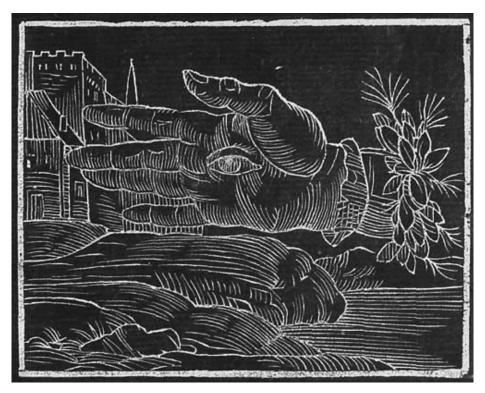
The Traction of Drawing

2009 Interstices Under Construction Symposium



Manus Occulata in Andrea Alciato (1546) Emblematum libellus, Venice (negative)

Interstices Under Construction: "The Traction of Drawing" is jointly organised by the School of Architecture and Planning, The University of Auckland and the School of Art and Design, AUT University (Tina Engels-Schwarzpaul and Ross Jenner).



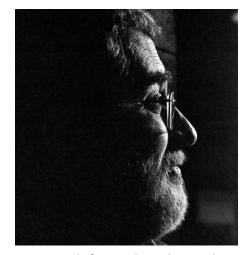


The Traction of Drawing

Why raise the issue of drawing again? With the proliferation and maturation of digital technologies, what is the use of the hand and the traces it makes on clay, stone, wood or paper? This symposium seeks to examine the technologies of drawing – their marks, lines, scratches, furrows, incisions, touches, dots and dashes, inscriptions, string lines, stains and blotches; pencilled, inked, chalked, brushed, illuminated or erased on diverse grounds.

What is made in acts of drawing comes into being through the sapience of a facture, not through Cartesian processes of mathème. Conceived thus, drawing is based on an intimate knowledge of material manifestations. Tangible lines become carriers of fluid and invisible links that guide intangible thought. Pulling in pieces of geometry, geology, philosophy, politics, biography, biology, mythology, and philology from alien fields, one should write and draw with hesitation, discovering the multiple aspects of graphesis, a generative graphic process understood in its slow making. The fruitful vagueness of graphesis comes from the line's ambiguity. Lines are heuristic devices, as a line of writing, a line in a drawing, or the pulling of a line on a construction site. Architecture results from their miscegenation: images are written and words are drafted; cultural events and material expressions cross. Graphesis is a course of actions, factures which actualize future and past.

The ink's luminosity, graphite's fatness, watercolour's lightness, tempera's density, the screen's pixellation, the flexibility or rigidity of supports ... readers of the drawings indirectly see and savour them all. They foster "inferences from facture". To consider an artefact in terms of its facture is to consider



it as a record of its own having been made. "The Traction of Drawing" will examine the technologies of drawing and how they exteriorise the mind and emotions, makes present the invisible. How they forecast, predict and aim at a destination. How drawing throws itself forward in orthogonal or oblique lines; how it severs, as in sections and plans. How it seeks enactment and how it translates: from drawing to building and building to drawing.

The keynote address by Prof. Marco Frascari (Carleton University, Ottawa), "Drawing: The Sapience of Facture and the Neurological Paradigm", draws on his latest book, a study of the interface between traditional drawing experiences and contemporary digital expertise during the conception of buildings.

Assoc. Prof. Laurence Simmons' (The University of Auckland) keynote address "Drawing has always been more than drawing" will investigate the Italian artist Valerio Adami's rendering of Jacques Derrida's texts.

Friday 13 November

Design Theatre, Conference Centre The University of Auckland

4:00 - 4:30 pm Opening Address

Jenny Dixon

Dean of NICAI, The University of Auckland

Patrick Clifford

President Elect of the New Zealand Institute

of Architects

4:30 - 6:00 pm Drawing Practice Today

with Jessica Barter, Pip Cheshire, Patrick Clif-

ford, Lynda Simmons, Simon Twose

Chair: Fleur Palmer

6:00 - 6:45 pm Drinks & Launch:

Interstices I 0: On Adam's House in the Pacific

Introduction to

6:45 - 7:00 pm Professor Marco Frascari

Ross Jenner

Drawing: The Sapience of Facture

7:00 - 8:00 pm and the Neurological Paradigm

Marco Frascari

8:30 pm Dinner

Vivace Restaurant, Level 1, 50 High Street,

Auckland

Saturday 14 November

Design Theatre, Conference Centre The University of Auckland

9:00 - 10:30 am Presenting | Making Visible

I. Drawing Imagination and the Imagination

of Drawing Federica Goffi

2. Seeing In Section Shelley F. Martin

3. Summoning Daena

Stephen Loo

10:30 - 11:00 am Morning Tea

11:00 - 12:30 pm Mediation | Intersection

I. "To Keep the Clay Moist"

Ross Jenner

Takohi

'Okusitino Māhina

3.Tatau

Sēmisi F. Potauaine

12:30 - 1:30 pm Lunch

at the Conference Centre

Saturday 14 November

Design Theatre, Conference Centre The University of Auckland

1:30 - 3:00 pm Enactment | Translation

I. Against Drawing Albert L. Refiti

2. Previous Enrolments
Carl Douglas

3. a priori / a posteriori Michael Milojevic

3:00 - 3:30 pm Afternoon Tea

3:30 - 5:00 pm Exteriorisation | Representation

1. Scale as the Representation of an Idea Susan Hedges

2.Architectural Drawings Do Not Represent Anything Mike Linzey

3. Drawing Distinctions Linda Tyler

5:00 - 6:00 pm Drinks

"Drawing has always been more than drawing":

6:00 - 7:00 pm Derrida and disegno

Laurence Simmons

7:30 pm Dinner

at O' Sarracino, 3-5 Mount Eden Road,

Auckland

Saturday 14 November

Planning 619, School of Architecture and Planning, The University of Auckland

3:30 - 5:00 pm Graphesis | Facture

I. Drawing the *Haunting*Philippe Campays & Stephanie Liddicoat

2. Blank Sheet: The pristine Sou Muy Ly

3. The Limitless Field Katica Pedisic

Sunday 15 November

Design Theatre, Conference Centre The University of Auckland

10:00 - 11:30 am

Techniques | Technologies

- I. Folded Space Andrew Barrie
- 2. Maintaining the Abstract Critical Facility Michael Davis
- 3. Diagnostic Imagings and Invisibilities Christine McCarthy

ALR5, School of Architecture and Planning The University of Auckland

10:00 - 11:30 am

Miscegenation | Migration

- I. Entrails
 Michael Chapman
- 2. Scratches in Space-Time Kate Linzey
- 3. Fixed: Techniques of drawing Deborah Cain

Design Theatre, Conference Centre The University of Auckland

11:30 am

Concluding Comments Marco Frascari

12:30 - 1:30 pm

Lunch

Yum Cha at Dynasty Chinese Restaurant 57-59 Wakefield Street, Auckland

Folded Space

Andrew Barrie

In Edo period Japan (1603-1868), construction was carried out by family-based carpentry workshops. Building design was determined more by conventions and practical constraints than by the arbitrary design intentions of the carpenter. These conventions were embodied in the *kiwari* systems of proportions and modules that guided traditional practice and a practiced builder could visualize and construct an entire building using a just a diagrammatic plan and his measuring tools; detailed architectural drawings were not necessary.

