After Dark

Architecture and the art of projection in ‘outer space’

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EXEGESIS SUPPORTING A SITE-SPECIFIC INSTALLATION OF PROJECTION
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ABSTRACT

This practice-led inquiry investigates concepts and practices of projection-mapping light images onto architectural façades after dark with a view to discovering specific ways in which this form of public art impacts on, extends or transforms, experience of place.

Spectacular new configurations of the medium have emerged in the 21st century, driven by global economic forces and advances in increasingly powerful digital technologies. In many parts of Australia, large-scale projections on façades of iconic buildings have become virtually de rigueur in significant cultural celebrations and arts festivals. They have, in particular, become the prime focus for a new wave of urban festivals such as Sydney’s Vivid, Melbourne’s White Night, and Enlighten Canberra. Underpinning this emerging cultural scene are complex negotiations between the arts and corporate sponsors, competing agendas for public space, government and commercial interests in ‘urban branding’ for tourism, and corporate marketing. Internationally, this is a new field of creative practice yet to be subjected to research and critical discourse. This study focuses on the Australian context of emerging projection practices.

The term 'lumentecture' serves as a succinct referent to the phenomenon since it draws into equal partnership the ephemeral qualities of image projection and the enduring materiality of a host surface. I introduce lumentecture as a contemporary arts practice with a hybrid cross-disciplinary heritage that encompasses proto- and pre-cinema, experimental arts movements, expanded cinema, and architecture as media façade.

My inquiry follows three inter-related trajectories to probe lumentecture’s significance in 21st century Australian arts and culture contexts. Development of my own practice is grounded in site research and direct responses to place at a particular rural location in northern Tasmania, as well as informed by field studies and online research into lumentecture installations around the country. In tandem with practice, inter-disciplinary reading in contemporary arts, cinema, new media, architecture, history and spatial studies has led to formulation of a set of key elements for reflecting on lumentecture’s distinctive vectors as contemporary spectacle: cartography, milieu, temporality, topology, surface and chorography. This conceptual framework forms a scaffold for discussion of exemplars from field studies and my own practice through the main body of the exegesis.

The outcome of the inquiry is a lumentecture installation on farm buildings at a remote rural site, an ‘outer space’ for working with and against elements of projected spectacle in counterpoint with lumentecture’s prevailing urban-centred spectacular excesses. My larger aim is to contribute some useful coordinates to ongoing conversations between creative practitioners, audiences and critics interested in this fast-changing, intriguing and contentious field of creative expression.
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PART 1: OPENING MATTERS

1.0 The Subject

This practice-led inquiry investigates concepts and practices of projection-mapping light images onto architectural façades after dark with a view to discovering specific ways in which this form of public art impacts on, extends or transforms, experience of place. I proceed via three main strands of activity that inform one another in gradually unfolding the medium’s complexities, diverse expressions and potentials as a contemporary arts practice. These encompass inter-disciplinary historical and theoretical research, study of a range of installations in widely dispersed Australian settings, and development of an installation project in northern Tasmania. In this opening section of the exegesis, I clarify key terms and aims, define the scope of the project, provide a rationale, discuss methodology, and outline a framework for the discussion to come.

The terms ‘architectural projection’ and ‘3D video mapping’ are commonly used to describe the phenomenon of outdoor projection, yet both are problematic. The first is easily confused with its more traditional references to the craft of rendering 2D drawings to represent 3D forms or, more simplistically, to the physical features of a building that extend out beyond the core volume. The second, 3D video mapping, now encompasses an extremely broad spectrum of new media art and design practices dedicated to projection-mapping images onto every conceivable kind of form and surface, inside or outside, from the tiny to the grandiose, and deployed to diverse ends from fine art installations to advertising spectacle. The particular sphere of interest of this thesis is more aptly captured in the improvised term ‘lumentecture.’

German multimedia design collective, Urbanscreen, coined this term to describe their own site-based art and design practice of bringing the material surfaces of an environment into conjunction with projected light images in such a way that both elements are of equal significance in the audience’s experience or encounter with the artwork. The notion of lumentecture is underpinned by the assumption that host structures cannot be seen simply to offer sets of passive surfaces – blank screens – for display of projected imagery, since buildings are already inscribed with complex cultural and political meanings. Fundamental departure points in developing imagery for site-specific lumentecture installations are the conceptual, technical and aesthetic elements of the host structure itself. Lumentecture therefore largely precludes the increasingly popular practice of guerrilla projection or ‘light bombing,’ a form of critical urban

intervention directed to collective repossession of public space and resistance to deployments of outdoor projection as vacuous spectacle.\(^2\) Guerrilla installations may at times express site-specific responses to place but, most often, practitioners simply use buildings and monuments as random surfaces for their signature tags and images. Guerrilla projections are motivated by a desire for more meaningful engagement with the city itself, rather than a response to a particular site.\(^3\)

The challenge for lumentecture artists and designers is to create an ‘aesthetic symbiosis’ between light images and the shape, scale, texture and decorative details of the ‘found’ surface to be illuminated in ways that engage with its inscribed political and socio-cultural meanings. Urbanscreen describe the outcome of this process as sensations generated in a “fluctuating cusp between virtual and real spaces.”\(^4\) Susie Attiwill provides a vivid sense of experiencing this flux in an encounter with Ian de Gruchy’s 1995 \textit{Projections} on the façade of Melbourne’s Exhibition Buildings:

> Traversing in front of a projector, the viewer/passerby’s shadow was thrown onto ground and then onto the building. The Exhibition Buildings read neither as architectural object nor as work of art but as part of a spatial composition in which form became continuous. Rather than separate, isolated, autonomous entities, light and shadow extended and stretched onto various surfaces of subject and object, of figure and ground.\(^5\)

Attiwill’s comment articulates an understanding of lumentecture as an event that occurs within a complex field of forces and relations, highlighting its potentially transformative effects on spatial relations between audience and built environment. Cognisant of the continual flux, degrees of intensity, and differing speeds and effects of the artwork, Attiwill shifts focus away from traditional concepts of art as discrete product and, instead, draws attention to the artwork’s situated, relational and activating qualities. Lumentecture brings ephemeral imagery into dialogue with a host façade, a natural feature, or the larger site itself in order to expose audiences to fresh sensations and interpretations.\(^6\) It can be understood, then, as both a methodology and a creative orientation to outdoor, site-oriented installations in which creative practitioners seek to

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\(^2\) New York group Graffiti Research Lab (GRL) was founded in 2006 and has continued to inspire an international movement with an ethos of sharing technical know-how and open-source software programs (see http://www.graffitiresearchlab.com/blog). GRL perspectives and techniques have been taken up in cities across Europe and Australia.


\(^4\) ibid.


harness unique qualities and forces that can emerge in the interplay of architecture’s enduring *monumentality* and light’s ephemeral *momentality*.

In this orchestrated interplay between familiar everyday landmarks of the physical world and the transient intensities of projected images, lumentecture serves as catalyst for immersing audiences in altered spatial and temporal relations, intensified by the surrounding nightscape. Counter to the viewing conditions of classic cinema where viewers are required to remain sedentary in fixed rows before the projection screen, lumentecture encourages mobile and active forms of engagement with the site, the projected work itself, and with other participants in the social milieu. Installations occur most often in urban settings that allow free public access, varying speeds of encounter and multiple trajectories within and through the viewing space.

Where the movie theatre and art museum afford access to a rarefied interior realm set aside from quotidian time and space, lumentecture opens new forms of multisensory encounter with moving image arts that are firmly embedded within the messiness and complexity of the world around. Simply by virtue of lumentecture’s outdoor location, numerous environmental variables ensure elements of uncertainty and indeterminacy in any given event: vagaries of weather (wind, rain, temperature) intersect with qualities of an environment (light levels, ambient noise, quality of the ground underfoot) and chance happenings that unfold within a particular timeframe (passing pedestrians, traffic, accidental and serendipitous occurrences). Lumentecture thus offers audiences new forms of cinematic experience beyond the temporal and spatial constraints of both the classic black-box movie theatre and the white cube gallery (mediatised with the art world’s embrace of video installation).

