Robert Freestone
Acting Associate Dean/Research
Faculty of the Built Environment

DESIGN RESEARCH GROUP 07

MEMBERS

Ainslie Murray
Andre Grant
Andrew Macklin
Andrew Fowkes
Ann Quinlan
Ben Roche
Bill MacMahon
Bruce Watson
Catherine Evans
Catherina Nawangpalupi
Chris Walsh
Geeta Arjun
Helen Kendall
Jim Plume
Joanne Quinn
Jonathan Talbot
Katrina Simon
Kirsty Mate
Lance Green
Linda Corkery
Lisa Zamberlan
Mariano Ramirez
Michael Brand
Mohammad Razzaghi
Oya Demirbilek
Rina Bernabei
Russell Rodrigo
Sid Newton
Stephen Peter
Steve Ward
Sue Serle
Tom Loveday

ASSOCIATES

Bruce Judd
John Mitchell
Kelly Freeman
Madeline Lester
Mary Montague
Matthew Johnson
Paul Alan Johnson
PTW Architects
Ruth McDermott

The DESIGN RESEARCH GROUP (DRG) aims to advance design scholarship, research and practice in the disciplines of the Built Environment.

Our membership is drawn from Architecture, Landscape Architecture, Interior Architecture, Industrial Design and Construction Management.

Individually and collectively, the DRG'S members aspire to:
» develop the intellectual framework of design
» articulate design's distinctive investigative and creative processes
» enhance design's visual, three-dimensional and written modes of representation
» stimulate debate about design and its manifestations in knowledge, practice and culture
» anticipate opportunities for realising design ideas and prototypes in industry, community and professional contexts.

A reflective, co-operative, strategic stance guides the activities of the DRG.

We encourage practice-led, creative and experimental design activities in order to generate and present new understandings, speculations and connections in and across our built environment design disciplines.

We recognise and build upon knowledge and processes generated through inquiry-based design-studio education, and we engage in action-based design research projects, informed by institutional, industry and community concerns.

The DRG currently focuses on the following interdisciplinary research areas:
» design as social, educative and ecological knowledge
» design as a speculative, creative and artistic practice
» community participation in the process and outcomes of design
» science and computer-based perspectives that inform design processes and outcomes
» product design processes including sustainability, marketing, production and usability.

The leadership of the DRG reflects its interdisciplinary commitment. The joint directors of the group are Ann Quinlan (Architecture), Tom Loveday (Interior Architecture), Lance Green (Industrial Design).

██████ The Design Research Group of the Faculty of the Built Environment, The University of New South Wales (UNSW) exists to support academic staff members involved in several kinds of design research. One of these is design as research. This exhibition emerged as part of the support for design as research at the Faculty of the Built Environment at UNSW. The exhibition demonstrates creative processes for design with exhibited artwork and presents a discussion of those processes. Taken together, these two features of the exhibition constitute a research process aiming at 'new knowledge' for design.

The Faculty of the Built Environment has a number of staff members who are active in both art and design practices. Creative practices are formed in a layer beneath or beyond the institutional disciplines of various practices within the general academic categories of design and art. In this 'hypo-strata' of creative practices, the boundaries are completely permeable and are dependent upon what at first appear to be abstract notions of alienation, representation and various other orientations to the world. For those in creative practices, these are not abstract or theoretical concepts but are direct and intimate practical positions taken in relation to the material with which practitioners work. The realm of creative practices is a tactile one, in which the imagination is one of the body and the possibilities of action with the body. Vision becomes a tactile experience in which the light that strikes the eye creates a bruise-like after-image and in which hands 'see' the surfaces and objects they touch. A strange world indeed and one that requires a strange sense to navigate, but also a world that generates a high quality design education and the ideas that contribute to the quality of design generally. *Tactile Imagination* offers a glimpse into this strange world and the thoughts of those that practice therein.

Art- and design-active staff members are involved in the Design Research Group in order to establish and expand their research horizon within creative practices by gaining support for theory practice as *research*. Exhibits range from conventional contemporary art practice to creative processes for commercial design practice. In each exhibit, a creative research process relevant to design is demonstrated in an art installation. For example, painting practice generates ideas for interior architecture, modelling practice generates commercial design, installation practice develops spatial concepts or conventional academic research generates installation approaches.

Why is such an exhibition research? Indeed, why does such a question need to be asked?

The administrative argument for creative practices as research rests largely upon assumptions about the contribution that creative practices make to a 'body of knowledge' vested in the university system. This is a well-rehearsed argument with a number of notable supporters in Australia. In general, the arguments rest on the idea that artists and designers contribute to the 'culture' in which they work. This contribution is argued to be research because it fulfils the administrative framework for 'research' in the sense that it is 'original', has 'impact' or has a leading effect in its field. Creative practices are then subject to judgment under the same sense of rigour and other forms of academic value that 'normal' research endures.

But is this really the case? What is the contribution that creative practices make to a 'body of knowledge' and does this so called body actually benefit from that contribution?

Creative practice represents something more significant than a variant of administrative contribution to new knowledge, something easily overlooked in the obsessive drive for administrative formulation of research. All creative practices constitute, at the moment that they are made, a *self-critique*. Self-critique is in a number of forms, mostly notable a critique of the creation of knowledge itself. The problem with this idea is that critique is built into creative work as an *effect* rather than as an argument and so, unless an argument appears and discussion ensues, the work remains a silent aesthetic effect, standing for itself as it were demanding an unquestioned presence. One could grasp the same effect in science, if a particle accelerator were presented to a conference, without a theoretical explanation or argument, as an *effect*. Theory opens a discussion about the 'meaning'

of creative practices, as a *critique* and thereby begins to reveal the contribution that creative practices have made, are making and will make. This presents us with an engaged and collective version of the production of new knowledge rather than the 'objective' rational approach associated with research by the individual 'genius,' as is seen especially in the more 'scientific' or 'academic' disciplines. Instead of the belief in a single objective 'rational' universal model of the world present before a 'disinterested' or subjective mind,[1] artistic of 'creative' practices present new ideas of new worlds and offer those as an effect within practices – a painting presents painted ideas, an sculpture presents sculpted ideas and so it is with other media, each of which must be discussed, argued and collectively 'communicated' in order to present new knowledge.

Of course, this is a challenge to the very idea of 'university' (one verifiable truth) as well as a challenge to many assumptions about creative practice. The challenge for universities exhibited by creative practices is far more than an administrative one. For artists especially, there is also the challenge to the dearly held twentieth century artistic notion of expressivity, in which the work must stand *for itself* before a silent audience so as to make direct contact with an inner nature or human spirit.[2] The challenge is also to the philosophical assumptions that underpin new knowledge in academic institutions. This remains difficult to explain, or even mention, with a framework that rests on a philosophically unreflective administrative definition of research. Perhaps meditation upon the familiar quote from Renaissance philosopher, Giambattista Vico, might make reconciliation between creative practices possible, or at least provide an acceptable way to begin the discussion:

Verum et factum convertuntur (verifiable truth and what is made are interchangeable) [3]

Despite the ambiguity of much of the current philosophical argument about creative practices as research, an exhibition such as *Tactile Imagination* is an internationally recognised and established form of research. *Tactile Imagination* is research in the sense that new knowledge is found in the demonstration of ideas and in the discourse that explains those ideas. New knowledge is found in the 'space' between demonstration and explanation, just as it is in all fields of research. This is what makes the administrative argument for *Tactile Imagination* effective and what has gained the exhibition the support of The University of New South Wales.

The exhibition has received the support of The Faculty of the Built Environment as well as Ivan Dougherty Gallery at the College of Fine Arts, UNSW though various grants and other forms of assistance. A number of external businesses, institutions and individuals (including the artists themselves) have also contributed to the exhibition, which reflects a growing interest in terms of public-private linkages in creative practices.

This support reflects the recognition that the 'body of knowledge' used in training of designers and artists and for the more general contribution by artists and designers to all forms of culture, relies heavily on such work.

Each exhibitor has a distinct approach to what it means to be creative. Ann Quinlan and Oya Demirbilek are researching creativity as a feature of design education and, using their video projection, *reflec[emo]tions*, to demonstrate their research findings. Rina Bernabei and Kelly Freeman are revealing the relationship between design method and design outcome, showing how the forms of representation contribute to the form of the designed product in *Seams* (2003-07). Bill MacMahon and Matthew Johnson have made a light installation, *Apelles' Line 4* (2007) with dynamic spatial ambiguity. Andrew Macklin explores the strange world of projective geometry in *Tactile Geometry* (2007). Ainslie Murray's interest in meditative repetition and the relationship between the making body and its work are demonstrated in the spatial presentation of apparently two-dimensional works, *Char Dham Walk (Garhwal)* (2007) and *Fushimi Inari Walk (Kyoto)* (2007). My own *Infrathin: Advice for Aliens* (2007) explores an alienated mode within which creative practices take place. All the works demonstrate their approach as exhibited work formed upon a particular hypothesis and which is theorised in relation to the work, so all the works are presented as research.

Tom Loveday
Joint Director, Design Research Group
Senior Lecturer, Faculty of the Built Environment
The University of New South Wales

1 What is surprising about this model of knowledge is that it has been subject to heavy critique in so many fields and yet remains as popular as ever among a largely unreflective academia in research and educational institutions.
2 Like the notion of rational objectivity in science, this idea has been shown to be unworkable for contemporary art practice and yet remains a popular notion among artists.
3 See Giambattista Vico (Stanford Encyclopedia of Philosophy), located April 20, 2007, http://plato.stanford.edu/entries/vico/ This statement can be interpreted as, "*verum esse ipsum factum*" (the true is precisely what is made).