The ruling elite, however, created certain building types for which the predetermined patterns were set aside and innovation was encouraged, notably those built in the sukiya style. The most important influence on sukiya architecture was the teahouse. These small spaces were intended to create a heightened sense of awareness in their occupants, and their design and construction demanded intense consideration and attention to detail. In order to consider and communicate such detailed design intentions, a new type of drawing emerged.

Okoshi-ezu—literally "folding drawing"—were models made from sheets of paper cut to the shape of walls fixed onto a detailed plan drawing. Holes were cut into the walls for windows and openings, and minor elements such as shutters, raised floors, and steps were sometimes fixed into place on the walls. Drawn onto both sides of the paper walls were the various elements of the room—structural members, windows, shelves, fittings, wall surfaces and the like. Stored flat, the models were erected by folding the walls up and fixing them into place

with tabs and slots. This resulting representation is at once a three-dimensional drawing and a collapsible, portable model.

This paper will trace the development of the *okoshi-ezu* technique, and examine its particular representational qualities, and use these as the basis for a reading of certain streams of development in contemporary architecture.

Andrew Barrie is an Auckland-based practitioner and Professor at The University of Auckland School of Architecture and Planning. After completing doctoral studies at Tokyo University in 2002, he spent several years working at Toyo Ito & Associates. On returning to New Zealand, he worked at Cheshire Architects in Auckland, and is a regular contributor to architecture and design journals. He has authored two books on the work of Toyo Ito.

Fixed: Techniques of drawing on skin, and other surfaces

Deborah Cain

The focus of this paper will be two artists who have used the process of tattooing as a way of engaging with diverse notions of mark making and its documentation. Specifically, Lisa Benson's Twenty Minute Spin (DVD, 2006) will be juxtaposed with the digital presentations of Tagny Duff's Living Viral Tattoos (2008) and her Cryobook Archives (2009). Both these artists provide opportunities to consider the techniques of drawing on bodies as vectors of information, and involve issues of technology and sculpture, of staining skin, and its display. While Duff's initial production was located in the bio-technology laboratory and Benson's work was done in the art gallery under tattoo-parlour conditions, both are mediated by their complicit forms of exhibition, incorporating performative aspects that include shifts in space and viewing.

Benson's work allows us to follow the rhythm of the tattooist marking the white line on a body part and mesmerizes the viewer into spending time watching the DVD film footage. In contrast with this, Duff's work with living tissue involves bio-technologies and the imprintation of viral cells. Looking at such work in its digital form is different to 'being-there' in the presence of pathogens as when Duff moves from the lab to the exhibition space. Whereas, the sterile environment of the tattooist is temporarily moved to the gallery for the making of Benson's *Twenty Minute Spin*.

Rather than technologies of digital manipulation, both these art works concern the archival format for their imaging, but are different in their temporal outcomes. And,

although fixed at a point in their production on skin, they are differently prone to the natural elements of fading and decay. The relations of skin, technique, and tattoo, to further conceptual ideas about dermagrapisms are a key part of my discussion.

Deborah Cain teaches in Foundation Studies at the University of Waikato. She was awarded her doctorate in Art History by The University of Auckland in 2007, for a thesis titled Semiotics of Self: Reflections on the Work of Louise Bourgeois. She has published articles in Third Text, SITES, Art New Zealand, and other locations, and has produced an experimental video on the artistic and poetic work of John Pule.

Drawing the Haunting

Philippe Campays & Stephanie Liddicoat

Haunted spaces can be defined as places that hold high emotive content. This paper argues that the process of drawing the invisible conditions of architectural space, such as air, temperature and moisture, can be employed as a strategy to develop knowledge about the concept of mood. This paper examines one project of visual representation of mood determinants in the haunted space. In this exploration, the creation of visual images engages the viewer in the experience of the haunting itself. This then promotes a greater understanding of such phenomena. Overall, the project's intention is to find ways of mapping, decoding and eventually translating scientifically collected environmental data acquired from this 'spirit of place' into architectural representation.

Initial findings from this interdisciplinary project link the concept of mood and ghost to emotion, interiority of body and space and to the notion of time. This relationship then becomes central to the representational investigation of the embodied emotional experience in the haunted space. The project generated representations of the surveyed haunted environment as an experiential system. Multiple screenshots were projected to transport the viewer to the different sites and time frames where emotional conveyance was reflected by solidity of form. Metric data governed the solidity of the geometry. As a result of this process, an aura of the represented space appeared. The authenticity of the aura oscillated between an archaic form resulting from a subconscious process and a designed spectacle.

The power of drawing aesthetics on the emotional experience that it can trigger is an issue raised in the abstract expressionist tradition. In this project, the drawing, originally a tool of interpretation and understanding of mood in the domain of ghost, appeared itself as a representational artifact. It became the embodied haunting, objectified. This project therefore questions whether the viewer's experience of visual images can lead to the experience of the haunting itself.

Philippe Campays received his architectural education in Paris at the Ecole Speciale d'Architecture. In 2001 he was awarded a Masters degree by thesis from The University of Auckland. He is currently lecturer at the School of Architecture at Victoria University of Wellington. Philippe has lectured in Paris, Auckland and Wellington and has practiced architecture in Burundi, Africa, throughout the South Pacific, Australia and New Zealand.

Entrails: Drawing and architectural space in the transgressive experiments of Dada Michael Chapman

George Baker argues that the well-known Dada experiments with drawing were conscious and deliberate movements away from the medium of drawing; an attempt, in the work of Francis Picabia in particular, to escape the confines and values attached and specific to the medium of drawing. There is a fascination, to the point of obsession, with architectural space in the drawings of the Dada movement: from the crude scratchings on the walls of the Cabaret Voltaire to the projected shadows and tracery of Duchamp's Large Glass, architectural space serves as the primary canvas through which Dada experiments with space were explored and articulated. In the Dada forays into drawing, the line no longer resides passively on the edges of architectural space but assumes an instrumental role in shaping and conditioning it.