Lumentecture installations straddle the cultural terrain of architecture, art, cinema and new media, all disciplines not averse to leveraging elements of spectacle in their products and practices as means to enchant, repel, or provoke intense responses. A post-millennial parade of startling apparitions on iconic architectural façades around the world has marked lumentecture as an expressive modality mired in spectacular excess. While most often presented within the ambit of arts and culture festivals, it tends to be viewed by arts aficionados as a novel form of popular mass entertainment –perhaps as updated animated digital cousin to the mural or street graffiti or even, as Philip Brophy scathingly asserts, a latter-day equivalent of fireworks.7 As a result, lumentecture is rarely subjected to serious scrutiny and review from arts and culture critics. Undeterred, its practitioners

continue to ‘paint with light’ on a giant scale and in bold saturated colour, manipulate the textures and tectonics of host structures to create uncanny illusions of architectural movement, and transform the banal predictability of everyday environs into fluid uncertainties. Unpacking the resonances of ‘spectacle’ in western discourse is therefore fundamental to assessing how lumentecture is, and potentially could be, understood and assessed as a cultural phenomenon.

The notion of ‘spectacle’ seems straightforward enough in standard dictionary explanations: a public display or performance, especially a showy or ceremonial one; a thing or person seen, especially an unusual or ridiculous one; a strange or interesting object or phenomenon. Yet these rudimentary descriptors only hint at the richly varied and often highly contentious manifestations of spectacle in the cultural life of communities. They draw attention to spectacle’s ephemerality, to its highly visible and public nature linked with ceremony, celebration and ritual (historical, religious, nationalistic for instance), to its proper foundation in the collective rather than the idiosyncratic personal, and to its embrace of novelty and the unfamiliar. The affective appeal (or repugnance) of spectacle derives primarily from its visual power and ability to hold the gaze of the viewer, but a more extended sensorium may be engaged through movement, sound, smell, touch and taste. Full participation in spectacle requires alert bodily presence and a willingness to merge into an enlarged sense of collective experience. In his photographic survey of an annual calendar of spectacular events around the globe, David Rockwell alerts us to their sensory, even spiritual, appeal:

Spectacles are larger than life. They imprint memories. They induce a heightened state that can only be experienced in the flesh. Attend such an event and you declare yourself; you become part of something greater than yourself.

Yet Anna Greenspan suggests that the Western philosophical tradition holds a deep-rooted animosity to spectacle. Reflecting on the cultural politics associated with the urban mega-spectacle of contemporary Shanghai she notes that, in the eyes of Western critics, the sci-fi skyline of lasers and neon signs and giant LED screens is an emblem of the shallowness of a city where all attention is directed to its glossy façade, beneath which lurks harmful neglect of the needs and desires of Shanghai’s citizens. Greenspan

suggests such views are rooted in a Western ideology invested in ‘penetrating the
surface, associating falsity with darkness and truth with light.’\textsuperscript{13} She argues that
traditional Chinese thinking promotes a far more positive attitude towards spectacle
since light and shadow were not associated with false illusion and dark deceit, but
perceived as contrasting forces of equal significance, each holding the other in check in
the interests of a productive dualism.

The West’s long-founded hostility towards spectacle, Greenspan suggests, is associated
with the powerful influence of the allegory of Plato’s cave. In this tale of prisoners
chained and immobilised since childhood in a deep cave where they can view only
shadows cast by the light of a fire, Plato makes seminal connections between projection
and delusion, shadow and ignorance.\textsuperscript{14} The captives are ignorant of the outside world
and have come to believe that only the shadows constitute reality. When one escapes, he
slowly and painfully adjusts to the reality of a sunlit world beyond the dim reality of the
cave and returns to reveal this truth to his friends in the cave. They reject his story as a
lie, preferring to trust the evidence of their own senses. For Plato, the philosopher must
seek illumination through reason rather than empirical evidence and the sun is “inferred
to be the universal author of all things beautiful and right, parent of light and of the lord
of light in this visible world, and the immediate source of reason and truth in the
intellectual...”\textsuperscript{15} In setting a polarised conception of the bright bleaching light of the sun as
emblem of truth and reason against the deception of shadowy projections deep in the
cave, Plato effectively engineered a lasting distrust of darkness itself, of the differently
oriented sensorium required to navigate its terrain, and of projection as nothing more
than illusory spectacle. The deceptive projections deep within Plato’s cave cast long
shadows through time, returning yet again as ironic inversion of luminous spectacles
projected large on the exterior walls of today’s cities.

\begin{thebibliography}{9}
\bibitem{13} ibid, 81.
\bibitem{14} ibid, 90.
\bibitem{15} Steven Kreis (2000). ‘Plato: The allegory of the cave’ in \textit{Lectures on Modern European Intellectual History}. The
http://www.historyguide.org/intellect/allegory.html
\end{thebibliography}
1.1 Research Focus and Methodology

Three questions drive this inquiry:

How might lumentecture’s recent rise to popularity around the globe be contextualised historically and within a contemporary media landscape?

What conceptual framings can be derived from distinctive elements of spectacle manifest in contemporary lumentecture practices in Australia?

As an independent artist, how might I work with or against these elements to create installations that respond to place – particularly non-urban, less public sites – with sensitivity and conceptual depth, as well as being conducive to multisensorial forms of encounter?

The investigative responses to these core questions proceed in tandem through the full span of the project. They take shape through a sustained interweaving of theoretical reading and reflection, online research into exemplars, field studies of lumentecture events in various Australian locations, and practice development involving site-based research and testing of ideas, tools, materials, surfaces and stylistic treatments. This approach to inquiry takes up the ‘site-writing’ methodology devised, practiced and theorised by architect and art critic, Jane Rendell.\(^{16}\)

1.2 A Practice-Led Inquiry: After Dark

Working at a remote rural site in Northern Tasmania, my practice explores options for détournement against lumentecture’s current excesses of scale and visual cliché typical of its contemporary urban expressions, forms that reduce it to vacuous commercial spectacle. I attempt to gauge potentials of the medium for independent artists wishing to undertake projects of affective, sensory and political vigour, with a view to enhancing an audience’s sense of place, space and architecture.

The methodology of ‘site-writing’ offers a productive approach to the challenge of drawing together the various strands of the inquiry. Rendell approaches theoretical critique as, itself, a form of situated, embodied practice.\(^{17}\) Site-writing, she suggests, can be understood as a set of procedures for materially organising and structuring space, an architectural configuration open to experimentation with “textural and material possibilities, the patterning of words on a page, the design of a page itself – its edges,


boundaries, thresholds, surfaces, the relation of one page to another.” The concept of site-writing is particularly useful to this investigation in that it draws a clear and intimate link between the practice-based notion of ‘writing’ (on) a site – through, say, projecting an audio-visual spectacle onto its surfaces – and siting, or situating, writing as an integral aspect of embodied encounters with an artwork’s material, affective and conceptual qualities.

*Site-Writing* explores the position of the critic, not only in relation to art objects, architectural spaces and theoretical ideas, but also through the site of writing itself, investigating the limits of criticism, and asking what it is possible for a critic to say about an artist, a work, the site of a work and the critic herself and for the writing to still ‘count’ as criticism.

Drawing on multimodal and open-ended textual practices, Rendell’s methodology frees the critic to respond directly to a creative work, to its context, and to other sites it evokes. This process may encompass an eclectic set of material, emotional, political and conceptual elements derived from how an artwork is constructed, exhibited and documented including what is “remembered, dreamed and imagined by the artist, critic and other viewers.” Rendell’s own site-writing practices serve as a model of agile interweavings of spatial and temporal relations across sites of art, architecture, cultural and physical locations, lived experience and modes of articulation. She positions sites in relation to one another in order to discern how relations between them may generate fresh understandings unlikely to emerge in studying those same sites in isolation. By juxtaposing diverse forms of text (images, words, sounds, smells, objects, performances), Rendell demonstrates how associations and meanings change and inspire creation of new material. She challenges critics to move beyond their traditional interpretative role, contingent on mere visual engagement with artworks as distant and objective eye, and to embrace an active spatial role appropriate to the embodied, sited nature of arts experience. Site-writing is a particularly useful model for the reflective praxis required of artist-researchers working within a university setting.

Rendell identifies the avant-garde tradition of the *détournement* as one effective strategy, among others, with which to articulate and transform relations between artist, text, critic, audience and location. The deployment of outdoor projection as hegemonic urban mega-
spectacle serves as powerful provocation for artists to détourn its characteristic elements into alternative situations: perhaps small-scale, non-urban, or more conducive to democratic forms of community connection and encounter with place. This premise underpins development of the practice component of my research.