TACTILE IMAGINATION:
WHITE IN THE DARKNESS OF CREATION AND THEORY

███████ I value headlines, titles, labels, names, yet I don't like to be headlined, titled, labelled, or named – maybe this is self-preservation at work, a struggle for autonomy against categories, and other people's misunderstandings. Thinking people must always deal with this. Some choose to explain, some revel in being misunderstood or fussed over, others merely whisper, a few retreat into solitude. Artists, sculptors, poets, writers, designers, architects, share these stances in varying measure – flashes of white in the darkness of creation. Creativity is darkly private. So too is theory. Both inhabit a world of the unsaid and unsayable that somehow finds voice through searching, imagining, making, declaring.
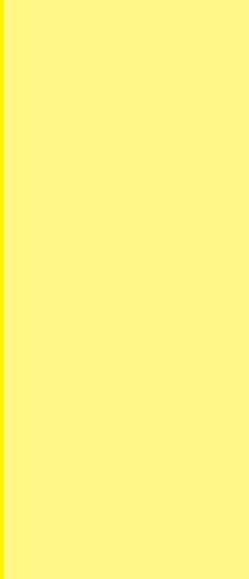
The exhibition title conjoins the material, the humanistic traditions of doing, with the immaterial, the humanistic traditions of being. For some designers this conjunction is realised through technique, particularly via the cross transfers of software in the cyber world, and for them design research becomes a matter of showing the potentials gained via technique. What is not clear though is how a technique is selected – there is no natural state, the selection itself still needs to be explicated. For me this merely reinforces that the material-immaterial conjunction in design is always already in place and is recognised and activated through theory. Design research then becomes a matter of declaration beyond what is made, or technique as the means of making, to help clarify the intentional and private 'working out' and 'working through' that has gone on while designing – even declaring the means of declaring. Rather than the refined white of Donald Schön's paintbrush engineers, who tidied up their account of designing for continued funding, design research desirably remains dark white.

On the material side the title prompts creativity as a darkly imaginative tactility, or darkly tactile imaginings taken in by darker tactile imaginations. Or darkly creative tactile imaginings being absorbed by more darkly receptive tactile imaginations. The materiality of this exhibition represents somatic mental states researched, designed and processed by touching, pushing, prodding into things stylised, anaesthetised, incised, cavitated, plaid, filled and animated. The six designed works on display, and designed they all are, each have their own purpose, for designing is the designation of something for a purpose, even if this purpose is not functional or useful. It may be that the purpose of these works is for other than epideictic reasons, for the display purports to be of 'personal work'. Whatever may be the case, these works at some point became aligned with exhibition and its academic purposes. Research is that purpose, exhibition its medium.

While all are declarative, the displayed works have more or less two theoretical modes. There is the frangible set in which the link between theory and outcome is evident but is in need of continual [re]assurance – the tactile metal 'seams' in the work of Rina Bernabei and Kelly Freeman, the sensate 'felt geometries' of Andrew Macklin, and the passively 'active planes' of Ainslie Murray's [two]three-dimensional pieces. Assurance may seem an odd thing to ask of such clearly honed and assembled works. Even though each designer is involved with materials and making at an intimate level, the power of the works lies in their praxis, their theory-in-practice – to best understand them you needed to accompany the designers in the process, the discussion and the making, hugely difficult to achieve as a surrogate. One also has to counter a belief among many artists and designers that this kind of working does not involve theory at all. Yet to decide material, form and connection is to always already have in place a process of filtering options towards realising potentials – a research agenda and a theory in other words, albeit one that may be intensely personal. The success of such endeavours rests on whether the outcomes sustain the intentions, which depends in turn on how well these and the choices made in working them through are vocalised, after which it may be said that they have attained something new. By 'new' I do not mean novelty, but rather a strategic position suitable for further invention and exploration.

Then there is the tough-minded set of works in which the link between theory and outcome is uppermost, where process is a necessary but less evident or significant part of the whole, and where a didactic stance is presented in which the challenge is to 'get it' – the ephemeral 'infrathin advices' of Tom Loveday, the metaphoric 'overlining' of Bill MacMahon and Matthew Johnson, and the digital 'reflec[emo]tions' of Ann Quinlan and Oya Demirbilek and their team. Notwithstanding a certain obliquity among these three works, the designers are straightforward in their desires – they want us to join them, to expand our understanding by directly uniting what is said with what is done and to have us work through these connections for ourselves. Arguably this is hardest for the video display of Ann and Oya because it deals with third- and fourth-order interpretations – interpretations

of students' interpretations filtered by academic interpretations then interpreted by exhibition goers. While this and the other two works will no doubt attract extraneous opinions, thereby still leaving something for the designers to say, it is a necessary concomitant to the kind of mutual engagement they seek. Since designing is hermeneutic and irregularly adjusts itself, as well as having mythopoeic qualities that enable it to keep going, this provocation by the designers is strategic and becomes a site for further design research and the refinement of theory.

The two groupings of works, as I characterise them, may differ and their media may vary, but the demands of exhibition necessarily ask 'Why are they so?' and seek explanations. It is unnerving, invasive and potentially damning to be closely scrutinised, especially when asked to reveal your research and design processes – most designers refrain from such direct encounters, preferring the distance of the magazine article, if they must say anything. Inevitably, no matter how loquacious the designer or how receptive the setting, not enough can ever be said. In other words, these works have limits and are also about forgetting. The designers' writings and works omit much, sometimes leaving traces of the forgotten or hidden in their thinking, and it is within such incomplete stories that a commentary like mine finds its place. I only wish I had more space.

For example, Rina and Kelly want mass manufacture to preserve and celebrate the qualities of craft without further questioning craft. In my view, designing and its designs are self-conscious imaginings, at once reflective and reflexive, dynamic and malleable, yet resistant and obstinate. But craft is in its purest sense unself-conscious and thus cannot be design. Neither can design be craft. Design and craft do align however when prepared for exhibition, though design differs from a craft that does not imagine. It may be hard to imagine an unimagining craft. Indeed, it is debatable whether such pure and unimagining craft exists at all, except in the deepest archaeological or cultural sense of repeated forgetful production. By implication this is what Rina and Kelly invoke when they speak of mass manufacture – repeated forgetful production. While such a mass manufactured craft may be conceivable, its origins lost in time like pure craft perhaps, it is difficult to conceive of an unimagining design. Except that maybe this is what Pevsner meant by 'building' not being architecture.

In offering up finished works, any discussion around this exhibition begins and ends with the mades that are displayed, for they are the residue of imagining, designing and making. The works are evidential, if not meaningful, and demonstrate their '-ality'. Just as the efficacy of Barthes's artisanal hammer lies in its equipmentality, so the efficacy of these works lies in whatever is their -ality, the main one being intentionality. As incidental-purposeful productions selected for exhibition they are also ephemeral, elusive, and momentarily significant, not a problem because that is where designers are most alive. Nonetheless they involve us in subtle qualities to do with memory, resonance, displacement, transference, rhetoric and perception reflecting their designers' theory at play, and at work. The most ubiquitous yet perverse and mercurial quality of these works is their materiality and the most subtle quality is their tactility, their sensual and emotional transference.

From what is evident, and any evidence is at best circumstantial, as well as from what is not, the works on display are intensely theoretical. As much as they can, these works align with what the designers say. Yet they are not of themselves repositories of new knowledge, for they attract unwanted and unintended meanings, interpretations and consequences, not just from the ignorant, but from those who are informed and sensitised, those who get it. The one constant is what the designers say they want to achieve. This comes closest to voicing their theory, because design theory is intentional and is informed by research. Yet design research is not about truth, it is mainly about efficacy – which only shows how delicately poised are the objects of design, the research that informs them and the theory that helps bring them to being.

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DESIGN AS CREATIVE PROCESS

▮▮▮▮▮▮ From time to time it is fashionable to play with the hidden meanings of words – their etymology and historical meaning – in the belief that words are like organisms which carry with them over time, like some kind of DNA, essential and enduring meanings. These meanings are then said to inform contemporary usage at a subliminal level. As a trained linguist I have always been skeptical of this idea, knowing that words change their meanings over time and in different contexts. We can't, for example, understand Shakespeare's 'mechanicals' in *A Midsummer Night's Dream* by applying a contemporary meaning to the word 'mechanical'. For a start, it is now an adjective not a noun, while a mechanic today is a very specific kind of worker, not the generalised worker denoted by Shakespeare's 'mechanical'.

Yet Shakespeare could also be used to support the opposing argument because his verse dramas have actually become semantically richer over time as his vocabulary has become layered by the accumulated meanings of five hundred years.

When we come to a word like 'design', the etymological approach is rich in possibilities. If we look at the word both across time and across languages, it reveals a wonderfully suggestive polysemic potential, liberating design from the functional, product-oriented straitjacket into which it so often seems to slip and endowing it with the creative and experimental character of art.

But if design, once liberated from its utilitarian role, becomes indistinguishable from art, then art too – seen from an etymological and art historical point of view – also shuffles off some shackles by virtue of its association with design.

The Italian word *disegno* is too easily translated as 'design', even though it is etymologically the source of the English word. Historically it was associated with composition through drawing, although the term *arti del disegno* once meant the visual arts in general. For the Mannerists, the anagrammatic expression *Disegno, segno di Dio* (Design is the design-manual of God) suggested the Platonic ideal of *disegno interni* or the form which in its perfection prefigures the natural world.