Baker associated Dada practices with a "libidinisation" of the act of drawing which provided a framework through which desire was integrated into artistic production. As part of the recent re-evaluation of the influence of the historical avant-garde (and in particular the transgressive avant-gardes of Dada and Surrealism), the relationship between space and drawing in Dada provides an important bridge that connects these practices with architectural space and a broader discourse about spatial representation.

This paper will look at drawings and processes of three artists from the Dada movement and demonstrate the importance of architectural space to their radical approaches to line and drawing. Focussing on selected works by Max Ernst, Francis Picabia and Marcel Duchamp, the paper will demonstrate how space functions as a 3-dimensional

canvas through which the medium of drawing is transgressed. In each case architectural drawing techniques, as well as the specific foreshadowing of architectural space, provides a framework for interpretation and integration within the broader history of architecture.

Michael Chapman is a Lecturer at the University of Newcastle where he teaches architectural design, history, theory and research methods. He is currently finishing his PhD in architecture concerned with the relationship between surrealism and architectural theory. His research has been published in journals such as ARQ, Architectural Science Review and Form/Work and has been presented at conferences nationally and internationally. Together with Michael Ostwald and Chris Tucker he is the author of Residue: Architecture as a Condition of Loss, which was published by the RMIT Press in 2007.

Maintaining the Abstract Critical Facility in Post-digital Drawing Practice Michael Davis

While drawing exists at the core of postdigital architectural design practices, it does so in a significantly altered state relative to pre-digital disciplinary understandings. This situation presents the imperative of scholarly discussion, an imperative compounded by the need to bring balance to the weight of technical hype that has shrouded digital media. This paper seeks to address the problem of how to maintain the abstract critical facility of drawing in a post-digital design environment - a space containing a plethora of devices geared toward the 'efficient' production of images. What is drawing in this environment both in an abstract sense and as an instrument?

The paper will argue that post-digital drawing practice operates across an expanding range of techniques and media in increasingly fluid relationships. The craft of drawing has shifted from protracted accumulation in a single medium to the quick production of multiple entities through multiple media. Mastery in this model of post-digital design practice has to do with the application of multiple tools, each producing fewer effects, and (perhaps more significantly) the management of the relationships between tools and effects. It is these relationships that facilitate the shifting of design entities between media, and it is the nature of these shifts which propel the development of design as much as the focused crafting of any individual entity.

Stan Allen presents post-digital designers with imperatives to be critical of their technique, and to maintain the abstract qualities of drawing. This paper will argue that the critical application of the expanded range of techniques and media facilitates

greater levels of control and awareness of abstraction in drawing practice. The argument will be demonstrated through a drawn case study project for a new industrial complex for Ecostore, a producer of environmentally sound household products, on a brown field site in Avondale. Auckland.

Michael Davis is a registered architect and lecturer at the School of Architecture and Planning, The University of Auckland, where he teaches architectural design and architectural media. His research focuses upon the instrumentality of media in relation to generative design techniques. He holds a Master of Architecture from the Architectural Association's Design Research Laboratory, London. He is currently undertaking PhD studies at RMIT. Melbourne, Australia.

Previous Enrolments: Drawing as collective formation

Carl Douglas

This paper presents a close reading of a drawing by Preston Scott Cohen, Rectilinear Spiraculate (1998), and a drawing by Enric Miralles of his Apartment Calle Mercaders (1995). The two drawings are characterised by their crowdedness. In each case the drawings are densely packed with lines. Projection planes are fragmented: elements of Miralles's plan are elevated in place, while Cohen's nominally perspectival drawing is a mess of vanishing points and picture planes.

Analysis of these drawings will explore the proposition that architectural drawing can be analysed as a collective formation, in the sense derived from sociologist Gabriel Tarde, who, in *Monadologie et sociologie*, wrote of collective formations like crowds that individual elements, "soldiers of those various regiments, provisional incarnations of their laws ... escape from the world they constitute". Tarde describes individual elements as always having "other leanings, other instincts coming from previous enrolments".

Lines, marks or gaps may be enrolled into figures, but this enrolment does not exhaust them. They are unruly, they compete and collaborate, have other allegiances, enrolments, potentials. Bruno Latour argues that acting is not an exclusively human capacity. A glass 'holds' water, a balustrade 'prevents' falling, a line on a page 'divides' it—and saying so is not merely engaging in anthropomorphic metaphor. According to Latour, describing any state of affairs is tracing a network of interactions between actors. A drawing, then, could be understood as an active, intensive field of interacting actors rather than a static transcription of thoughts residing elsewhere.

A drawing, according to Cohen, is a scene for calculating and resolving contingencies. Cohen's and Miralles's drawings will be examined for the traces of this contingency and unruliness which expose the drawing as a crowd of active participants.

Carl Douglas is a Lecturer in Spatial Design at the School of Art and Design, AUT University, where he teaches spatial theory and studio (concerned with the intersections of architecture, interior, landscape, infrastructure, and urbanism). Recent research has addressed the Parisian barricades of the nineteenth century; theorised lateness; and explored the spatiality of archaeological sites.

Drawing Imagination and the Imagination of Drawing: The role of ambiguity and the unfinished Federica Goffi

It is a mistake to believe in photo renderings as the best way of accessing a building. It is possible to enter a building through ambiguous imagery and unfinished representation, experiencing a kind of real *transitus* that religious icons allow. Tiberio Alfarano's 1571 hybrid-drawing of St. Peter's Basilica in the Vatican, combining traditional architectural drawing with decoupage and representation techniques typical of icon paintings, goes well beyond representing a one-time likeness, providing a metaphysical gate into this building.

He draws a plan as transparent veil, exploiting the ambiguity of metaphoric transparency. The ichnography allows 'multiple readings', detecting literal and metaphorical presence of a building within another building and is a 'track-drawing', providing memory traces on the 'drawing-site'. Through unique colour renderings the ichnography makes the passage of time visible, revealing different time-layers, and the meaning of drawing as unfinished palimpsest in-the-making. The significance of colour in Alfarano's drawing has never been discussed in scholarly literature. By blocking out the element of colour, scholars have focused on one predominant element, i.e. geometric form, thus eluding the question of iconographic significance. Alfarano factured a bi-stable image, revealing the presence of Old St. Peter's within the new. The ambiguous reading of two plans forms a 'double-image' enhanced by colours, which facilitate switching the reading, making the viewer an active participant.