Practice-based methodologies are now widely accepted within the creative arts and design departments of Australian universities, albeit subject to ongoing scrutiny and contention among artist researchers, arts academics and the broader academic community. Of particular value is the notion of ‘material thinking’ articulated by artist-researchers such as Paul Carter and Barbara Bolt. As Bolt explains, material thinking extends beyond the bounds of purely conceptual reflection and involves theorising from practice as distinct from applying theory to practice. It emerges from the joining of hand, eye and mind:

Material thinking offers us a way of considering the relations that take place within the very process or tissue of making. In this conception the materials are not just passive objects to be used instrumentally by the artist, but rather the materials and processes of production have their own intelligence that come into play in interaction with the artist’s creative intelligence. Words may allow us to articulate and communicate the realizations that happen through material thinking, but as a mode of thought, material thinking involves a particular responsiveness to or conjunction with the intelligence of materials and processes in practice. Material thinking is the magic of handling.

1.3 Rationale

Multiple factors underpin my desire to expand my own independent digital media practice to encompass outdoor projection. Firstly, I have long been interested in installation as a means for rendering dynamic interfaces between the digital and terrestrial realms. Projecting images and sounds onto the surfaces of outdoor environs offers a different set of constraining and enabling forces to those with which I have previously worked, therefore this practice offers fresh conceptual, aesthetic, technical and organisational challenges. I am intrigued by projection’s inescapable flirtation with spectacle and illusion, the medium’s ambiguous reputation for conjuring supernatural magic and deception just as surely as it highlights the spectacle of technological advance. Secondly, related to the first, I am committed to making art that invites audiences into...
immersive spaces and haptic forms of engagement, working against western art’s prevailing ocularcentricity. Thirdly, I am interested in places themselves, how we construct memories of place, and the sense in which ephemeral projections may serve – literally and metaphorically – to ‘bring to the surface’ a host of hidden, lost or invisible vectors of experience that play through them. This speaks to the notion of using the walls of buildings as canvas or screen, surfaces already inscribed with meaning, to invoke an even fuller sense of architectural richness and complexity by layering them further with a transient play of imagery.

Shaped by rapidly changing economic, social and technological vectors, lumentecture’s 21st century manifestations constitute a new and open field for scholarly research and critique. Yet the phenomenon of outdoor projection itself is not new and architectural surfaces have long been appropriated for visual display of traditional art forms such as trompe l’œil, fresco, graffiti, murals and relief sculpture. Outdoor projection of images became possible in the first half of the 19th century as lighting technologies advanced, particularly the oxy-hydrogen limelight (‘calcium light’) and the electric arc-light. These were used as early as the 1840s to illuminate public monuments in Paris. Projecting images and text, rather than just a beam of light, soon followed and – particularly in the United States – slides were projected outdoors on screens, blank walls and even public monuments, establishing a tradition from the 1860s onwards. As ‘bright lights’ became a metaphor for the modern city, lighting for spectacle, ambience and advertising rose to equal prominence and were associated with productivity and security. While the development of urban street-lighting was primarily functional, there is also a long history of lighting cities for spectacle and pleasure. The invention of the incandescent bulb and then the floodlight in the 1920s ushered in the concept of the urban ‘light fair’ or ‘luminous cities’ across Europe. It was anticipated that lighting installations would become a new art form in their transformations of architecture after dark.

Gas-lit Paris was proclaimed the world’s first ‘city of light’ in the 1820s. From the 1870s, World’s Fairs regularly showcased new developments in electric lighting, paving the way for the twentieth century ‘electropolis’ as cities such as Chicago, Berlin and New York came to be defined by the intensity of their illumination.

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27 ibid. Huhtamo notes that the full extent of early outdoor projections for commercial use is not known, 24.


Only in the past half-century have electronic innovations made it possible to project public surfaces with extremely large, sharp, colour-saturated images. From the 1960s, experimental movements in arts and cinema took projection and other forms of electronic installation out into public spaces, leading to the development of large-scale projection of slide images in the 1980s. Since the turn of the millennium, however, lumentecture has rapidly evolved through radical transformations and expansions made possible by the advent of extremely powerful new projectors and sophisticated digital tools for animation and 3D mapping. These innovations emerge within a matrix of new technologies of digital display, from tiny hand-held mobile devices to giant LED screens. Projection installations are just one configuration among a host of ephemeral interfaces that are becoming integral to, and changing, how we relate to and navigate cities at night.

The rapid advance of lumentecture’s new modes of expression in the digital era appear to be outpacing the speed of response in research and critical discourse. While scholarly discourse on the emergence of ‘media façades’ and screens in public space began to develop from the early 1970s and Krzysztof Wodiczko’s powerful large-scale slide projections have been the subject of substantial attention since the early 1980s, critical attention has been slow to engage with the significance and implications of lumentecture’s emerging configurations. Abigail Susik asserts that critique of ‘architectural light projection’ is bound to build into a fully-fledged discourse as ongoing technological advances lead to expansion and diversification of the identity and materiality of screens, prompting a need to scrutinise the politics and ethics of projections that occupy surfaces in the public sphere.

Towards the end of the first decade of the 21st century, large-scale outdoor projection works began to feature prominently in Australian arts and culture festivals, reflecting their broader surge in popularity around the developed world. By 2010, projections had become virtually de rigueur in major urban celebrations across the country and a global

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33 A rapid rise in movie clips posted on internet sites such as YouTube and Vimeo are indicators of the phenomenon.
wave of new night festivals, dedicated primarily to light art and projection, had begun to emerge. Aided by powerful new digital tools, artists and designers began exploring relationships between light, architecture, audiences and public space. Where earlier avant-garde proponents of expanded cinema paved the way for transporting the moving image beyond the constraints of the movie theatre into the real world, by the end of the first decade of the 21st century, the world itself had become a screen amenable to being transported by the moving image.

Audio-visual installation and site-specific projection mapping have released the beloved art of cinema from the traditional viewing environment. Bridges and tunnels, fine art galleries, museums, special events, parties, concerts – almost any location can now host large-scale cinematic entertainment. Our culture’s greatest communication medium becomes free to travel, interact and respond to the environment beyond the screen.34

Despite lumentecture’s rapid rise to popularity in Australia from around 2008 to 2010,35 development of critical discourse remains embryonic. Research and scholarly assessment of the cultural and political significance of digital media façades is only now beginning to gain momentum as a new interdisciplinary field. Ava-Fatah Schieck argues that we may be witnessing the emergence of a new form of urban space fundamentally different from what we have previously known, a phenomenon in need of new kinds of analytical tools and perspectives. The growing presence of mediatised façades continues to raise numerous philosophical, political, practical and ethical questions that have, as yet, barely begun to be addressed:

What happens to a building when the architectural material becomes a display screen? Do we perceive the space by the content of the display? The medium or the message? How can we understand this dynamic form or analyse it? And how do we represent this dynamic as perceived rather than as a piece of geometry? The representation techniques learned from architecture are static, contained and two-dimensional whereas the new form is dynamic, open and three-dimensional.36

These recent developments are underpinned by economic and political drivers emerging from the spread of globalisation; foundational to my rationale is the need for closer interrogation of those drivers. The current gamut of lumentecture installations display a broad spectrum of practices from fine arts works with sophisticated conceptual and stylistic underpinnings to vacuous spectacles designed to service purely commercial ends. It may become increasingly difficult for audiences to distinguish between these disparate agendas when they co-exist side by side in arts festivals and the previously clear boundaries between the arts, popular entertainment, and advertising begin to blur. These 21st century developments have profound implications not only for audiences, but

34 From the website of New York projection mapping company, Light Harvest. <Accessed 17/2/2016> http://www.projectionmappingnewyork.com/
35 Prominent early instances were Adelaide’s Northern Lights by The Electric Canvas in 2008 and 2010 and Vivid Sydney’s initiation in 2009.
36 Schieck, op. cit., 5.
also for artists wishing to incorporate projection into their own practice and for theorists offering critical analysis and debate on their implications. My aim is to contribute to scholarly discourse assessing the significance of outdoor projection within a contemporary media landscape.

1.4 Preview of Exegesis

Organised into five parts, each section of this exegesis offers a response to the core research questions of the inquiry from a different point of emphasis.

*Part 1: Opening Matters* maps out the ground of the project, delimits boundaries, and provides a rationale for the choice of this particular subject and approach.