Similarly, the French word *dessin* is not cognate with 'design' and carries a meaning well beyond the notion of 'design' as it is understood in English – although, even in English, *design* is polysemic. In German, the term for design, *entwurf* does not have Latin origins, but still carries the same overtones of design as experiment, play and sheer creativity for its own sake. The noun *wurf* is related to the word *wurfen* (to throw) which, when joined to the prepositional particle 'ent-' (to create the verb *entwerfen*) suggests throwing an idea out there to see what happens.

What I am suggesting with these etymological curiosities is that we need to re-think the way we use the term 'design' and to interrogate the sloppy way in which we often represent design as art. Just where precisely do the contemporary notions of design and art come together?

One way of looking at *Tactile Imagination* is to see it as an exploration of the idea that what design and art most fundamentally have in common is that they are both essentially a *process* and that the object – space, product, sculpture or painting – is simply the artifact left behind at the end of that process. It is not a new idea, but it is frequently misunderstood and rarely applied to the design/art interface where the design product is generally seen simply as a *de facto* art object with utility sidelined as irrelevant. In art, with the continuing dominance of conceptualism, the role of the art object as a trigger to a phenomenological process in the viewer is ignored in favour of sermonising by the artist, making the 'concept' effectively yet another object, indifferent to engagement with its audience. What this exhibition explores is a process so perfectly expressed by Goethe in one of his *Roman Elegies*: "Sehe mit fühlendem Aug, fühle mit sehender Hand"[1] where he discovers the nature of classical architecture and sculpture by erotically exploring his lover's hips at night.

In *Tactile Imagination*, Tom Loveday's quasi-modular paintings, *Infrathin: Advice for Aliens*, clearly declare that they are merely the raw ingredients. While they are referential, it is the viewer who needs to 'design' them in order to fully amplify their meaning. Likewise, they resist 'objecthood', existing instead in a permanent state of process. In this sense, the viewer is 'alienated' or forced to see things with a fresh eye.[2]
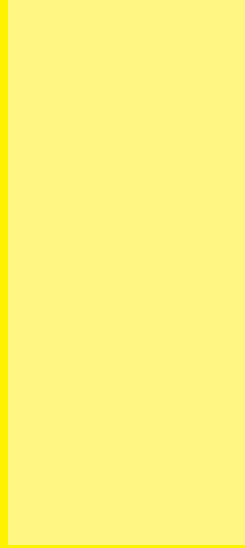
Design-as-process steers clear of the 'object' because it sees its primary task not as problem-solving, but as problem-setting (to use Donald A. Schön's term), and it is here that design and art come together – again exemplified in Loveday's paintings which, through their minimal and ambivalent referencing, set out the problem rather than offer a solution. Probably the most outstanding industrial design practice in Australia from this point of view is korban/flaubert whose work has a seamless unity of utility, aesthetic integrity and ceaseless investigatory drive. They are not in this exhibition, but bernabeifreeman are and, like korban/flaubert, their work (using sheet metal for pendant lights and tables while referencing the highly decorative textile designs of the Arts and Crafts movement) results from an essentially experimental motivation, exploring the potential of their materials and manufacturing process for the simultaneous expression of function and metaphor. The resulting objects resonate with the experimental process which generated them, evincing a permanent tension between their utility and their autonomy as art objects. At the same time, bernabeifreeman's work is a celebration of materiality and of the marriage of imaginative and technical processes.

Architect, Bill MacMahon, and artist, Matthew Johnson draw parallels between the tension of line and light (colour) in the history of painting, and the use of line to create space in architecture. Hence, *Apelles Line* is both a contemplation of the line and an interrogation of it: a room (space) containing an LED-generated line which is simultaneously tangible and fugitive.

Ainslie Murray, in her two large, suspended and stitched paintings, explores the issue of the formulaic versus the creative in design by referencing traditional stitching and weaving which is typified by repeated, formulaic patterns, every now and then interrupted by intuitive gestures – hence making them far more interesting aesthetically than contemporary, machine-made carpets and textiles. At the same time, the paintings codify or map two walking journeys – again evincing a ritualistic element, while implying a three-dimensional potential to a two-dimensional surface.

Ann Quinlan and Oya Demirbilek's video installation, *reflec(emo)tions*, explores another, often overlooked, aspect of design as a creative process, namely its synergistic dimension. In particular, they are concerned to reveal the emotional component of people working together in what they term "a community enterprise involving layers of reciprocity and risk". While art, *qua* art, may remain a largely individual enterprise, design is largely a collective enterprise, notwithstanding the current cult of celebrity designers.

My reading of Andrew Macklin's "felt geometries" is that it picks up on some very long-standing preoccupations, such as Kant's speculations on point of view, Heisenberg's uncertainty principle and, back in linguistic territory, Labov's 'observer's paradox' which argues that the act of observation influences perception. Equally, Macklin's circular plates held in suspension in different planes allude to the Cubist agenda to apprehend multiple perspectives simultaneously. Whatever their origins, these sculptures are an exploration of how we process ('design') the space in which we live.

By setting out to exemplify design as research, *Tactile Imagination* shifts focus to design as a creative process. In so doing, it clarifies the murky interface of art and design by highlighting the importance to both of not knowing the outcome at the beginning.

Dr Paul McGillick writes on architecture and design and is Editor of *Indesign* magazine.
His most recent book is *Concrete Metal Glass: Hijjas Kasturi* (Editions Didier).

1 Literally translated as "See with feeling eye, feel with seeing hand".
2 I suspect Loveday has adopted Brecht's notion of 'alienation' as in the *Verfremdungseffekt*, which Brecht actually lifted from the Russian post-Formalists. 'Alienation' is not a good translation and translations of the Russian texts tend to use terms like 'distancing' and 'de-familiarising'. Brecht's German version more accurately translates as 'making strange'. But Loveday is also playing with the ambiguity of the English word 'alienation'.

RINA BERNABEI + KELLY FREEMAN

SEAMS

Our aim is to design completely mass manufactured, industrial products which embed the qualities of craft and domesticity, both past and present. Our explorations encompass both the traditionally feminine realm of domesticity, and the masculine realm of mass manufacture. Traditional textiles from the domestic environment have been the foundation for many of our works. Techniques such as embroidery and lace work have been reinterpreted using sheet metal and the industrial processes of CNC turret punching. The resulting products speak of today's technologies, yet reference past interiors through their detailed and decorative quality, creating a contemporary visual language for interior products.

Having studied as industrial designers, the mass manufactured element of our work is particularly important. We chose to explore the properties of sheet metal primarily because of its industrial quality and its accessibility. It also provides an excellent mode of paralleling the textile design process – in form, patterning, construction, and documentation.

Our new work entitled *Seams* evolved as a natural progression within our design process. Having pushed specific elements of sheet metal manufacturing processes in past work, in particular perforations, we wanted to develop more three dimensional forms in order to find a new visual language that could be constructed from the flatness of sheet metal. Traditionally, sheet metal is given a hard industrial visual language as a result of its production processes and industrial applications – air conditioning, tubing, and roofing. While still maintaining our interest in the textile, we wanted to celebrate the industrial qualities of the sheet metal by creating a feature of these industrial elements. By re-interpreting these manufacturing processes and the language of the industrial landscape, we wanted to create something that juxtaposed these qualities with the language of the domestic interior.

Seams' overall forms developed from the traditional archetypal cloth lampshades. We reinterpreted the language of pleating, gathering, and the stretching of fabric over the frames. We also aimed to parallel the pattern making and construction techniques. This resulted in the design of three diverse and recognisable pendant lamp forms.

During the design process we explored many different shapes and modeled multiple ideas in card, mimicking the methods that would be required to create and assemble on mass. However, even with our experience in sheet metal, creating a new series of forms using folding proved to be a lengthy process. Designing a form from folded metal that was able to be manufactured for current machine capability proved to be incredibly challenging. We worked very closely with our manufacturer throughout the process, employing three dimensional computer modeling to document the complex forms.

Each design incorporates six identical folded panels which connect along the seams. These seams became important visual indicators, as they paralleled the textile and metal design processes. We further explored the idea of the seams by protruding them and opening them out, instead of the traditional method of hiding them to the point of invisibility. In addition to the opening up of the seams, and as a method of echoing back to the stitches required in fabric lampshades, we incorporated perforations along the fold lines of the panels. These perforations became very important in the sheet metal production, as the complex bending would not have been possible without them.

Tactile Imagination will be the first public showing of this new work for bernabeifreeman. For this exhibition, it is important that the viewer understands the parallel design process between the textile and the sheet metal. As with all manufacturing, there is often excess material and/or parts created. For this reason our installation reflects that of a working textile and dress maker atelier, with finished interior products, working metal blanks or unfinished parts.

Seams demonstrates our aim to continue to explore industrial processes of mass manufacture as well as the domestic textile and places these elements into a contemporary landscape. Our products re-interpret the language of the domestic textile into sheet metal through perforation, riveting and bending and now, with *Seams*, complex folding.

Rina Bernabei + Kelly Freeman *Seams* 2007
installation of six powder coated, aluminium sheet lights and nine patterns of card and aluminum dimensions variable
Photo Dieu Tan

TOM LOVEDAY

INFRATHIN: ADVICE FOR ALIENS

The aim of *Infrathin: Advice for Aliens* is to find a way to touch upon the elements of creativity so that they too are creative. It is an instance of creative practice that simultaneously reveals its mode of thought. Thus *Infrathin: Advice for Aliens* concerns, among other things, the visual basis for creative practices, called 'strange seeing'.