Currently the practice of conservation — once a form of invention and imagination where memory was not simply an archive for posterity, but was always in-the-making — has

turned conservation into a form of 'still-preservation'. Alfarano interpreted drawing as a window through time, allowing insight into the 'multi-temporal' dimension of architecture, experienced as memory of the past and revealer of future presence. This offers the possibility to critically reassess architectural conservation in present practice as a form of invention and imagination.

Federica Goffi is Assistant Professor, Azrieli School of Architecture and Urbanism, Carleton University. Her research concerns relationship between music and architecture; technologies of wood construction; researching material imagination and representation; restoration of historic timber structures; restoration and rehabilitation projects.

Scale As the Representation of an Idea, the Dream of Architecture and the Unravelling of a Surface Susan Hedges

Scaled drawings can demonstrate an architectural idea, when the architect attempts to fix fragmented dreams in logical sequences, building understanding step by step. In a system of scaled logic, eventually the nature of forms that are too complex to be seen at a single glance becomes clear. The scaled drawn detail becomes an act of clarification, of unravelling, a visualization of the imagined. In his book Invisible Cities, Calvino's version of scaling relies on procedures of partial seeing, scoping, rescaling and extending. A single work can appear at once assured and ordinary, or near and yet strangely remote, it may affect vast areas, yet simultaneously seem in danger of disappearing. A drawn detail can be at a miniscule scale or at a 1:1 detail. the dimensions of a future building. Focusing on a single object may change the sense of scale and require imaginative scale shifting to show the relationship between the drawn and its link to ideas. Scale also invites the inhabitation of a drawing, the anticipation of occupation.

Architectural drawings are considered as a medium of thought and can be understood as a primary clue to thought processes and ideas. The drawn is a tangible speculation that experiments with scale as the labour of the hand and eye attempts to bring dreams into the built world. Scale, it is argued, is the representation of a dream and the complicating of a surface with which architecture comes into being. The drawing not only presents ideas of architectures past but also represents them through the un-built. This paper attends to the drawing archive of The Auckland University for Smith and Caughey

Department Store (1927) and, in particular, two drawings of the elevations to the department store.

Susan Hedges is a PhD candidate at the School of Architecture and Planning, The University of Auckland. The thesis will address the notion of the narrative through a close study of preliminary and finished drawings focusing on issues of detail in relationship to wider spatial conditions in the drawings. Susan lectures in Interior Design at the Department of Design + Visual Arts, Faculty of Creative Industries + Business, UNITEC.

"To Keep the Clay Moist": Drawing as possibility

Ross Jenner

Jean-Luc Nancy has recently posited that "drawing is the opening of form". It is, he argues, an opening in two senses: opening as a departure, origin, start, burst or raising, and opening as availability or capacity itself. According to the first direction, it evokes more the gesture of drawing than the traced figure; according to the second, it indicates an essential in-completion, a non-closure or non-totalisation of form. Either way, the word 'drawing' keeps in itself a dynamic, energetic and inchoate value. The words 'painting' or 'film' or 'cinema', for example, he notes, do not. Words like 'music', 'dance' and 'song', by contrast, are closer to this dynamic or potential value. In drawing, act and power are mixed. The sense of the act, the state, or thing under consideration cannot be entirely detached from the sense of gesture, movement, becoming: form in a state of formation and form forming. Yet in the word 'drawing', and perhaps even more, that of 'sketching', there is an essential suspense of completed reality designated. Mallarmé, Valéry (and even Ruskin) had probably already expressed as much in their theorisation of drawing.

With this in mind, we will examine works from two periods. First, the Italian Rationalist exhibitions and installations, the *allestimenti* (a word which itself implies form 'suspended between construction and representation', a 'preparation for an event', an ephemeral process) of Albini and Persico, where a state of potentiality is evoked in the guise of 'building-drawings'. These installations take on the characteristics of drawings, retaining a sense of incompletion and form-in-process. Secondly, the work of Alvaro Siza, a master sketcher, who says about his designs that "one

must, like a sculptor, keep the clay moist". Such potentiality, it is suggested, may in fact be a *Pathosformel* of modernity.

Ross Jenner is Deputy Head (Research & Postgraduate) at the School of Architecture and Planning, The University of Auckland, and occasionally practises. He has a MS and PhD from the University of Pennsylvania under the supervision of Joseph Rykwert and Marco Frascari. He has worked in Europe, taught at various institutions in Australia and the U.S. and was Commissioner for the New Zealand Section of the XIX Triennale di Milano. He has chapters in various books (published by, for example, Routledge and Electa) and journals, including The Journal of Architecture, Lotus, Transition, Architecture Australia and Interstices, which he co-founded in 1990.

Scratches In Space-Time: Len Lye's 'Free Radicals' and Temple Art Kate Linzey

'Particles in Space' (1978) and 'Free Radicals' (1958/1978) are animations created by scratching directly into 16mm Du Pont leader tape. Starting with the exposed and processed film, which carried no images or frame registration, Len Lye made lightning white marks, to dance and vibrate through black space. One effect of the primitive hand animation, where each frame is individually and uniquely formed, is a juddering movement evocative of Lye's own description of atoms: "The facts of physical reality... nothing whatever exists at bottom in static form,... the identity of all forms and entities... is held together by countless electrons in motion."

Despite significant success, Lye announced later that he was 'going on strike' from film making; an expression of his frustration with the conservative American film industry. Behind this public declaration, however, Lye's focus may already have shifted to making 'tangible motion sculpture' as, by 1961, the Museum of Modern Art in New York was able to host a solo 'performance' of several of Lye's kinetic objects. He came to conceive of these at a massive scale, either mounted on the facades of buildings, as dry fountains in civic squares, or assembled in parks.

This paper will ask of Lye's work: what is the particular relationship between the scratched lines of his film and the wild materiality of his sculpture? An architectural perspective will be brought to his work arguing that the scratch films were actually studies for Art Mecca architecture. As architectural drawings these scratches can be seen delineating enclosures, creating the potential for occupation, and describing relationships between the enduring/static/inanimate of

architecture and the transient /mobile/living which inhabits it. Lastly, as architectural drawings these animations will be shown to fail, that is, to not-be the Art Mecca they preceded, nor, alternatively, to be merely complete as art-films.