*Part 2: Contextual Matters* draws attention to a series of key historical ideas and practices that underpin lumentecture’s contemporary festivalesque manifestations as public spectacle played to excess.

*Part 3: Luminous Matters* is the longest section with a series of five short essays that unpack lumentecture’s distinctive elements of spectacle. It constitutes the main body of original contribution to theory on the subject, offering a new framework of concepts for reflecting on lumentecture more broadly but, in this instance, illustrated with recent Australian examples. This conceptual framework draws on and departs from the recent work of film and media scholar, Francesco Casetti, who puts forward a set of seven concepts with which to track cinema’s radical reinventions in the 21st century.37

*Part 4: Dark Matter* documents the outcomes of a practice-based response to a particular remote rural site in Northern Tasmania using photography, video, sound and after-dark projection. It details three small-scale lumentecture installations that offer an alternative use of the medium to its pervasive contemporary manifestations in the large-scale, high-budget spectacles typical of urban festivals and special events.

*Part 5: Closing Matters* reflects back on particular challenges, successes and limitations encountered in the unfolding of the project. Main achievements and contributions are summarised, and potential directions for future research suggested.

2.0 Circuits of Projection as Spectacle

Every spectacle is wonderful the first time you see it, some like the rainbow are enduringly captivating as we penetrate their mathematics; some manmade, like fireworks on the Sydney Harbour Bridge or the Birdcage, seen twice, induce ennui... practitioners are well aware that the surprise element arising from new technologies is a fragile frontier, interesting for a moment, and then ubiquitous.¹

Certainly, for much of its history, projection has been less closely associated with the arts than with science – physics, geometry, optics, technology – as well as with psychology, graphic display, and popular entertainment.² New forms of projection installation appearing in galleries and public spaces are associated with a far less celebrated history than that of painting, sculpture, theatre or music.³ Jungmin Lee notes that the multiple elements and media linked to the ambit of outdoor projection practices have each “undergone a considerable history of development, many forms of which operated outside the traditional and conventional sites for exhibition.”⁴ Perhaps this accounts for the paucity of critical discourse coming from the arts sector in relation to lumentecture’s contemporary expressions, despite their positioning as events within mainstream arts and culture festivals.

The ostensibly simple act of throwing light images against a wall or screen, first achieved through use of pinhole devices such as the camera obscura, belies the complex history of projection’s trajectories of practice and cross-disciplinary theorisation. The words ‘project’ and ‘projection’ themselves elicit an equivocal play of meanings with fluid and diverse references.⁵ To ‘project’ may refer to mental activities of predicting, imagining and envisaging as well as to physical exertions such as throwing, pushing, ejecting or extruding. Used in relation to light, ‘projection’ denotes “the luminous transport of images” or “the action of projecting images on a screen and the representation of a volume on a flat surface” thus mixing the ostensibly disparate fields of spectacle and geometry in the same word.⁶

³ ibid.
⁵ Païni, op.cit., 23.
⁶ ibid.
Observing key elements that surface in today’s large-scale projection works suggests that lumentecture has taken shape in a hybrid genealogy encompassing disparate and historically separated discursive practices: the allegory of the shadow figures in Plato’s cave; the phantasmagoria of Étienne-Gaspard Robertson’s magic lantern shows in late 18th century Paris; shadow theatre in Europe from the late 18th century; the beginning of cinema in the mid-1890s and its first decade as a popular ‘attraction’; the experiments of various 20th century avant-garde arts movements using light as material; the ‘expanded cinema’ movement of experimental video art beyond the black-box of the movie theatre in the 1960s and 70s; the emergence in that same period of site-specific art installations; and, most recently, the groundwork laid by a handful of pioneer lumentecture artists such as Krzysztof Wodiczko from the early 1980s onwards. Yet the recurring trope of spectacular illusion, shackled to the wonders of newly emerging technologies, runs through this convoluted history of the projected image. Projection as spectacle continues to simultaneously provoke both pleasurable awe at its capacity for conjuring extraordinary visual effects and suspicion for its concomitant fabrication of false illusions, its potentially dangerous and manipulative social effects when deployed within circuits of powerful influence and political force.

This chapter of the exegesis visits certain historical ‘moments’ that, in retrospect, appear to have been seminal in shaping lumentecture’s contemporary formations. This account can be used by artists as source material with cogent implications for contemporary creative practice and I summarise key provocations in red text at the end of each section. These will be revisited in relation to the unfolding of my own practice in the final two parts of the exegesis.

2.1 Phantasmagoria

The power of projection to evoke both pleasure and terror in response to its illusory spectacles became evident early in the history of magic lantern, as evidenced in the following account of its introduction to a Chinese emperor by a Jesuit priest in 1735.

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7 See Erkki Huhtamo (2004). ‘Elements of Screenology: Toward an archaeology of the screen’ in ICONICS: International Studies of the Modern Image, 7: 39. Huhtamo suggests shadow theatre is interesting not only as a widespread public spectacle, but also as a phenomenon that easily crossed the boundary between public and the private, particularly in the West. He notes that miniature shadow theatres were marketed for domestic use in Europe from the late 18th century on. Yet shadow shows were readily enacted simply by projecting hand shadows on the wall, a practice known as Ombromanie, which became a popular stage entertainment in the late 19th century.

8 The magic lantern was invented by Christian Huygens, a Dutch astronomer and mathematician, who produced a device with a concave mirror and two lenses that was able to project images by passing candlelight through hand-painted glass slides. See, for instance, Laurent Mannoni, (2000) (orig. 1994). The Great Art and Light and Shadow: Archaeology of the Cinema. Trans. Richard Crangle, Exeter: University of
Finally he showed [the Emperor] a Tube which contained a burning lamp, whose light exits via the small hole of a tube, at the mouth of which is a telescope lens and in which slide several small glasses painted with various pictures. These same pictures are represented on the wall opposite, smaller or of a prodigious size, according to whether the wall is close or far away. This spectacle during the night or in a very dark place, caused as much fear in those who did not know the art, as it did pleasure in those who had been instructed. It was this which caused it to be given the name Magic Lantern.⁹

By the late 18th century, magic lantern projection – commonly referred to as ‘pre-cinema’ – was building a reputation for unsettling the certainties of habitual and rational understandings of the known world. Early projectionists displayed much ingenuity in devising techniques for engendering a sense of mystery and wonder in their audiences. Laurent Mannoni¹⁰ describes their strategies for producing uncanny apparitions and disturbing soundscapes in a theatrical mix of science, magic, art and deception. The elaborate spectacle of the ‘phantasmagoria’ in Paris in the late 18th and early 19th centuries comprised a clever assemblage of elements that were designed, its exponents claimed, to show how convincing phantoms and illusions could be produced by science and technology. Philip Polidor, who introduced phantasmagoria to Paris in 1793, began his show with the preamble:

I will not show you ghosts, because there are no such things; but I will produce before you enactments and images, which are imagined to be ghosts, in the dreams of the imagination or in the falsehoods of charlatans. I am neither priest nor magician. I do not wish to deceive you; but I will astonish you.¹¹

In like vein, fellow Parisian, Etienne-Gaspard Robertson, became a master of phantasmagoric spectacles by devising a range of innovative techniques to fascinate and confound his audiences (Images 2.1-1 and -2). Staged in the cloisters of an abandoned convent, Robertson’s show is an early exemplar of site-specific projection installation. Making full use of his theatrical and spooky setting, Robertson integrated ghostly projections into an array of richly sensuous and evocative experiences that encompassed demonstrations of science and new technology as context for carefully staged encounters with the uncanny. As Tom Gunning notes, Robertson’s phantasmagoria offers fertile ground for reflecting on the nature of illusion and shadow, and on how light itself, albeit ephemeral, can be used to “structure and create its own world.”¹²

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⁹ An account of the introduction of the magic lantern to the Chinese Emperor in 1735 by Jesuit priest, Father Grimaldi, quoted in Mannoni, 73.


¹¹ Cited in Mannoni, 14.