Strange or *alienated* seeing is a necessary perspective for creative thought, especially for art and design practices, but also for any activity that requires creative thinking or that needs to be seen from the point of view of experimental production rather than analysis and judgment. Strange seeing is a contradiction of the central premise of rational thought. This is the premise, or 'law of identity' whereby a thing is equal precisely only to itself.[1] The law of identity is upheld in two ways: as a determined equation of the actual and the virtual and as a reductive approximation of events. To break the law of identity is to enter the non-equation of the actual and the virtual and the non-reductive approximation of events. It is to enter multiple spaces or planes as well as multiple modes of thought. In other words, to break the law of identity is to enter creative modes of thinking.

This is a theoretical position for *Infrathin: Advice for Aliens*, but its lacks an aesthetic figure, which is a kind of persona around which the work is built. The aesthetic figure for *Infrathin: Advice for Aliens* is the *alien*, by which is meant the *one who is alienated*. Here the work is a series of paintings for an alien and a book of advice about the world directed to an alien. The alien as an audience is the central artistic 'idea' of *Infrathin: Advice for Aliens*. The fact that extraterrestrial aliens are a fantasy and terrestrial aliens are 'foreigners' creates a productive contradiction that reveals surprising conclusions.

Infrathin: Advice for Aliens does not attempt to reduce an object of inquiry to a founding principle by finding differences and divisions, but rather it merges and combines ideas, images and words. Neither is there a rationalistic 'weighing up' (or a rationality that is inflected with the sense of touch) in which the gravity of a thought is measured against the gravity of other thoughts.

Merging of the meanings of alienation allows the issue of representation to be explored as if it were a way to expose the differences in meanings for alienation. The conclusions

Tom Loveday *Infrathin: Advice for Aliens* 2007
acrylic on canvas 52 works at 25 x 25 cm each and book (not shown)

about various alien-related issues depend upon bringing representations into play before an alien. This enables a richer explanation of aliens, alienation and how alienation 'works'. The result of merging of meanings is often humorous because alienated seeing is often counter-intuitive, deliberately superficial or, in some cases, downright offensive. At the same time, it can be self-effacing (a familiar approach for both artists and court jesters).

The rather ambiguous and often theorised Duchampian concept *infrathin* is used because it sets up an alienating connection between appearances. *Infrathin* is an obscure idea that persistently eludes definition, especially by its inventor, Marcel Duchamp.

The conceptual explanation of Infrathin is, itself, *infrathin*. The word infrathin is a translation of an imaginary French construction 'inframince', literally: "(be)low" from scientific usage and 'thin' from French. Duchamp is often quoted as saying that the term is an adjective and cannot become a noun.[2] Duchamp says that Infrathin can only be understood through examples:

When the tobacco smoke smells also of the mouth which exhales it, the 2 odours marry buy infra thin (olfactory infra thin) [3]

Despite Duchamp's insistence that it cannot be defined, some theorists have tried to do so. Possibly the clearest theoretical explanation of infrathin is the following from a footnote in a journal article.

Although Duchamp stated that the infrathin was indefineable, [Hector] Obalk attempted to define it in a paper given at the College Art Association, in Boston, in February of 1996. [Hector] Obalk makes three distinctions of the notion infrathin. In the first notion of infrathin, the term describes an "infinitesimal" thickness – the thickness of an atom for example. The second notion of infrathin characterizes any difference that you can easily imagine but doesn't exist, like the thickness of a shadow. The third and final notion of infrathin qualifies a distance or a difference you cannot perceive, but you can only imagine. This last concept of the infrathin is the most important because it exists completely in the viewer's mind.[4]

Perhaps Duchamp's "infra mince" can be best translated as thin that is beyond the sensible due to its thin-ness and yet still able to have a representational effect.

The *infrathin* is the thinnest possible difference between two things and is the surface that divides and joins one thing and another. Infrathin thoughts have no weight—they are superficial in the extreme and dance lightly over the landscape, with laughter and music, like the dancing philosopher.[5] The purpose of *infrathin* is to reveal itself as distinct and yet identical from the things that it connects. Because *infrathin* is the thinnest possible connection between representations, and occurs where all representation is of *equal value*, it allows us to grasp the alien point of view all appearances are of equal value; *equal as representations*. Because aliens are *alien*, there can be no original and copy – there are only connections between representations. This enables the thinnest possible connection between what seem like highly disparate appearances, such as minimal paintings and actual worldly events and objects. Some questions raised by *Infrathin: Advice for Aliens* include: What can be a painting? What can be a book? Why theorise? Why paint? What is representation? What is alienation? What is design? There are, of course, many other questions along these lines. Despite the extensive theorising, however, few answers are given. Each painting raises a question and each theoretical text elaborates that question.

The exhibit consists of a series of fifty-two minimalist paintings and a book. The paintings are each named according to the thinnest possible connection between the reduced image and what that image represents. The book consists of explanations of alienation and representation and a short text about each painting. As such, the exhibition of paintings and book presents practice and theory as a single 'creative' act.

1 This is the central 'law' upon which formal logic is based. For a brief description, see RC Jeffrey, *Formal Logic: Its Scope and Limits*, McGraw-Hill, New York, 1967; S. Wolfram, *Philosophical Logic*, Routledge, London, 1989; Sir Anthony Kenny, *A New History of Western Philosophy, Volume 1: Ancient Philosophy*, Clarendon Press, Oxford, 2004.
2 Dawn Ades, Neil Cox and David Hopkins, *Marcel Duchamp*, Thames and Hudson, 1999, p. 183.
3 Dawn Ades, Neil Cox and David Hopkins, *Marcel Duchamp*, Thames and Hudson, 1999, p. 183.
4 Ben Howell Davis, 'Infra-thin Multimedia, Man Ray's Paris Portraits: 1921-39', Tout-fait, Vol 2, Issue 5, 2003 (paper originally given in 1990, at the Museum Computer Network Conference 1990), viewed April 19, 2007. http://www.toutfait.com/issues/volume2/issue_5
5 Friedrich Nietzsche indirectly referred to himself in *The Gay Science* as the Dancing philosopher, an artist or musician

ANDREW MACKLIN

Andrew Macklin *Rocka* 2007
gator board, wool, paint 30cm diameter
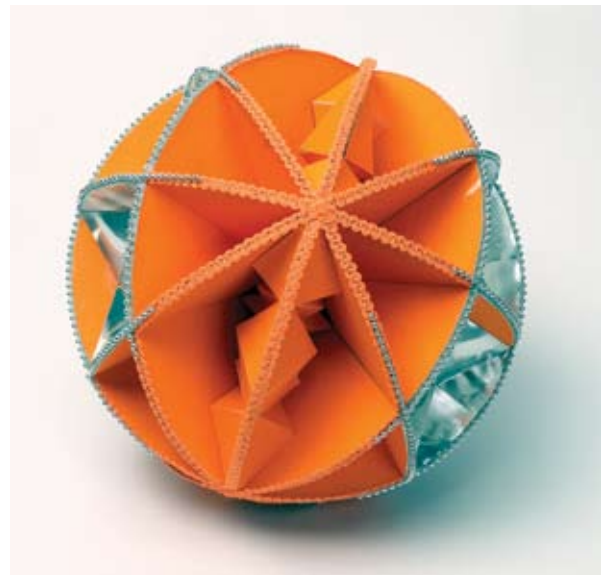Photo Sue Blackburn

TACTILE GEOMETRY

In this exhibition I am presenting several sculptures from three different series. Most of my recent work consists of sculptures created by joining circular plates in different planes giving the impression of a sphere. The planar circles relate to different spatial directions x (length), y (width), and z (height) and carry the residue of the Cartesian model of 'slicing' the spatial world. Multiple, axially joined circular plates lead to complex interweaving curves. Circular geometry - arcs, rings, bands, discs, spheres, balls or globes - allows for the choreographing of very dynamic orbital movement which implies motion. An important influence on the creation of this work are the sculptures of early twentieth century artists exploring abstract geometric forms often with stringing which was significantly influenced by late-19th century mathematical models. From around 1860 many mathematicians began to model the mathematics of curvilinear surfaces in physical models often involving stringing. Highly influential was the work of Eduard Kummer, Felix Klein and Alexander Brill who elaborated their mathematical theories through beautifully crafted physical models in a variety of materials including plaster, cardboard, metal and string. Between the 1880s and the 1910s most schools of mathematics acquired three dimensional physical mathematical models developed by Klein or Brill and sold notably by the firm, Martin Schilling. (Most models have

disappeared but the Institut Henri Poincare (Paris) and the University of Illinois' (Urbana Champaign) 'Altgeld' collection have complete collections of the so-called Brill models.) Kasimir Malevich, Naum Gabo (and his brother Antoine Pevsner), Pablo Picasso, Lazlo Moholy-Nagy, Joseph Albers, Henry Moore and Barbara Hepworth were all influenced by 19th century mathematical models which can be seen variously in the Cubist notion of time in drawing (significantly informed by Klein's ideas of the forth dimension) to geometric sculptures involving stringing, to the idea of 'kinetics' or movement art.