Kate Linzey is currently undertaking PhD study with at the University of Queensland. Her PhD topic explores the architectural implications of kinetic parks designed by Len Lye (1901-1980) between 1958 and 1970. She is teaching in the Centre for Creative Technologies, Weltec (Wellington, New Zealand).

Architectural Drawings Do Not Represent Anything

Michael Linzey

It is not uncommon that an architect's drawing reveals unexpected consequences; a new idea comes to light in a drawing which had previously been unintended. Drawings can take on a life of their own just as characters in a novel are sometimes said to lead a novelist into unexpected plot developments. Drawings do not re-present ideas, since the subjective ideas have not yet been presented to the world in any other medium. Drawings present objective ideas (along with possible future implications) to the world for the first time.

The paper argues that drawings are what Heidegger called the being of an architectural experience, the horizon, the boundary, the delineation which bring meaning into presence in time, for the first time. Vitruvius was more sanguine: he said that drawings are the ideas of an architectural discourse. Vitruvius conceived of architectural ideas as drawn objects in a Popperian sense rather than representable subjective entities in a Cartesian sense. According to Karl Popper, architectural drawings are objective products of the kind of human experience that we call architecture; architectural drawings either are or contain objective knowledge. But ever since Descartes we have been persuaded that ideas are equivalent to subjective thoughts, they exist only as the contents of some mind. Provisionally, therefore, we have to posit two possible kinds of ideal entity: subjective ideas as usually understood in the humanist tradition, and post-humanist (Popperian and Heideggerian) objective ideas.

For Martin Heidegger, the kinds of aesthetic experiences that he called thinking are inescapably in the world, linked with

(and simultaneous with) dwelling. The paper discusses a hypothetical set of drawings that Iktinos may have prepared for the Parthenon and presented for the first time to Pheidias. When a discourse about temples, gods, earth and truth is located in the time of the drawing, Heidegger's existentialist poiesis is shown to be integral with Popper's view of objective knowledge.

Michael Linzey is a senior lecturer at the School of Architecture and Planning, The University of Auckland. He has been engaged in aesthetic theory since midway through his PhD at Melbourne University. From 1979, he applied aesthetic theories to Māori and Polynesian architectural forms and developed an interest in the cultural philosophy of Korean traditional architecture and Japanese Medieval teahouse architecture. Since about 2000, a succession of papers dealt with the classical roots of aesthetic theory in Greek and Roman architecture.

Summoning Daena: Drawing the parallel

Stephen Loo

To draw is at once productive of lines, replete with potentiality, which call into visibility that which is to-come. This sense of drawing is more often than not romanticised as the stroke(s) of genius that summons the material world and incarnates the spirit to form a continuous landscape of possibilities. The persistence of this sense of drawing means its corollary sense as incision, a cut in the sense of starting into something, is symptomatically forgotten. In fact, drawing is etymologically related to traction, a movement or passage that is perhaps violent as it involves a wresting or tearing away (as in to draw-out or to draw blood).

It is argued that such an incision is however not an intersection but the delineating diagram is the parallel, and Heidegger's image is the furrow. Drawing is an incision by which a non-dialectical separation between two conditions (for Heidegger they are thinking and poetry) is set out and the drawing can only draw itself, is itself, as it performs this demarcation. This paper outlines the implications of the parallel as the diagram of drawing in the aphoristic works of the Italian Rationalist Massimo Scolari. In Scolari's drawings, the parallelism of instrumental and imaginative universals de-monstrates what Marco Frascari sees as the "transmutation of angles into angels".

To attempt the study, this paper performs a close reading Giorgio Agamben's concept of 'genius' as an impersonal but inseparable pre-individual component to being human. Drawing work is not the human soul bearing witness to genius, but is performed in order to become impersonal. To Agamben, genius is

not in the image of Christian guardian angels (one good and the other evil) but the Iranian angel Daena, the heavenly archetype in whose likeness the individual has been created, but whose face changes with the individual's every gesture, word, and thought.

Stephen Loo is Associate Professor of Architectural Design, School of Architecture, University of Tasmania. His research is located at the intersections of philosophy, architectural theory, contemporary visual art and experimental digital practice. He has published in *International Journal of Humanities*, *Architectural Theory Review* and *Interstices*. Stephen has practised as an architect in Australia, Malaysia and the South Pacific.

Blank Sheet: The pristine

Sou Muy Ly

There is something about a clean sheet of white paper, the crispness of the white, pure, alien, so completely and absolutely without colour, untouched, precious, uncontaminated, and utterly powerful in its untainted whole. I cannot bring myself to touch it, to press the tip of my pencil against it, or drip that tiny drop of ink on its smooth surface. My fingers, my hands, my body, repelled from it, I stare at it mesmerized. I cannot muster the strength to taint its untarnished surface. There is some invisible force, daring me, challenging my bravery, asking me make that first move, to be the first to breach its deathly whiteness. The blank sheet, white, without touch, asking for my acquaintance. It is too painfully and strangely familiar to be trustworthy.

This paper is a reflection upon this encounter with the white blank page. It is through this blank page in which we explore the pristine in drawing and architecture. This is to be examined through the bodily experiences of both the act of drawing and the act of experiencing that which lacks the human touch.

In order to do so, the essence of pristine is looked at as that which is both 'of something natural' and 'of man-made objects'. Pristine is a condition describing such a 'thing' to be of untouched pure state, and thus suggests that which is characteristic of an earlier time or condition. The pristine is intertwined with complexities of its own, and in depicting the blank page, suggests a convergence of both natural and manufactured.

This paper proposes an understanding of the dialogue between body and pristine, natural and manufactured, corporeal and ce-

rebral, presence and absence. It is an interplay of these paradoxical thoughts, to identify why this mysterious 'act' of 'non-act' plays a role in our everyday material practices.

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Takohi: Drawing in Tongan thinking and practice

Hūfanga 'Okusitino Māhina

The Tongan concept and praxis takohi, translated as drawing will be critiqued in the broader context of the new general $t\bar{a}$ - $v\bar{a}$, time-space theory of art, a derivative of the $t\bar{a}$ - $v\bar{a}$, time-space theory of reality. Philosophically, a general tenet of this theory of reality states that all things, in nature, mind and society, stand in eternal relations of exchange, giving rise to conflict or order. These ever-lasting exchange relations formally and substantially exist in physical, psychological and social terms, such as intersecting lines, opposing ideas and competing human demands.