Prior to entering the main chamber of lantern projections, the audience was required to walk after dark past the crumbling ruin of the convent, through the nuns’ graveyard, down a long corridor decorated with “dark and fantastic paintings” and into the ‘Salon de Physique’ - an exhibition space dedicated to displays of science and an array of new optical and aural technologies. The recently discovered power of electricity was demonstrated along with various gadgets for expanding or manipulating sight and sound “to confuse and transform the senses.” Robertson presented science as a series of wonders and surprises that would destabilise his audience’s sense of mundane reality and prepare them for the show’s spectacular climax. Strategic use of unearthly and dramatic sounds added greatly to the rising sense of drama and suspense as the audience, well primed, entered the main hall of the phantasmagoric projections. Once inside and seated, they were plunged into darkness and bombarded with a disarming cacophony of sounds simulating extreme weather, tolling church bells and the unearthly resonances of the glass harmonica. With senses simultaneously stimulated and challenged, the audience was confronted with a “blackness thickly seeded with expectations and suspense.”

Robertson’s elaborate projection techniques produced convincing illusions of ghosts, “reportedly causing women to faint and men to rise, striking out with their canes against the apparently threatening phantom.” Yet exposure to a parade of supernatural apparitions was clearly as pleasurably thrilling for participants as it was scary, for the show became one of Paris’s top attractions and continued to run over several decades. The dematerialised phantoms of Robertson’s spectacle were cleverly placed, both literally and metaphorically, on a threshold between scientific rationalism and superstitious belief, between astonishing revelations of technological achievement and mystifying

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13 ibid, 25.
14 ibid.
16 Gunning (pp. 26-29) describes in some detail how Robertson broke with earlier magic lantern practice by concealing his apparatus and its operators from view, using rear-screen projection so that the audience could see the ephemeral images but not their source. The visibility of the diaphanous screens was also minimised by wetting them and draping curtains in front until the lights went out. The figures on the glass slides were surrounded with lampblack so that they appeared isolated in space. Robertson produced a convincing illusion of motion by placing the projection apparatus on a trolley that could be pushed smoothly forward or backward on polished brass rails so that projected phantoms appeared to loom large into the audience or retreat. This effect was supported by controls that enabled fast adjustment of focus, as well as by working in total darkness so that all spatial markers were erased. A sense of movement was also conjured by using two or more slides that could quickly pass from one to another.
17 ibid, 28.
18 See Huhtamo, 35 and Barbara Maria Stafford & Frances Terpak (2001). Devices of Wonder: From the world in a box to images on a screen. Los Angeles: Getty Research Institute, 301
occlusions of magic through interplay of the real and the virtual. As Gunning explains: “The phantasmagoria did not manufacture belief or faith, but rather generated entertaining confusion.”19 This strategy, he suggests, established the radical possibilities of the phantasmagoria as an art of total illusion, yet one that contained its own critique:

This startling experience in the darkened room denied its own reality even as it was being presented, simultaneously overwhelming and calling the senses into question. One could think about the avant-garde art of the ensuing century and a half as moving between these two poles – a direct and overwhelming appeal to the senses on the one hand, and the critique of illusion on the other. The critique seems to carry on the Enlightenment project, while the sensual approach often questions the powers of the rational mind and circumvents rather than demonstrates its powers.20

Robertson’s dual tactics of hiding and revealing, seducing and rewarding, anticipated the “logic of attraction” that would subsequently become central to the world of 19th century entertainments.21 The legacy of phantasmagoria lay not so much in its innovative strategies for producing convincing illusion, but in offering a compelling paradigm of sensory immersion and collective participation in a new platform for art and entertainment in which works were no longer conceived as imitation of appearances or representation of ideal models. This ethos, rippling through the revolutionary projects of successive arts avant-garde movements would eventually lead to a reconceptualisation of art and cinema as sensual experience rather than sets of material objects.22 Gunning describes the significance of the phantasmagoria’s contribution to this ground-breaking reorientation:

From the demystifying point of view, the phantasmagoria asserted the ultimate truth of the rational and the fallibility of the senses. But from the point of view of showmanship, audience pleasure, and aesthetics... the novelty of the phantasmagoria lay in its manipulation of the senses – not to foster credulity, but simply to produce startling effects. Rather than seeing the phantasmagoria exclusively as either an ideological machine sustaining illusions or a process of demystification, it might be worth pursuing it as a new model for the manipulation of the senses.23

The spectacle of the phantasmagoria found a profoundly influential trajectory through Western thinking through much of the 20th century in the writings of Karl Marx and his successive interlocutors. The popularity of the original phantoms had long faded by 1867 when Marx wrote that the commodity form at the heart of capitalism transformed “a definite social relation between men” into “the phantasmagoric form of a relationship

19 Gunning, op.cit., 30.
20 ibid.
21 Huhtamo, op.cit., 36.
22 ibid, 32.
23 Gunning, op. cit., 32.
24 Marx’s seminal work Das Kapital: Kritik der politischen Ökonomie was first published in German in 1867, translated into English in 1887.
between things.”25 Marx saw a clear analogy between how the phantasmagoria deployed scientific rhetoric and latest technologies to create illusory phantoms and the way in which objects could appear animate and magical once turned into commodities. His use of the term phantasmagoria referred to the distancing of products from the material conditions and labour invested in their production. Marx pointed out that, while a pre-capitalist economy allowed the buyer to purchase directly from those who make things and to negotiate value based on real costs and labour, products in capitalism were distributed through numerous intermediaries who assigned value autonomously. He coined the term ‘commodity fetishism’26 to describe how a randomly assigned market value of a product comes to be seen as intrinsic to the item itself, rather than being tied to the materiality of human labour invested in its production. Marx suggested that when false fantasies are over-valued and capitalism’s phantasmagoria are given free rein, then the commodity appears as a form of spectacle27 into which the consumer is inexorably drawn as spectator.28

Phantasmagorias were not just a trick of light, producing ghostly movement by wheeling the lantern forward so that the phantoms grew progressively larger; they were also a trick of address. Spectators were invited to see a scientific display which would demystify the spirit world: what they saw seemed to confirm their most atavistic superstitions. Technology, it seemed, was determined to make manifest ‘the ghost in the machine’.29

Walter Benjamin built on Marx’s analysis of commodity fetishism with reference to the Paris shopping arcades of the 1930s, regarded as the forerunner to modern shopping malls. Shifting away from Marx’s emphasis on relations of production behind the appearance of the commodity, Benjamin emphasised its qualities as spectacle. He deployed the spectre of the phantasmagoria to critique the fetish of embracing the “visible, lush, spectacular side” of merchandise and the technologies that enhanced their subjective impact.30 Benjamin suggested that the notion of phantasmagoria was central to understanding both the importance of world exhibitions in capitalist economies and the attractions and distractions of modern culture.31 He observed that works of art had,

27 De Castro, op.cit., 112-113.
28 Gunning, op.cit., 32.
29 Highmore, op.cit., 129.
30 ibid, 114.
31 ibid, 128.
themselves, become commodities in the 20th century, and hence phantasmagoria. 32 Nadir Lahiji suggests Benjamin’s notion of phantasmagoria is still a cogent tool for analysis of new economic and technological transfigurations in the ‘hyper-mediated’ cities of present times. 33 Lumentecture’s emerging expressions bring into play a whole new set of phantoms susceptible to capture – and resistance – within the capitalist machine.

Guy Debord’s influential treatise of 1967, La Société du Spectacle, 34 revitalised the Marxist tradition with his own critique of consumer culture and commodity fetishism in the new historical conditions of post-war France. 35 Debord extended the concept of ‘commodities’ beyond tangible items that could be bought and sold, to encompass images produced and imposed on people by capital and the state in order to define meaning and value. 36 Spectacle, for Debord, represented the epitome of the excesses of capitalist hegemony. He argued that modern conditions of production had resulted in societies where all of life had simply become an immense accumulation of spectacles to the point that “All that once was directly lived has become mere representation.” 37 Debord regarded television and cinema as particular culprits in industries devoted to promulgating false representations of life, inhibiting people from actively producing their own lives and reducing them to roles of passive spectatorship. 38 His concept of ‘spectacle’ referred not simply to images themselves, but to the alienating social relationships wrought by a relentless and ubiquitous flow of images.