Orb 2 is a sculpture from a series strongly informed by sci-fi aesthetic, the illustrations of John Berkey, the aesthetic of science fiction spacecraft models, particularly the exquisite minimalist interiors and streamlined spacecraft in Stanley Kubrick's *2001 A Space Odyssey* to the glam-sexuality of *Barbarella* (directed by Roger Vadim) and the Blake 7 series models and sets designed by Roger Murray-Leach. Harry Lange and Fred Ordway designed the sets and spacecraft for Kubrick's *2001 A Space Odyssey*. Both were consultant engineers on the *Saturn V* project in 1960's at the Marshall Space Flight Centre (Huntsville, Alabama) and were brought into the film by Arthur C. Clarke who wrote the short story *The Sentinel* which is the basis of the movie. The 2001 aesthetic – for example, the interior of space station five – is strongly influenced by Lange and Ordway's research into actual space vehicles and equipment of the time particularly designs at General Electric's *Missile and Space Vehicle Department*, Bell Telephone Laboratories, Honeywell, IBM and the work of designer Eliot Noyes. *Orb 2* is an abstract sculpture influenced by the colour and surface-sheen hyper-reality of sci-fi models and sets.

Andrew Macklin *Orange Orb* 2007
gartor board, paper, holographic paper 30 cm diameter
Photo Sue Blackburn

Finally and importantly, I am an abstract artist NOT mathematician so I explore geometry from a personal *modus operandi* beyond any system or narrative, hence I refer to these sculptures as 'felt geometries' - a feeling towards geometry from physical making where geometry evolves haptically. These sculptures are about creating poetic possibilities not conceptual or mathematical probabilities; about intuitions leading to self realisations not deductions within a pre-existing system; they are about exploring self via a self-evolving logic of hands transforming materials. Hence they are 'translations' – I use this word from the theorist Michel Serres – a translation, a folding of self into an object, an embedding of the maker in the made and in a feedback loop realising the self in the experiencing of new possibilities. Exploring geometry phenomenologically, is an organic process that allows for variability and iterability inherent to a making process versus more formal and causal paths of reasoning inherent to the conceptual language of mathematics for example. It is about form determined by the hand, shaping intuition into object. These sculptures allow me to develop sculptural and spatial possibilities directed by my aesthetic knowledge in a way that is creative, poetic and loose and which allows for the full possibilities of self - whose richness lies in its random, hybrid nature – to emerge with, beyond and before my consciousness.

BILL MACMAHON + MATTHEW JOHNSON
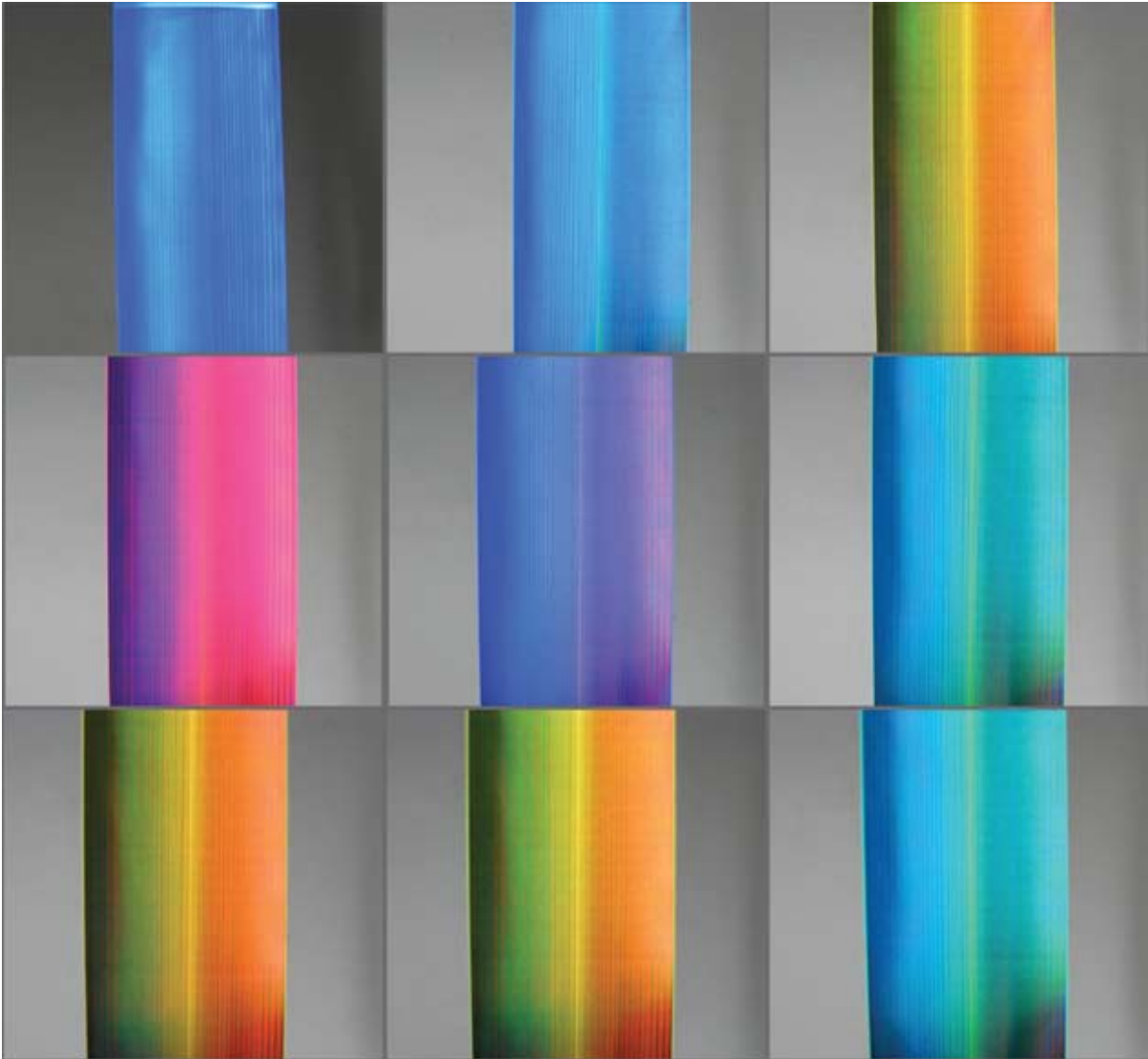
Bill MacMahon + Matthew Johnson *Apelles' Line 4* 2007
installation of LED light, timber dimensions variable

APELLES' LINE 4

" ….and taking up a brush he painted in colour across the panel an extremely fine line and when Protogenes returned the old woman showed him what had taken place. The story goes that the artist, after looking closely at the finish of this, said that the new arrival was Apelles, as perfect a piece of work tallied with nobody else and he himself, using another colour, drew a still finer line exactly on the top of the first one, and leaving the room told the attendant to show it to the visitor if he returned and add that this was the person he was in search of; and so it happened; for Apelles came back, and, ashamed to be beaten cut, i.e. drew a yet finer line on the top of the other two lines with another in a third color, leaving no room for any further display of minute work.

Hereupon Protogenes admitted he was defeated, and flew down to the harbor to look for the visitor; and he decided that the panel should be handed on to posterity as it was, to be admired as a marvel by everybody, but particularly by artists. … it had been previously much admired by us, on its vast surface containing nothing else than the almost invisible lines, so that among the outstanding works of many artists it looked like a blank space, and by that very fact attracted attention and was more esteemed than any masterpiece."

Pliny the Elder, *The Natural History*[1]
Apelles and Protogenes' painting does not survive.

Matthew Johnson has focused much of his work upon a dynamic figure ground relationship producing works that take their precedence from both the optical artists and the abstract expressionists. Johnson claims alternatively his position as a painter and a colourist. Works of the last decade have been focused upon notions of a matrix of coloured spheres painted in oil. The circles are sometimes sharply drawn, sometimes blurred, sometimes melding into the space behind or at other instances crisply contrasting to the background.

The works exist in this non-figurative space and with their measured structure describe something between the determination of Cartesian space and a three-dimensional undulating plane. Sometimes there appear associations to the surface of the sea, mutable and reflective, achieving a sense of depth from the mirror quality of the surface. We look through and we look back.

With their ideas of the division of surface, their sense of proportion and scale, Johnson's works have been well received in applied architecture. In the last ten years Matthew has received multiple commissions for works integrated into architecture based upon collaboration with Bill MacMahon.

At times these works have played diverse roles in the buildings they occupy. In one a decorative surface wrapping the building, in another a shape penetrates the building or another as a line of light made up of blocks of colour constantly shifting their tonal relationships.

The works have measure through repetition, and a sense of depth through layering, transparency, tone and colour. The geometrical basis underlying the works provides a structure to develop varied painterly effects. In the built works, such as with the 'Yellow House', Macleay Street, Sydney, the removal of the hand of the artist and its interpretation through the work of joiners means that the nature of colour selection becomes an issue requiring a theoretical view of the colour palette; one specifies rather than paints. The work is seen from either the interior perspective at which point the lines of colour intersect as distinct lines, a mesh of slats casting shadows or, when viewed from the urban viewpoint, the distant view means the colours blur, the individual lines become less distinguishable and the three floor high work becomes a giant kinetic canvas altered by the movement of the panels and the position of the sun.