Art can be generally defined as $t\bar{a}$ - $v\bar{a}$, time-space transformation, where conflicts in the form (fuo) and content (uho) of things are symmetrically arbitrated in the creative process. As a tool of line-space intersection, takohi will be reflected upon, in terms of both its varied abstract and concrete manifestations, with specific examples drawn from across the three divisions of Tongan art, viz., material (tufunga), performance (faiva) and fine (nimamea a) arts.

Both takohi and tatau (the English equivalent of symmetry) are constitutive of temporal and spatial entities, demonstrating that time $(t\bar{a})$ and space $(v\bar{a})$ are indivisible in mind as in reality. The separation of mind from reality, spatio-temporality or four-sided dimensionality amounts to dualism of the rationalist, idealist and relativist sort. However, the term takohi can be generally accounted for as the tempo-marking $(t\bar{a})$ of space $(v\bar{a})$ by means of lines. Specifically, the word takohi points to the rhythmic production of images ('ata) through line-space intersection. The temporal production of images involves the mediation of opposing formal and substantial

tendencies at the interface of line and space. By symmetrically mediating tensions in the creative process, they are spatio-temporally transformed from a condition of crisis (felekeu) to a state of stasis (maau). This sustained state of harmony (potupotutatau) is itself beauty (mālie).

Hūfanga `Okusitino Māhina holds degrees from The University of Auckland and a PhD from The Australian National University. He taught at Tonga's `Atenisi University and Auckland's Massey University before he was appointed at UoA 1994, where he taught Pacific political economy and Pacific arts. Dr Māhina is Founder-Director of Vava`u Academy for Critical Inquiry and Applied Research (VACIAR) where he is Professor of Tongan Studies.

Seeing In Section: The practice of the photogrammatic drawing Shelley F. Martin

Laszlo Moholy Nagy's initial material practice of recording the form of light revealed a surface constructed solely by means of drawing. Nagy was the first to produce the photogram as a "diagram of forces", an act that inscribed tangible and intangible qualities of light, surface, and profile. Sectional records present the instrumentality of light by moving between technical and imaginative states of lines and spatial occupation, continually recording, regulating and propagating material illuminations.

This paper considers the material record of light as a programme for drawing, and examines drawing as a vessel for veridical and non-veridical modes of thought and material inquiry. Moving between Richard Wollheim's "seeing-in" and a type of non- veridical imaginative resurrection of what already may exist, the photogram considered as a basis for drawing understands the sectional projective action. In this photographic space, drawing studies the transformation of the original object, and seeks to materially express both interior and exterior, volume and profile, and to engage construction as a field of inquiry. A new space of drawing is made where light records the consequence of sectional space prior to material existence. This record is not based on technical correspondences, but instead continually constructs and re-constructs an interplay within the picture and the line, the gramma, and the gramme.

Just as principles of photogrammetry mine geometric properties from photographic records and project them as formal gestures, the direct transposition of a three dimensional object onto a surface examines light as a tectonic object, and produces a field

of inquiry rich in spatial consequence. The instrumentality of drawing acts as a carrier to read these consequences through the graphic processes of construction, and the productive nature of drawing acts as a speculative venture that moves the act of drawing from the form of poetry to that of prose.

Shelley F. Martin is Associate Professor in the School of Architecture + Design at Virginia Polytechnic Institute and State University. She teaches architecture studios, theory seminars and an introductory architecture course. She writes on the practices of image making in architecture and produces photographic studies and 16mm films investigating material properties and sectional dimensions of landscapes as propositions of form and shape.

Diagnostic Imagings and Invisibilities: Medicalisations of the architectural section drawing Christine McCarthy

Medical imaging of the architectural section has a long and invasive history situated as analogous to anatomical dissection by writers as diverse as Ackerman, Bloomer, Derrida, Frascari, Tavernor, Wang, Powell and Leatherbarrow, and Roberts and Tomlinson. The architectural section has variously been described as a cut, the "drawing pen ... a knife" (Frascari), and drawing as surgical (Derrida); the building implicitly a body: animal or human.

This paper will re-examine this metaphorical dependence and propose that images made from more recent, and less explicitly invasive medical visioning apparatus: the x-ray, ultrasonography (ultrasound), Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET), challenge the persistance of the sectional discourse within the rhetoric of a simplistic and physical dissectional removal. Bloomer's suggestion, in "Vertex and Vortex," of the section as: "a screen or window for seeing through" is rethought with this examination of the section as a technologically enabled and displaced view of the inside of building.

In contrast to dissection, contemporary medical imaging produces avisual sectioning to extract vision from the physical characteristics of the body, which are instead reinterpreted by VHF sound, radiation, and nuclear magnetic resonances. Vision is thoroughly mediated. Gradations of visibility and invisibility place the viewer to imagine an occupation of the non-spatial materiality of architecture; an experience or anticipation - a pre-occupation - of architectural intimacy.

The paper will consequently argue that, rather than a dissection of an architectural body, the section drawing is a mechanism of the selective, and speculative boundary-making of the visible and the invisible. Equally, the architectural section drawing insists on a more intimate relationship to the human body, rather than proposing the drawn building is a body.

Christine McCarthy teaches interior architecture at the School of Architecture, Victoria University, Wellington, New Zealand.

a priori / a posteriori: Elin and Carmen Corneil's drawings for Vestmannaeyjar and Kashagawigamog Michael Milojevic

The Canadian-Norwegian architects and teachers Elin and Carmen Corneil draw on an exceptionally wide range of formats, materials and techniques enriching their parallel and collaborative transAtlantic practices in Trondheim and Toronto. Their reticence is very noticeable; through drawing they communicate wordlessly. For the Corneils drawing and dislocation are complimentary: they have done eleven competitions from the critical distance of the opposite side of the Atlantic. By drawing at a (critical) distance they take the time and space to respond in such a way as to make sense of their physical dislocation and cultural distinction.

The Corneils' Vestmannaeyjar competition boards [Skjalasafn Bókasafn Vestmannaeyja, Heimay] are an immediately engaging and detailed reading of the status quo of the town's surviving urban fabric following a catastrophic volcanic eruption. For a site the architects had not actually visited their allencompassing urban narrative included: largescale fine-grained geological and archaeological reliefs showing both the land and building as one; abstract charcoal sketches of the new volcanic landscape and surviving structures; superwide fish-eye perspective panoramas of urban vistas; detailed shop drawings for hexagonal street pavers and street light bollards. Stitching modest interventions closely into the damaged urban fabric, indeed by drawing Vestmannaeyjar together as it were, the Corneils submission was a totalising a priori vision.