A founding member of the avant-garde Situationist International (SI) art movement in Paris, Debord called for acts of resistance against the alienating and debilitating effects of the spectacle by a collective of revolutionary subjects. The SI advocated two particular kinds of subversive strategy for regaining control of life. Members embraced the practice of détournement – the appropriation of images, artefacts and techniques of the spectacle in order to alter them and twist meanings, turning them back against themselves as critique. Subversive interventions into commonplace images and artefacts could, they believed,

32 Gunning refers here specifically to the lyric poetry of Baudelaire and the Symbolist’s resistance to art as commodity, 32.
35 De Castro, op.cit., 119.
38 De Castro, op.cit., 119.
disrupt the mediations of the spectacle and reconfigure relations between people.\(^{39}\) Popular culture genres such as movies and comic strips were particular targets of the SI as they took action to change contexts or rewrite dialogue and speech-bubbles to make them mean something totally different.\(^{40}\) Through such acts, they sought to counter authorised spectacle with even more extreme and unauthorised spectacles of their own. SI also advocated the *dérive* as “a playfully constructive behaviour in which participants walked parts of the city’s terrain, not as tourists or incidental observers but as active makers of new meanings in their reading of its text, its traces of human occupation and institutional control.”\(^{41}\) Walking at random – or ‘drifting’ – through city streets was suggested as a means to transform the meanings of spaces and situations of everyday life.\(^{42}\) These two SI strategies have retained currency with artists for the past half-century, as has Debord’s spectre of alienated individuals, “reduced to consuming corporate-supplied entrancing narratives”\(^{43}\) continued to resonate in academic discourse across disciplines.

Debord’s insights appear particularly salutary for a digital era saturated with images of persuasion pushed out globally via the internet across a proliferating array of mobile devices and urban screens. Yet, as Richard L. Kaplan points out, scrutiny of his account of spectacle reveals serious flaws, even within its own terms of reference.\(^{44}\) Debord’s analysis (like that of Marx) is contingent on the notion of liberal individualism, an ideology it professed to oppose:

> Implicitly, his theory revolves around an exaggerated notion of a self-sufficient, autonomous, self-legislating collective subject. Against this romantic idea of the collective revolutionary subject, Debord juxtaposes an image of the populace of contemporary mass society as completely dependent and manipulated.\(^{45}\)

Kaplan argues that both terms – alienated masses and revolutionary collective – abstract individuals from their cultural traditions and overarching social relations in which they are embedded.\(^{46}\) Debord’s premises, he says, fail to take into account social plurality,

\(^{39}\) Mitchell, op.cit., 165.

\(^{40}\) ibid.


\(^{42}\) ibid.


\(^{44}\) ibid, 457–478.

\(^{45}\) ibid, 458.

\(^{46}\) ibid, 468.
disparate worldviews, and how cultural resources, community and communication persistently mediate people’s encounters with the phantasmagoria of late capitalism. In recent decades, much critical analysis has been directed to exploring the multiple senses in which individuals are not just passive recipients of meaning, but active co-producers who interpret and respond within networks of communication and resources. Debord’s construct of the spectacle is problematic, Kaplan points out, in that it detaches cultural texts and messages from the dynamic and messy conditions of everyday life where meaning is collaboratively produced and assumes messages can be unilaterally imposed by governments or corporations on a passive, naïve populace. Nonetheless, Debord’s views remain influential and have deeply inflected notions of spectacle with negative connotations in western thinking. Productive cultural vectors that may be associated with the spectacle’s disparate manifestations in collective ritual, commemoration and celebration are far less emphasised and explored in western academic discourse.

A possible line of flight from the totalising and alienating capture of social relations implied in Debord’s spectacle comes from the post-Marxist thinking of Gilles Deleuze and Felix Guattari. Abandoning classic strategies of critique of political economy and dialectical thinking, they articulate the notion of a social infrastructure constituted by desire. For Deleuze and Guattari, desire is not driven by lack (as in psychoanalytic theory) but is a positive and productive force that facilitates life’s material flows. Claire Colebrook explains:

Desire is connection, not the overcoming of loss or separation; we desire, not because we lack or need, but because life is a process of striving and self-enhancement. Desire is a process of increasing expansion, connection and creation. Desire is ‘machinic’ precisely because it does not originate from closed organisms or selves; it is the productive process of life that produces organisms and selves.

Desire operates to form connections and territories, a process Deleuze & Guattari refer to as ‘territorialisation’ – the combination of forces to produce distinct wholes, or fluid ‘assemblages’. This approach opens new avenues for rethinking the subversive potentials of art and spectacle within global capitalism. Art is conceived as a fluid field of forces produced through and producing territorial effects and transforming relations, hence evading confinement within the conceptual limitations of commodity fetishism.

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50 ibid.

and representation. Such thinking eschews analysis of artworks in terms of traditional aesthetics since it shifts focus away from produced objects, commodified in flows of global capital, in favour of exploring what art does in transforming temporal and spatial relations. Deleuze & Guattari assert that the primary function of art is to produce sensations, affects and intensities through “a system of dynamised and impacting forces rather than a system of unique images that function under the regime of signs”. Extrapolated more broadly, this poses a challenge to all forms of creative endeavour to focus on engendering new forms of subjectivity, rather than on producing objects that represent and reinforce the status quo. As O’Sullivan explains, representations of the familiar – what we already understand ourselves to be, know, believe and value – simply reinforce the status quo and block thinking. With a genuine encounter however the contrary is the case. Our typical ways of being in the world are challenged, our systems of knowledge disrupted. We are forced to thought. The encounter then operates as a rupture in our habitual modes of being and thus in our habitual subjectivities. It produces a cut, a crack.

This rupture, in Deleuzo-Guattarian thinking, produces deterritorialisation or a movement away from a familiar zone of thought and action while, at the same time, affirming something new, a different way of experiencing the world and a reterritorialisation into a realm of fresh possibilities. Rather than falling into passive entrapment within the stultifying effects of representation in a mediatised world dominated by spectacle, subjects can forge productive encounters and trajectories through the shifting configurations of material and immaterial elements at their disposal.

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**PROVOCATIONS 2.1**

What insights might be gained from Robertson’s ghostly phantasmagoria in terms of how light projections and shadow can structure sensory experience and rupture or displace the known and familiar?

How can new forms of détournement or dérive serve as strategies for resisting the dehumanising effects of late capitalism’s phantasmagoric spectacles, particularly those played out using projection as a vehicle?

How might projection artists engender productive encounters between people and place conducive to the forging of new connections and forms of subjectivity?

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54 ibid.
2.2 Critical Interventions

From the 1980s, in the wake of avant-garde movements in site-specific installation art and expanded cinema, artists began projecting on architecture as a form of ephemeral urban intervention with critical intent. Foremost among a handful of pioneers was Polish-American artist Krzysztof Wodiczko\(^\text{55}\) who used the medium to pose probing questions about the design of urban environments and their often alienating and disempowering effects on the communities who live and work in them. Working with large-format still slides, Wodiczko transformed iconic buildings into ‘anti-monuments’ designed to reveal the hidden voices of a city’s dispossessed communities. He asks:

> What are our cities? Are they environments that are trying to say something to us? Are they environments in which we communicate with each other? Or are they perhaps the environments of things that we don’t see, of silences, of the voices which we don’t, or would rather not, hear? The places of all of those back alleys where perhaps the real public space is, where the experiences of which we should be speaking, where voices that we should be listening to, are hidden in the shadows of monuments and memorials.\(^\text{56}\)

From 1996, Wodiczko began incorporating moving images and sound into his work, continuing themes first explored in his large-scale still slide images. He continues to create numerous large-scale slide and video projections on architectural façades and monuments around the world, deconstructing ways in which power is embedded, albeit invisible, in architecture and public space. His projections foreground the plight of dispossessed and marginalised communities: the homeless, immigrants, survivors of domestic violence and war veterans. Collaborating with those living around his chosen sites, Wodiczko has frequently animated architectural façades with moving images of hands, faces, or entire bodies, integrating them with citizens’ voices articulating local circumstances and concerns. He focuses attention on collective memory and history, using projections to destabilise the silent, stark monumentality of buildings and interrogate discourses of human rights, democracy, violence, alienation and inhumanity. His works critique official narratives of history and their monopoly on collective memory,\(^\text{57}\) serving to “infiltrate buildings and sculptures with images that awaken memories of those groups that have been defeated in the conflicts that produce social space.”\(^\text{58}\)

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55 Born 1943.
PART 2. Contextual Matters

building or monument behind the overlay of ephemeral imagery. Even as he appropriates these architectural surfaces, making them speak with the voices of those they seem to ignore or displace, Wodiczko never attempts to occlude or deny the building’s presence.\(^{59}\) The *Hirshhorn Museum Projection* of 1988 demonstrates his sparing use of a large-scale projected slide image so that the presence of the building is clearly brought forward (Image 2.2-1).