The Yellow House, Sydney
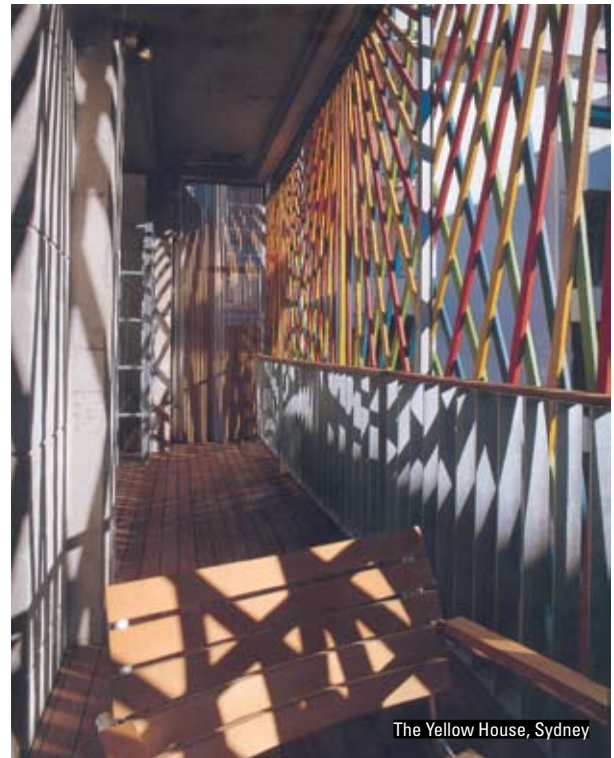
The marking out of surface, the ability to integrate the works into the fabric of the building and the increasing reliance upon light produce a level of activity that is applicable to architecture.

APELLES' LINE

Apelles' struggle with Protogenes to divide a line by applying another line of different colour over it produced a minimal work that made apparent the space of the ground, the background of the canvas. The line was an abstract figure, the intent to make the figure as narrow as possible produced by the reduction of the figure the subsequent enhancement of the ground. The fact the line was divided three times by lines of another colour calls up the notion that the colour itself was producing optical effects enhancing the spatial activation of the ground. Its division and the relation to the dividing line activated the blank sections of canvas.

Apelles was reputed to work with an elegant sufficiency of effort, never overworking the subject. We have no examples of his work that survive, just hints of an artist of minimal means.

The notion of *Apelles' Line* seeks to reestablish the collaborative relationship between the visual artist and the architect.

Taking a lead from the laying down of coloured line and informed by Matthew Johnson's optically energetic coloured works, the installation, *Apelles' Line*, is a collaborative work that seeks to render depth and motion by the interplay of light and colour.

A series of lines of varying thickness and rendered in a variety of hues are lit by primary colours. The variation in the kinetic sequence of primary colours alters the luminance of the lines producing a shift in the reading of the panel. A variety of optical effects results as the grey toned yet coloured lines absorb the light. Red based lines will become deeper in tonality when saturated by a primary red illumination but, for example, will recede when lit by green.

LIGHT/COLOUR	BLUE LINE	RED LINE	GREEN LINE
BLUE LED	Enhanced	Dulled	Dulled
RED LED	Recedes	Enhanced	Recedes
GREEN LED	Dulled	Recedes	Enhanced

The location of the line within a grey space balances and extends the colour effects of the lights. The resultant colour shifts thus produce dynamic visual effects.

Optical effects have long been of interest to artists. Op artists such as Bridget Riley and light artists such as James Turrell have sought inspiration in the product of spatial psychology. Matthew Johnson's work while not sharing the precise linear qualities of Riley nor exploring the spatial illusions of Turrell have sought to extend the optical possibilities of repetition of objects upon a coloured field. Johnson's work also has a painterly interest in the surface: depth and layering being important attributes of his visual language. A continuing strength is the manipulation of colour in the work.

Monument building residential foyer, Sydney 2005

Apelles' Line extends the light based work of Matthew Johnson and myself at Monument in Sydney's Darlinghurst, combining the elements of painting with light.

As a collaborative work between Matthew Johnson and myself the Apelles' Line is an exploration in spatial manipulation: the interior informed by the line. It represents an exploration of ideas of the tuning of colour and light to produce a space that hovers between the static and the dynamic, where the perception of colour within the space is challenged and where the viewer's notions of depth are questioned.

As the colours fade into grey or slowly grow in intensity of tone the viewer is left to contemplate the certainty of vision.

1 Pliny, *Natural History*. XXXV, 81-82, English translation by H Rackham, London (1961), p321.

AINSLIE MURRAY

THE ACTIVE PLANE

I

My practice explores processes of assembly and repetitious gesture principally through painted and stitched works. Architectural concerns emerge in geometry, proportion and materiality as painted planar surfaces are 'disturbed' through an extended series of focussed physical gestures. Two-dimensional space is called into question as surfaces are forced into tension and compression through dense fields of hand-stitched transparent line work. The works may be considered as active planes, where undulating architectural surfaces draw attention to both artefact and process, and evidence sequences of conception, construction and inhabitation.

II

Time that is moved by little fidget wheels is not my time, the flood that does not flow.[1] I consider the condition of my orbit, and think only of the time and tides necessary to make this work. It demands a silence, a quiet space of sunlight and still air. It requires a contemplative mind prepared to follow the line from the front to the back, through a boundary, from light to darkness and back again. I call upon blindness as I travel within, dragging myself along razor-sharp edges in the danger inherent in journeying to unknown places. I am drawn equally to both sides and fall in and out of knowing and not-knowing. My movement is cyclical, for I am bound to architecture and its geometries and overlay all with neat orders of systems and grids. In one life I carve air into sharp slivers with surgical precision; in another I breathe in liquid air and watch it seep out through an architectural skin; in another I hover in the upper air, floating to allow the diffuse mist of objectivity separate me from myself. The movement between these positions is a constant and conscious oscillation, and part of an ongoing questioning of ideas that habitually settle, compress and solidify. To practice across disciplines is to turn knowledge over before the rot sets in.

III

The tactile present offers clues for imagining past and future inhabitations of space. Two figures dance on either side of the canvas in the delicate postures of disentanglement and constancy. The line is held in air as it is drawn from front to back; its passage through the canvas marks both space and time, and its taut presence is a reminder of all that transpired to make it so. Space is constructed as the needle materialises, traces arcs in air, and returns to the site adjacent to its prior disappearance. Here, the grid is not of itself but exists rather as a site for contemplation and action. The works themselves are lived spaces and act as the residue of inhabitation; each puncture of the canvas signals an associated spatial and bodily act that took place in a certain time and space. Subtle shifts permeate the repetitious gesture, and the inhabitation of space expands with the memory of the line stretching, sinking and folding. The line loops backwards and forwards through time, differentiating the apparent homogeny of our spatial inhabitation. Each movement of the needle marks a re-visiting, re-thinking, and re-working as that which has already been contemplated is contemplated again.

1 Kenneth Slessor, *Five Bells*, 1939

Ainslie Murray and Meeray Ghaly (studio assistant) hand stitching *Fushimi Inari Walk (Kyoto)*, Sydney College of the Arts, 2007 Photo Ian Hobbs
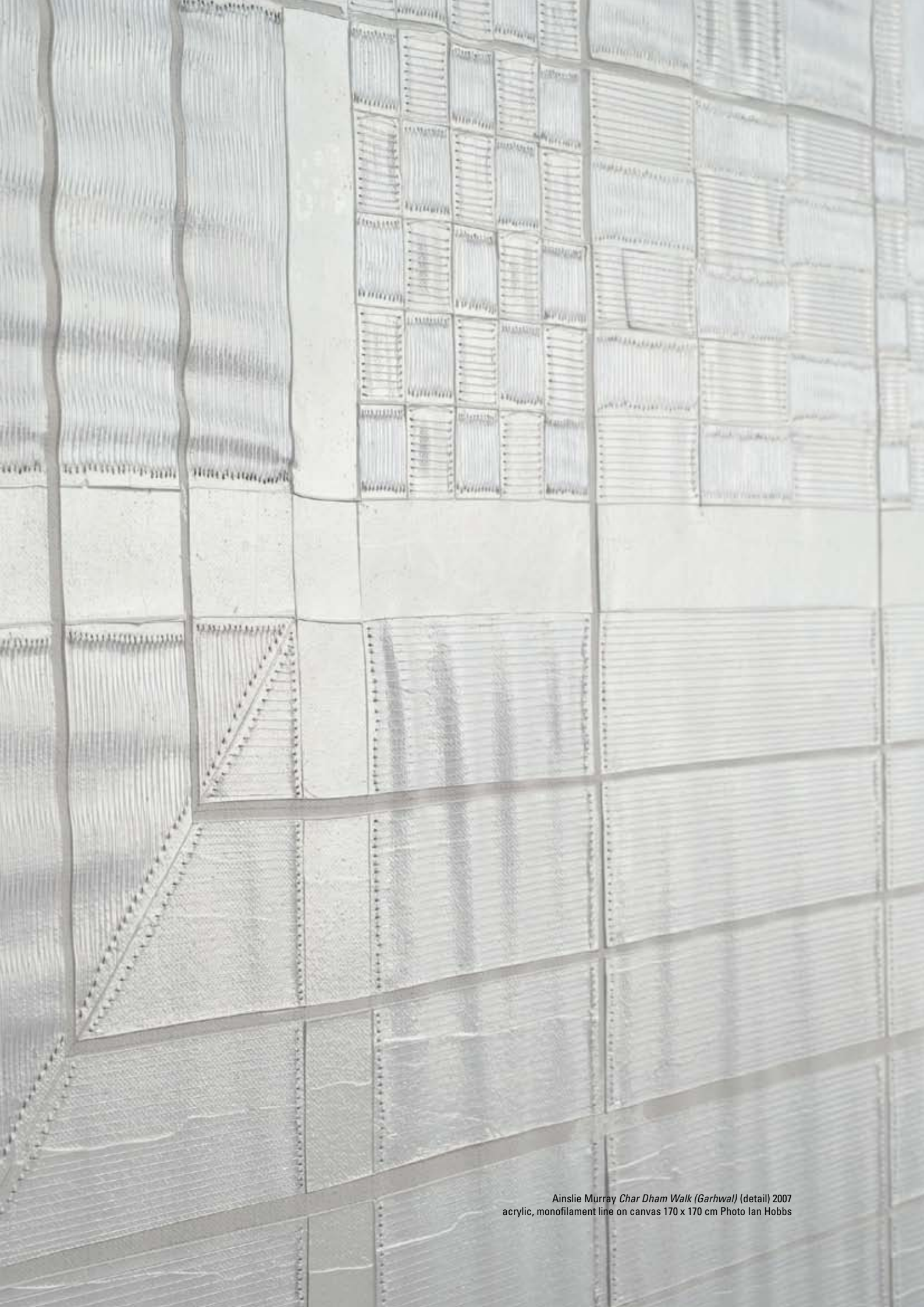
Ainslie Murray *Char Dham Walk (Garhwal)* (detail) 2007
acrylic, monofilament line on canvas 170 x 170 cm Photo Ian Hobbs