The McMullen Summer House project record [Corneil Fonds, Canadian Architecture Archive, Calgary] shows the Corneils engaging drawing as both a participatory tool and

as diagrammatic guidelines for play and assembly. Their building store process rejected the traditional role of the architect's documentation of working drawings and specifications. To initiate the process the client was given a set of large plain playing cards to decide the building footprint automatically by throwing them down onto a surveyor's site plan. The builders were left to assemble the building freely working at 1:1, the Corneils asked only occasionally for 'rules' interpretations and 'refereeing' faxes from Norway. Building plans and elevations were only drawn a posteriori for publication.

Michael Milojevic is a Senior Lecturer at the School of Architecture and Planning, The University of Auckland, and specialises in ancient and medieval architecture and the architecture of Canada. He is a regular contributor to the Annual [North American] Byzantine Studies Conference and the annual conferences of the Society for the Study of Architecture in Canada. He has recently curated the travelling exhibition e+c architecture: the work of elin and carmen corneil 1958-2008.

The Limitless Field: We are in the midst of reality responding with joy Katica Pedisic

In light of the increasing uptake of digital technologies in architectural drawing, this paper considers the apparent paradox occurring in certain recent drawing practices. Architects Sotirios Kotoulas and Matthew Shlian and artist Silke Schatz give emphasis in their drawn work to an artificially digital aesthetic and a repetitive work process verging on the mechanistic. Attained, however, not through the use of digitally enacted drawing or digital software, but laboriously by hand. Evoking the precisions and perfection of line found in digital technologies, these architects and artists turn away from the imprecise mark of the hand, towards an exploration that seems to esteem the standardised line-work offered by the digital as drawing tool.

This paper explores these moves in reference to and draws parallels with the drawings of Agnes Martin of the early 1960's to the late 1980's. Martin's drawings are almost exclusively based on the format of a grid. The relationship between Martin's grid drawings and digital architectural drawing emerging at the time are re-examined with reference to Rosalind Krauss' writings on the grid and Helene Cixous' writings on the emotive force of the drawn line. It suggests that the rigidity of such work and its repetitive nature provides a vehicle by which artists and architects can explore the inherent vulnerability and imperfection of the hand and the marks it makes. In Martin's grid drawing, for instance, the marks of her hand emerge almost imperceptibly at the edges, where the grid breaks down and destabilises the framework of the work. Accepting the limitless field, situated in the midst of its reality, Martin makes implicit in

the grid the intimations of human expression in the hand, the inherent gesture of the hand drawing, the delicate sense of frailty.

Katica Pedisic is a registered Architect who has worked as an associate at Con Bastiras Architects in Adelaide. She established her own practice, antidote, in 2008, specialising in small-scale high-end residential and commercial projects with an emphasis on interdisciplinary collaborations, intense research and process-based conceptual, contextual and formal explorations. She has lectured in Architecture at the University of South Australia (2008-9) and is currently undertaking a PhD by project at RMIT.

Tatau:

Symmetry as conflict-mediation of line-space intersection Semisi F. Potavaine

This paper deals with the Tongan concept and practice of *tatau* (symmetry, mirror-image, image, copy, same and equal). My theoretical inquiry into *tatau* revolves around the *tā-vā*, time-space theory of reality, which basically recognises the philosophical fact that all things in reality stand in eternal relations of exchange, giving rise to order or conflict. The theory also takes into account that, by virtue of these never-ending exchange connections, order and conflict are of the same logical order.

Relations of exchange between all things across nature, mind and society are expressed in terms of time $(t\bar{a})$ and space $(v\bar{o})$, on the abstract level, and by way of form (fuo) and content (uho), on the concrete level. The unending exchange relations between things exist by means of intersection, where spatiotemporal, substantial-formal (and functional) conflicts, on both the abstract and concrete levels, are symmetrically reconciled by means of tatau. This state of noa (zero-point), i.e., order, is a counterbalance of equal and opposite forces.

The use of *tatau* as a mediation of conflicts at the crossing point of things applies as much to the colliding objects in nature as to the opposing ideas in mind and competing demands in society. In abstract ways, these contradictory tendencies are expressed at the shifting interface of line (*kohi*) and space (*vā*), such as the mediation of intersecting bodily movements (*vaa`ihaka*) in dance, interlacing tones (*vaa`itā*) in music and conflicting human meanings (*vaa`i`uhinga*) in poetry, on the concrete level. My paper will deal with the intersection of *kohi* and *vā*, line and space,

where the mediation of contradictions are done by means of *tatau* (symmetry). I will critically examine specific instances of *tatau*, such as wringing (*tatau*), hanging (*tautau*), role-modelling ([*faka*] *tatau*) and saying-goodbye (*tatau*), all of which are connected with the mediation of conflicting tendencies.

Semisi Fetokai Potauaine was born and bred in Tonga, in a rich cultural environment, where he had an early exposure by way of "critically lived experience" to a number of Tongan material, performance and fine arts. He left Tonga for New Zealand in pursuit of tertiary education and holds a NDAT diploma in architectural technology from Unitec (2000), BAS and BArch degrees in architectural studies and architecture from The University of Auckland (2007), where he is now an M.Arch student.

Against Drawing: Line-making and the Tufuga guild

Albert L. Refiti

This paper will examine the Samoan builders guild, the Tufuga-fau-fale motto of "leai ni tusiga-ata" - there are to be no drawings - in their opposition to graphic representation as a mode of outlining, conveying and demarcating a building before it can be made. These architects are direct descendants of the progenitor Tagaloa-a-lagi and are therefore considered the companion of the gods (agai o tupu). Drawings as ata or graphic representation were not tools that existed in their craft. This was because graphic representation in Samoan thought came under the category of ata or becoming-shadows, which had an important relationship to light, ancestor worship and their place in the structure of knowledge as predicting a future, therefore it was forbidden to be drawn or 'marked-down'.

If there were a relationship between the Tufuga guild and drawing, it would have to do with line-making: moving lines around by drawing-out and unfolding materiality and form, by hands and feet: a body practice. This type of line-making had little to do with a representative line that predicted an outcome. This type of body practice is a form of graphism. Graphism is bound up with techniques of the body, which is part a memory system that the body makes active by storing them in activities such as storytelling, song and dance. These body performances as mnemonic techniques were crucial in making the body pliable to 'take-on' and shape physical matter. These can still be seen today in the way buildings are made in Samoa and the Pacific.