Scott McQuire suggests that key issues for media forms in public space include control, access, and filtering of content. However, New York artist Jenny Holzer\(^{60}\) demonstrates how public projections may also serve to produce new forms of relations.\(^{61}\) Holzer began working with large-scale projections on urban façades and other environmental surfaces in 1996, a transition to new media that followed two decades of exhibiting posters of printed text on city walls. Her texts have appeared around the world\(^{62}\) on a phone booth, pavement, trees, fountain, mountain, waves, riverbank and ski-jump.\(^{63}\) Public space remains central to her work, blending subversive messages into barrages of advertising texts (Image 2.2-2). Reflecting on her particular approach to disseminating ideas through assemblages of projection, site, time, ambience and audience, Holzer explains:

> I show what I can with words in light and motion in a chosen place, and when I envelop the time needed, the space around, the noise, smells, the people looking at one another and everything before them, I have given what I know.\(^{64}\)

*For the City* is a series of text projections onto the façades of landmark buildings around New York City, beginning in 2004 and recurring since then on a wide variety of sites. Holzer presents multiple viewpoints and voices using scrolling texts of poetry by eminent writers as well as her own messages. In 2005 for instance, Holzer projected poetic texts onto the façades of the Public Library and the Rockefeller Center, but also took a new direction in displaying declassified United States government documents released under the Freedom of Information Act on New York University’s Bobst Library.\(^{65}\) Her texts are designed to provoke critical reflection on the very structures and


\(^{60}\) Born 1950.


\(^{62}\) Holzer has exhibited in Australia a number of times in both Sydney and Melbourne.


\(^{65}\) ibid.
environments that host their appearance. Holzer describes her texts as ‘Truisms’ – acts of artistic mediation between the contested ‘truths’ of a post-modern cultural landscape and the deluge of constructs of ‘the real’ generated in the interests of global capitalism. They work against the commodified urban environs of mass media, advertising, product marketing, and all the various “non-truisms” that saturate the quotidian realm. Holzer inserts her work and ideas into public spaces where they can activate critique and analysis of surrounding cultural, economic and political conditions.\(^66\) In 2008, Holzer continued her former series of New York projections in a special commission for the curving façade of the Guggenheim Museum, following the restoration of Frank Lloyd Wright’s iconic building and in preparation for its 50\(^{th}\) anniversary in 2009. Holzer’s \textit{For the Guggenheim} displayed large-scale her own writings and poems in a play of light and changing language designed to generate a space for viewing, social connection and critical discussion.\(^67\)

Under the rubric of ‘relational architecture,’ Mexican-Canadian artist Rafael Lozano-Hemmer\(^68\) creates projection installations that use technology in such a way as to “make relationships emerge, as opposed to preconceiving the outcomes.”\(^69\) His work cross-references and brings into juxtaposition disparate levels of audience experience. Lozano-Hemmer’s large-scale projection \textit{Body Movies} first appeared in Rotterdam in 2001 (Image 2.2-3). Numerous further iterations of the original concept have since been commissioned around the world, including \textit{People on People} for Sydney’s Museum of Contemporary Art (MCA) in December 2011. Based on projections of portraits of people photographed close to the installation site, the work offers an exemplar of an effective \textit{interactive} projection installation in public space. The larger-than-life portrait projections on a wall remain invisible, bleached out by high-powered xenon lights, until participants walk across in front of the lights throwing shadows that reveal the figures. Once a projected figure has been made visible another replaces it. \textit{Body Movies} “attempts to misuse technologies of the spectacular so they can evoke a sense of intimacy and complicity instead of provoking distance, euphoria, catharsis, obedience or awe.”\(^70\) Scott McQuire explains the import of Lozano-Hemmer’s approach:


\(^{68}\) Born 1967.


\(^{70}\) Rafael Lozano-Hemmer’s statement on \textit{Body Movies} from his website. <Accessed 7/1/2016> \url{http://www.lozano-hemmer.com/body_movies.php}
It’s a work which emphasises public participation – ‘interactivity’ is not simply a choice among a menu of predictable consequences, but belongs to a more open horizon in which contingency and unpredictability play a greater role. Instead of the logic of ‘taking turns’, where single users produce representations that others can see, up to fifty people could participate in *Body Movies* together. This interface created a delicate balance between personal participation and collective interaction, between active engagement and reflective contemplation. But the most striking aspect of *Body Movies* was the playful engagement it sustained among groups of erstwhile strangers who came together in public space, and discovered that by enacting a collective choreography, they could affect the visual ambience of public space.  

Many of Lozano-Hemmer’s works are, likewise, contingent on user-generated input and focused on personalisation and creating dynamic relations between action, space and object. His interactive environments draw participants in bodily “to transform the dominant narratives of a specific building or urban setting by superimposing new audio-visual elements that recontextualise it.”  

In Australia, lumentecture is largely a post-millennial phenomenon, yet here too it had an earlier, albeit slender, history as an experimental arts practice. Ian de Gruchy was an early protagonist and one of the first in Australia to articulate the unique potentials of outdoor projection as public art. He continues to work in the medium and to assert the view that “through the power of digital technology and cinematics, projection can produce complex engaging works that operate as an intervention within the city as an ephemeral public art crossing the boundaries of art, architecture and performance.”

De Gruchy completed a number of collaborations with Krzysztof Wodiczko from the early 1980s including *Humpy* (1988), a seminal work that paid homage to Indigenous Australians in the year of modern Australia’s Bicentennial celebrations (Image 2.2-4). *Humpy* was a series of still images projected onto the irregular surfaces of the Adelaide Festival Centre and directly referenced the history of the Festival Centre site, a traditional Indigenous camping ground, overlaying the smooth white skin of the building with

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71 McQuire, op. cit., 12.


images of materials used in vernacular architecture both before and after colonisation. This strategy, Alexandra Gillespie suggests, created an immersive media experience that effectively repositioned the viewer in time and space, allowing an invisible repressed history to become visible. Concerns highlighted in this work continue to resonate a quarter of a century later in debates over Indigenous loss of place and land rights, ongoing disadvantage, reconciliation, and constitutional recognition. De Gruchy has continued working extensively on cultural institutions such as galleries, libraries and museums, seeking to reveal concepts embedded within each building or critique some aspect of it.

Large-scale outdoor projection installations began to appear in Australian arts festivals from around the mid-1990s. An early example is Susan Fereday’s Culture is Business (1993), a slide projection on Melbourne’s QBE Insurance building, appearing as part of the city’s international arts festival (Image 2.2-5). Robert Schubert comments on the significance of Fereday’s image:

Susan Fereday’s projection insinuated itself into the visibility of the city by adopting the rhetoric of corporate names and logos. On a scale of corporate recognisability, Fereday’s projection worked by thieving the QBE Insurance building’s typography so that the public art and corporate identity merged. Dwarfed by an enormous screw, the language of the political avant-garde and the dead language of corporate signs became incompatible and critical bedfellows, neatly avoiding the question of who was screwing whom.

Other artists who began working with lumentecture installations from the early 1990s in Australia are Craig Walsh, Nick Azidis and Olaf Meyer. Walsh has become known for his distinctive large-scale projections on a wide range of natural forms (trees, rocks, water) as well as on buildings. Azidis’s work is primarily focused on creative response to

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77 ibid, 6.
79 City Screens, for instance, featured a group of artists who projected still-image works on the walls of buildings in the 1994 Melbourne International Arts Festival and was co-sponsored by the Centre for Contemporary Photography. Artists who contributed works were Ian de Gruchy, Patricia Piccinini, and Marie Sierra-Hughes.
80 Born 1959.
the streets and buildings of Melbourne. Meyer is a 3D animator and software developer whose multimedia installations include VJ contexts as well as architectural façades. From the early 2000s, numerous younger artists began to swell the ranks of early lumentecture practitioners: Cindi Drennan, Amanda Morgan, Ian Corcoran and Yandell Walton all continue to work in the medium as independent practitioners. Many of these artists worked initially with still slide images and later moved to video, animation and sound as technologies advanced. Their works reflect a concern with use of the medium for engendering meaningful engagements between audiences and place, with strategic use of lumentecture’s characteristic elements of spectacle.