ANN QUINLAN + OYA DEMIRBILEK

REFLEC[EMO]TIONS. ANIMATING RESEARCH: FLESH / CONTOUR / LINE

BACKGROUND

Through our research, we are interested in revealing the 'lived experience', the embodiment, and the *presence* of the whole person in her or his interactions with design. In particular, we are interested in the interaction between emotion and design. For Oya, an industrial designer, this means the interaction between people and designed objects. For Ann, an architect, it concerns transformative student design learning interactions.

During our term as joint directors of the Design Research Group, these interests were further nuanced by our efforts to represent and document the group's research activities. Despite the very obvious *presence*[1] and expertise of our member community of 33 people (drawn from Architecture, Interior Architecture, Landscape Architecture, Industrial Design and Construction Management) and our outreach into the broader community, industry fields and professions, we were *absent* in the institutional research community. Ironically, for such a visually orientated discipline, we were a *dys-appearing* body[2] when we engaged in research authentic to our discipline. We were visible only when we delivered research outcomes such as Department of Education, Science and Training (DEST) audited publications from research processes that were often alien to our designedly ways of being.[3]
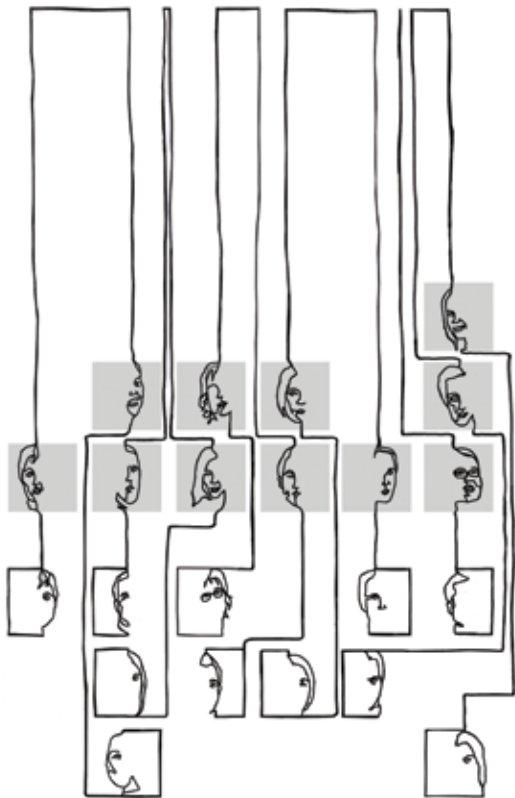
Belinda Rosenbaum, pre-production image
for Ann Quinlan + Oya Demirbilek in association with Michael Yip and Rido Pin
reflec[emo]tions. Animating Research: flesh/contour/line 2006-2007

In meeting this challenge, we have reviewed our self-concept as designers, scholars and teachers. We now try to think of ourselves as entrepreneurial researchers[4], engaged in scholarship[5] that re-*presents* design as an evolving, layered practice of networked and reciprocated inquiry that gives agency to our creativity and emotional vitality. We have also attended to the distinctiveness of our role as design educators. Our understanding of the complexity of design is continually being revealed to us through our interactions with students in design learning settings such as design studio.

EXHIBITION PROPOSITION

Framed by our resolve to advance design as a scholarly activity, this Design Research Exhibition provides a springboard for gaining new insights, interpretations and counterpoints for representing the interaction of design and emotion. Our proposition's raw material is data gathered as part of an educational research project on the perceptions of final-year students undertaking research activity across all programs in the Faculty of the Built Environment. For students in Architecture, Interior Architecture and Landscape Architecture, this activity leads to a design project outcome; for those in Planning and Construction Management, it leads to a thesis; and for those in Industrial Design, it leads to a thesis and a design project outcome. Our aim in the project was to understand students' lived experience of research and design, using in-depth filmed interviews, focus groups and student journals.

Our aim in this exhibition, however, is to explore riskier, untried research and representation tools to interpret and express the students' lived experience. In this intention, we were inspired by the 'say/do/make' model pioneered by Elisabeth Sanders.[6] This model (Figure 1) places information that research participants 'make' – their feelings, experiences and dreams – at its tip. This kind of information is often more difficult to interpret than what participants may say (the top part of the triangle) but is more accurate and authentic to their experience, more representative of real life and more open to new forms of creative expression and inquiry.


Figure 1.
Ways to understand people (Sanders)

To interpret and represent the 'made' data, Sanders argues we need new research 'toolkits', which focus on the emotional aspects of experience. Thus we sought out media techniques and specialists to help us develop an appropriate toolkit.

We knew we wanted to represent the students' lived experience of research as a video projection installation, and we had speculative ideas about the layered and looping
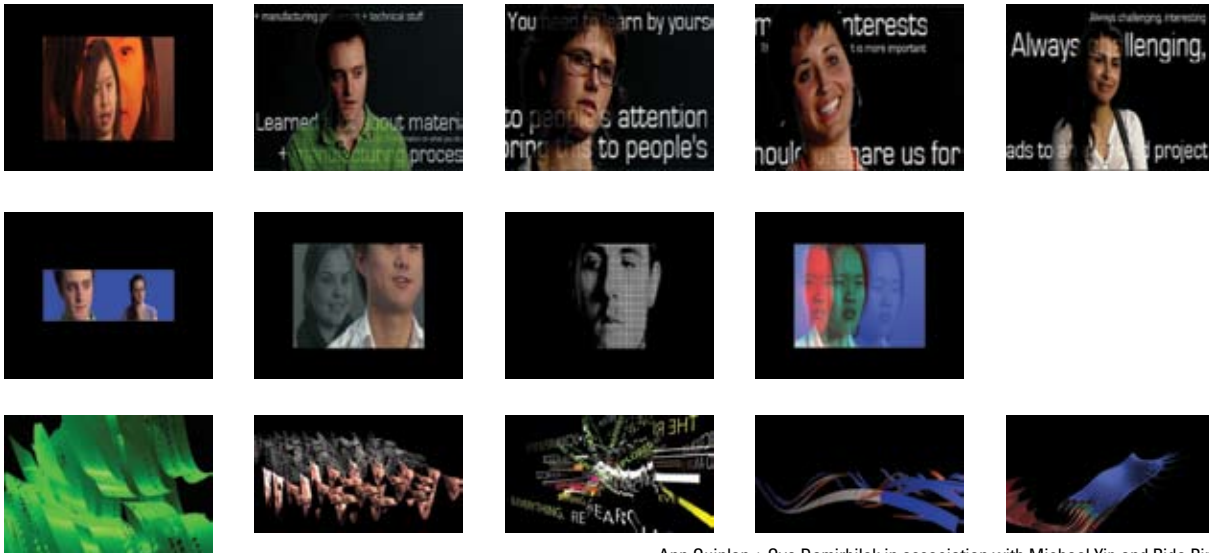
Ann Quinlan + Oya Demirbilek in association with Michael Yip and Rido Pin
reflec[emo]tions. Animating Research: flesh/contour/line 2006-2007
digital video installation

animations we wished to create. But we had no idea how to produce this installation technically. Therefore, we contacted our professional alumni colleague Michael Yip, Associate of the architectural practice, PTW Architects, who leads a visualisation course for built environment postgraduate students. In consultation with him, we invited his students to interpret and represent the raw material using creative digital compositing of image, line and text. We were excited by the potential of digital compositing techniques to assist us in communicating the *presence* of the final-year students as well as the vitality, depth and complexity of their lived experience of research.

The students undertook these experimentations as a course assignment, guided by Michael and his colleague Rido Pin. For us, there was an educational authenticity in connecting postgraduate learning to the creative process of revealing the nuanced emotion of undergraduate student research experiences. This also created another layer of interpretation as the postgraduate students relived their own undergraduate research experiences through the experiences of the final-year students. Moreover, we were not in control of technical processes or the twists and trajectories of the postgraduate students' interpretations as they become deeply immersed in the intimacy of their connection to the final-year students, their emotions and actions.