The paper will also explore the idea that an epiphylogenetic system emerged with the absence of drawing as representation. An exposition of the use and worship of tools by the *Tufuga* guild will be established via a reading of Bernard Stiegler's theory of epiphylogenesis as an external artificial mnemonic apparatus that humans and tools share.

Albert L. Refiti is currently enrolled in a PhD at AUT University, where he is Head of Department in Spatial Design. Apart from working in architecture in Auckland and London, Albert has taught at The University of Auckland, Manukau School of Visual Arts and Unitec School of Architecture. Albert has published his research in a number of books and journals for the last ten years with a focus on Pacific architecture and art.

Drawing Distinctions: Ernst Plischke's line drawings for Design and Living Linda Tyler

Caricature is a term used to describe an exaggeration, a skilfully stretched and intentionally deformed alteration of a familiar form. Plischke's *Design and Living*, a book published under the auspices of the Department of Internal Affairs in 1947 in Wellington used caricature to show how existing New Zealand cities were a pastiche of architectural styles so badly planned as to be beyond remedy. Plischke caricaturing of the moderne plays an important role in the drawings for Design and Living. His caricature deformations rest on the notion of Art Deco as a degradation or perversion of a "healthy" original form, which is his own version of modernism.

A relationship is indicated between the drawings in Design and Living and the work of the popular British humorist Osbert Lancaster whose illustrated books exaggerated the characteristics of different architectural styles for comic effect. The similarities of style and approach are sufficient to suggest that Lancaster's Pillar to Post (1938) and Homes Sweet Homes (1939) offered Plischke a model for reaching a broad audience with recourse to architectural caricature. However, while Lancaster uses line drawing to amuse and entertain, both Design and Living and a second design book published in 1947 D.E. Barry Martin's more prosaically titled Modern Decoration and Furnishing are intended to instruct in good taste.

Plischke set out to celebrate modernist form at its most existential level in his drawings for *Design and Living*. He uses caricature as a medium of expression that is subtle, implicit, connotative and indirect, yet powerful, expressive and emotional. Because of the highly connotative nature of Plischke's

caricatures, their power lies not only in the presence of formal architectural features but also in the subtle argument presented by their absence.

Linda Tyler is Director of the Centre for New Zealand Art Research and Discovery at The University of Auckland. Previously, she was Curator of Pictorial Collections at the Hocken Library at the University of Otago. She is co-editor of a recently published compilation entitled *Treasures of the Hocken Collections*. She now administers The University of Auckland Art Collection (including the former Auckland College of Education Collection).

Drawing the Lines of Theory: Francesco di Giorgio's imagination at work (Poster) Pari Riahi

While the quick spread of digital media has led to an alienation of drawing by hand, understanding the potentials of manual drawing becomes more critical than before. It appears that the change lies in the medium itself (computer vs. hand), but the intentionality and the ultimate use of drawing are also undergoing major changes. The present paper intends to examine the work of Francesco di Giorgio Martini, Renaissance architect and theoretician, who demonstrated a precocious and unique understanding of drawing not only as a medium for representation, but also as a vehicle carrying forward architectural thought and its proliferation. Such an investigation is instructive as Francesco's modes of operation might be relevant to modes of drawing in digital media.

Francesco di Giorgio's main body of work, Trattati di architectura, ingeneria e arte militare, provides the first systematic prototype of an architectural theory wherein drawings are equal to the text. Francesco believes that drawing is an infinitely inventive medium that looks at nature and draws from the mind while fusing past, present, and future. His emphasis on the importance of the reader's active imagination in understanding the drawing indicates an 'embedded' time, dormant and yet actively present, in the body of drawing. Thus drawing becomes an open ended process rather than a fixed one. The most significant feature of Francesco's work is, however, the linkage between theory and practice through drawing. His widely diverse drawings reveal and present notions of architecture that can be accessible only through images. This is what matters most in establishing our rapport with digital media

wherein the predominant trends, focusing on using the media through a specific 'process', have undermined a deeper attachment to a given 'theory' of architecture.

Pari Riahi initiated her architecture studies in Iran, continued in France and eventually moved to Montreal, where she received Bachelor, professional and academic Masters Degrees from McGill University. She is a PhD Candidate at McGill University. She is a registered architect and has been teaching at Rhode Island School of Design since 2007.

The Inter-relationship between Drawing and Film (Poster)

Simon Welch

Drawing and the origins of film are related through the *camera obscura* and the audiovisual field involves drawing in various ways. Most movies are based on storyboards and rely on costume and set design. Thus it could be argued that film is as dependent on drawing as a preparatory tool as painting is.

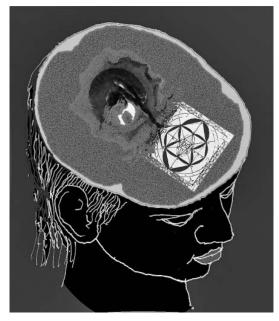
Film is the best medium for recording the activity of drawing. Numerous documentaries have recorded artistic activity and drawing often features in fiction films in which it is employed to important narrative and aesthetic ends. In *The Draughstman's Contract* by Peter Greenaway, the hands of the director are shown drawing sketches of a house and garden which reveal important clues pertaining to the plot.

The relationship between perspectival drawing and cinematic representation is explored in *The Seven Samurai* where ancient Japanese norms of pictorial representation inform the manner in which Kurosawa films various scenes. Drawing plays a major role in the films of Michael Powell such as *A Canterbury Tale*, *I Know Where I'm Going* and *Black Narcissus* whereby the past evoked in drawings is transformed into a cinematic present, facilitating the transition in time and space between scenes. Similarly, a print, in *Last Year in Marienbad* by Resnais, is used to create a *mise en abîme* in that it depicts the setting for the film.

The use of geometric drawing helps to set particular visual themes during the opening credits of various Hitchcock films. Hitchcock began his career as a title card designer and mostly considered the planning/storyboard phase of filmmaking to be the most interesting part of the process.

This conception of film reveals the extent to which Hitchcock's approach to filmmaking was a form of mental drawing process. Using the above examples of issues arising from the interface between drawing and film, my intention is to examine the ontological implications for both media.

Simon Welch lives in Strasbourg, France, where he teaches Video & Cinema Studies at the University of Strasbourg. Having obtained a BA in Fine Art at Liverpool Polytechnic in 1988, he pursued his studies at Strasbourg University where he was awarded a Masters in Visual Art in 1997 and a Doctorate in Arts in 2005. Simon Welch regularly publishes articles and has participated in academic conferences and film and video festivals and exhibitions.



Marco Frascari (2009) Architect as a Neuro-Demiurge

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