We appreciated working with professional design colleagues as part of an open and cooperative design practice. Indeed, this exhibition has brought home to us that design research means marshalling a network of people, ideas, research approaches and resources to achieve an artistic vision. It affirms that design research is a community enterprise involving layers of reciprocity and risk in the pursuit of something whose final form may not be known. In this endeavour, we have engaged in a complex creative matrix of networked layers and interpretations to represent the interaction of design and research. As the video installation is viewed and interpreted, new layers and directions of inquiry are created, affirming exhibition as research, and research as exhibition.

1 The concepts of *presence* and *dys-appearing* are drawn from Leder's discussion of the 'lived body', which is itself framed by the work of Merleau-Ponty. See Drew Leder, *The Absent Body*, The University of Chicago Press, Chicago, 1990. With reference to educational settings, see Charlotte Silen, 'The tutor's approach in base groups (PBL)', *Higher Education*, vol. 51, no. 3, 2006, pp. 373–385. Silen proposes that *presence* is when the body is directed towards the world of life (p. 377).
2 Charlotte Silen, 'The tutor's approach in base groups (PBL)', *Higher Education*, vol. 51, no. 3, 2006, p. 379. Silen proposes that Leder's *dys-appearing* body means that the body emerges when it is non-functioning (dys) in some way.
3 See Nigel Cross, 'Designerly ways of knowing', *Design Studies*, vol. 3, no. 4, 1982, pp. 221–227.
4 See Angela Brew,. 'Conceptions of Research: a phenomenographic study' *Studies in Higher Education*, vol. 26, no.3, 2001, pp. 271 – 285.
5 See Lee Andresen, 'A usable, transdisciplinary conception of scholarship', *Higher Education Research and Development*, vol. 19, no. 2, 2000, pp. 137–153.
6 Elisabeth B.N. Sanders, 'Postdesign and participatory culture', paper presented at *Useful and Critical: The Position of Research in Design* conference, 9-11 September 1999, Tuusula, Finland, viewed 16 April 2007, <http://www.maketools.com/pdfs/PostdesignandParticipatoryCulture_Sanders_99.pdf>

RINA BERNABEI + KELLY FREEMAN

Rina Bernabei is a Senior Lecturer in the Industrial Design Program in the Faculty of the Built Environment, The University of New South Wales (UNSW), and Kelly Freeman is a casual lecturer in the Industrial Design Program in the Faculty of the Built Environment, UNSW. They began conceptualizing together in 2001, however it wasn't until 2002, that they co-founded bernabeifreeman. With an aim to design mass produced contemporary lighting products that captured the qualities of the handcrafted.

Rina and Kelly translate the decorative motifs of historical textiles into sheet metal, through CNC turret punching. The resulting work is a digital dialogue of metal laces, and veils, which retain just a hint of a nostalgic interior. Using punched and fabricated sheet metal as their main medium, Rina and Kelly have worked closely with manufactures to give the hard, cold material a hand crafted like quality. The resulting contemporary work easily sits in many different interiors. They have worked with interior designers on many commercial projects such as the Exchange Hotel, Balmain, Sydney and the Eastern Hotel, Bondi, Sydney. Their products have won national awards, and been exhibited and published widely both locally and internationally.

ANDREW MACKLIN

Andrew is an architect, artist and philosopher teaching architectural design, drawing, painting and model making at the Faculty of Built Environment at The University of New South Wales. He currently teaches organic architecture which involves making highly material models. This is influenced by readings in phenomenology (e.g. Martin Heidegger or Maurice Merleau-Ponty) and theories of materiality and hapticity in architecture and design which stress our bodily, physical and sensual engagement with the world. An important ethical component of Andrew's design teaching is exploring human-architecture-nature relationships through eco-philosophy and in particular eco-phenomenology which stresses architecture-nature mutuality. Paradoxically, Andrew is exploring the opposite aesthetic to organic design, the hyper-reality of sci-fi environments which create hermetically sealed three-dimensional spherical worlds of seamless minimalist surfaces, a purely human-mirrored aesthetic without any reference to nature.

AINSLIE MURRAY

Ainslie Murray is an artist, architect and academic currently lecturing in the Architecture Program at The University of New South Wales. She is fond of interdisciplinary adventures, and increasingly occupying the margins between art and architecture in her practice-led research. She is interested in contemporary spatial arts and forms of invisible architecture created through human movement. Her work is predominantly painting and textile-based; she makes intricate stitched paintings that trace the extended occupation of space through the mapping of human gesture. Ainslie is currently working on a PhD in Visual Art, examining the relationship between repetitious gesture and spatial production.

BILL MACMAHON + MATTHEW JOHNSON

Bill MacMahon and Matthew Johnson have shared a friendship for over twenty-five years. Matthew Johnson is an eminent artist best known for his paintings featuring optically vibrant grounds. Bill MacMahon is an architect and academic in the Interior Architecture Program of the Faculty of the Built Environment at The University of New South Wales. Matthew and Bill have collaborated on projects for approximately ten years on works such as the Yellow House, Sydney and the Glenroy Community Centre (with MGS architects) in Victoria. Bill has a research interest in architect/artist collaborations and in the use of projection and light in an urban setting. Matthew continues to pursue his international career as a painter while pursuing a growing demand for his architectural interventions.

THOMAS LOVEDAY

Tom Loveday studied architecture at the Louis Laybourne Smith School of Architecture, South Australian Institute of Technology, now the University of South Australia, from 1981-1985 and registered to practice as an architect in 1986. After graduating in architecture, Tom studied art practice at the South Australian School of Art, North Adelaide Campus, in 1986 as well as teaching in architecture at the University of Adelaide.

After working at several architectural practices until the early 1990s as well as teaching architecture, now at University of South Australia, Tom moved to Sydney, to teach interior design at the University of Technology, Sydney. In 1997, he taught drawing at Sydney College of the Arts, University of Sydney and in the following year, began a Master of Visual Arts (MVA), graduating in 2000. In 2002, Tom began working towards a PhD in theories of art practice with a focus on painting, graduating in 2006. The title of Tom's PhD thesis is *The Darkened Room, Painting as the Image of Thought*, with a painting series titled, *The Planets*.

In 2003 Tom moved from UTS to The University of New South Wales in order to pursue research interests, especially in creative art and design practice as well as research in theoretical aspects of design. Tom continues to be a regular exhibitor of paintings and other artwork and has pursued research and other activities across of number of disciplines.

Tom Loveday currently teaches Interior Architecture Theory and Design Studio courses and supervises thesis students, is Year 4 (graduation year) Coordinator, for the Interior Architecture Program. As well as undergraduate teaching, Tom Loveday also supervises postgraduate research students.

He is a member of Faculty of the Built Environment (FBE) Research Management Committee + Chair, Editorial Committee for FBE be magazine and co-director of the Design Research Group.

Tom currently has several major publishing projects this year, including commercial publication of his PhD, a text theorising interior architecture and a theoretical explanation of architecture using Nietzschean philosophy.

ANN QUINLAN + OYA DEMIRBILEK IN ASSOCIATION WITH MICHAEL YIP AND RIDO PIN

Ann Quinlan (BSc Arch. B.Arch. MHEd. UNSW) is joint director of the Faculty of the Built Environment (FBE) Design Research Group at The University of New South Wales (UNSW). Ann deploys a practitioner-led action-based research practice. Informed by Boyer's (1990) model of interaction between the Scholarships of Teaching, Application and Integration this approach is enhanced by deliberate interdisciplinary collaborations with FBE colleagues. An Architect and Senior Lecturer in the Architecture Program, Ann engages in a student centred, inquiry-based approach to architectural design, learning and teaching. An initiator and mentor of numerous FBE exhibitions, Ann is the recipient of a Deans Teaching Award, UNSW Learning and Teaching Awards and a recently completed UNSW Universitas U21 Fellowship award.

Oya Demirbilek (BID and MSc Blg Sc METU; PhD Bilkent; PhD Marmara University) is Program Head for Industrial Design, Faculty of the Built Environment at The University of New South Wales. Her professional experience includes appointments as instructor in product design, Art Centre College of Design (Europe); freelance designer for ceramic products, Hardegger Handels, Bern/Switzerland; Research Assistant, Lecturer and Assistant Professor in Industrial Design at the Middle East Technical University, Ankara, Turkey; Adjunct Lecturer, Lecturer and Senior Lecturer in Industrial Design, Faculty of the Built Environment, UNSW. Her current research interests include universal design, participatory and collaborative design, design for aging populations, and emotional responses to products.

Michael Yip (B.Arch, UNSW) is a lecturer in Advanced Visualization at the Faculty of the Built Environment and an Architect and Associate at PTW Architects. He has extensive experience in architectural competition projects of various scales, ranging from interior design to urban design and development. He has a sustainable focus in various building types, including mixed-use, residential, commercial and TV studio. He promotes intuitive learning with digital tools and encourages students to explore experimental processes in conceptual development. His expertise is in design, production and training of three dimensional narratives, non-linear spatial interpretations and installations.

Rido Pin (BSc Arch, MSc Architecture & MSc Building Technology TU Delft, The Netherlands) is a young and recently graduated architect currently working at PTW Architects in Sydney. His interests lie in conceptual derived architecture and the structural complexity of double curved surfaces within design. The three-dimensional software used to research this has guided his interest towards the field of film editing and 3d animation. Assisting Michael Yip on a conceptual level within Film and Animation at UNSW allows him to further explore his ideas and interests.

TACTILE IMAGINATION
DESIGN RESEARCH PROCESSES
24 May – 30 June

Exhibition curator: Tom Loveday

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DESI**GN RE**S**EARCH 07**

**IVAN
DOUGHERTY
GALLERY**

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