PROVOCATIONS 2.2

How can lumentecture be deployed to reveal invisible or less overt ways in which power is embedded in architecture and communal spaces? How might it bring attention to dispossessed or marginalised communities and render a fuller account of collective memory and history?

In what instances might projected text be a potent tool for activating critique and analysis of surrounding cultural, economic and political conditions?

Why and how should audiences be offered opportunities for significant input into creative works and the kinds of relationships they engender?

How can contemporary projection artists build on the legacy of the past three decades to create powerful works that address sites, issues and audiences pertinent to an Australian context?

2.3 Architectural Attractions

Pioneer 20th century projection artists paved the way for major new post-millennial developments made possible by the rapid advance of digital technologies and increasingly powerful projectors. Large-scale lumentecture installations began to appear from the early ‘noughties’ in disparate locations around Australia, generally as free public attractions within arts festivals or other cultural and historical events. Here, as in many other parts of the world, there was growing awareness of the potentials of

“painting with light” on a grand scale. A formidable suite of new digital tools made it possible to transform façades – not just with still slide images – but also with animation, video and sound. New software programs enabled precise mapping of images onto irregular architectural planes and their detailed components, allowing for illusory manipulations that appeared to mobilise static surfaces. Lumentecture moved from its former cultural location as avant-garde art intervention to join the ranks of proliferating forms of ‘post-cinema’ in which the moving image dispersed across multiple new platforms, cultural contexts and viewing arrangements.

Entrepreneurs and marketers were quick to appreciate the potentials of this rapidly evolving medium as a novel form of popular entertainment capable not only of transforming, but of re-imagining, public space. Lumentecture’s commercial promise spawned a new breed of companies specialising in digital design for large-scale public installations.

Audio-visual installation and site-specific projection mapping have released the beloved art of cinema from the traditional viewing environment. Bridges and tunnels, fine art galleries, museums, special events, parties, concerts — almost any location can now host large-scale cinematic entertainment. Our culture’s greatest communication medium becomes free to travel, interact and respond to the environment beyond the screen.

One of the first and most active Australian design companies was The Electric Canvas (TEC), established in Sydney in 1997. TEC has remained a dominant force in festival installations around Australia and internationally, employing a team of artists and specialist technicians to tackle projects well beyond the scope and resources of most independent artists. An early TEC commission was Neon Colonial in 2002 for the Sydney Festival, a work celebrating the city’s colonial architecture with installations on the Customs House, the State Library of NSW, and Hyde Park Barracks. Neon Colonial continued the tradition of large-format still slide images, but was a landmark work in the early development of 3D projection mapping. TEC artists worked with various graphic treatments – bright contrasting colours, hand-drawn overlays, architectural sketching and photographic manipulations – to create “as many unique and striking designs for each of the buildings as possible” with a different image every day of the festival.

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89 From the website of New York projection mapping company, Light Harvest. <Accessed 1/3/2016> http://www.projectionmappingnewyork.com/

90 ibid.

91 Lists of companies and artists who specialise in lumentecture installations are provided in References.


By the end of the decade, lumentecture was well established as a spectacular festivalesque attraction, a highly successful device for drawing crowds into city centres at night, animating streets with bodies and façades with mesmerising imagery. On a site not far from the Adelaide Festival Centre where *Humpy* appeared in 1988, TEC was commissioned by the Adelaide Festival to create two iterations in 2008 and 2010 of *Northern Lights*, projections on a row of iconic public buildings along Adelaide’s North Terrace. Each building had projected onto it a series of still slide images that changed every five minutes, a relatively slow and primitive technique by subsequent standards. Yet this cluster of installations established the concept of a night-walking itinerary through an illuminated urban precinct, a seminal departure from focus on a single building and a model for festivals to come. By 2015, Adelaide Festival had embraced the moving image in a whole precinct of projection installations titled *Blinc*, transforming Elder Park with numerous light sculptures and large-scale video projections from a cast of international artists. In 2016, Adelaide Fringe featured *Illuminations*, a projection program again mounted on North Terrace, but highlighting “the rapid evolution of the art and technology of high intensity coloured projections” through interactive works.

Evolution of these projection events in Adelaide’s festivals encapsulates lumentecture’s broader trajectory as a practice that began with independent artist interventions using large-format still slides, the uptake of this practice by commercial design companies, its refinement with 3D mapping techniques and incorporation of moving image/sound, and finally to works encompassing forms of audience interactivity and the rise of night festival itineraries. Yet despite the sophisticated technological power now harnessed in the service of these contemporary projection artworks, they do not necessarily rise to the conceptual vigour and depth of engagement with site demonstrated decades before by Wodiczko and de Gruchy in *Humpy*. Cindi Drennan, for instance, comments negatively on a number of works projected on the Adelaide Festival Centre as part of *Blinc 2015* on the grounds of their minimal relationship with the site and the building, presenting abstract video pieces more suited to a rectangular format and flat screen.

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By the second decade of the 21st century, lumentecture in Australia had expanded to encompass a broad spectrum of practices and contexts from small-scale installations by independent artists to mega-productions spanning numerous sites around an urban precinct, or even multiple precincts. A wave of new urban night festivals had emerged, enlivening city centres after dark by attracting audiences to night-walking itineraries punctuated with light sculptures and projection installations. \textit{White Night Melbourne},\textsuperscript{98} initiated in February 2013, was directly modelled on the international \textit{Nuit Blanche} movement, an ever-expanding global network of cities that invite their citizens and visitors to stay up all night, one night a year, for a program of arts offerings dominated by large-scale projection mapping onto multiple urban façades.\textsuperscript{99} Sponsored by the State Government of Victoria, the festival was initiated as a strategy for branding Melbourne as “Australia’s international city of artistic innovation.”\textsuperscript{100}

Numerous other annual night festivals around Australia occur over more extended periods, typically running for several weeks. Melbourne hosts two further annual night festivals at different times of the year: \textit{The Light in Winter}, initiated in 2007 as a solstice celebration centring on Melbourne’s Federation Square\textsuperscript{101} and the community-focused \textit{Gertrude Street Projection Festival (GSPF)}\textsuperscript{102} established in 2008 by a not-for-profit volunteer group dedicated to exhibiting new media.\textsuperscript{103} Canberra’s wryly named \textit{Enlighten Canberra} was initiated in 2011 and occurs annually in March over several weekends around the celebration of the city’s foundation day.\textsuperscript{104} Perth’s annual \textit{Winter Light Festival} began in 2011 and runs for two weeks each July, with projections focused on five heritage buildings in St Georges Terrace.\textsuperscript{105} An alternative Perth option is the \textit{Public} festival aimed

at an international niche audience interested in emerging forms of street art. While Brisbane is yet to follow other cities in initiating its own dedicated light festival, it did commission Ian de Gruchy in 2009 to create projections on the William Jolly Bridge, a slide installation that has since periodically recurred and been further developed. Brisbane also hosted a lumentectural extravaganza leading up to the G20 summit in October 2014. The Electric Canvas was commissioned to create installations on four eminent public buildings with the clearly stated purpose of promoting tourism, building international networks, and highlighting “the best of what the State has to offer.”

Foremost among Australia’s new night-light festivals is Vivid Sydney, initiated in 2009 by Tourism NSW to attract visitors to the city in late May, normally the quietest time of year. Vivid runs an 18-day program aimed at transforming Sydney “into a dazzling playground of light installations and projections” and a “hub of innovation, creativity and community” by “building audiences and markets for the creative industries, and offering professional development opportunities across the sector.” Promoting Sydney as a creative city par excellence ready to complete on the world stage, Vivid’s commercial agenda is overt. The festival is marketed as an opportunity for productive cross-fertilisations between business, the arts, science and technology. Its primary purpose, festival marketing rhetoric asserts, is to transform Sydney into a showcase for the latest in lighting technology and immersive experiences, offering “one of the world’s most unique consumer and business events” where creators, light artists and manufacturers can enjoy “a unique opportunity to highlight new products and leverage Sydney’s global brand.”

Marketing material for Vivid 2016 blatantly conflates ‘light’ with ‘enlightenment’ in an extraordinary example of neoliberal rhetoric that begins with a romanticised history of

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107 The Treasury Hotel, the Old State Library, Parliament House and the Pullman Hotel.


109 Now renamed ‘Destination NSW’.


112 ibid.
ancestors around the campfire (an oblique nod toward Indigenous Australia) then segues to a heavenly vision of Sydney as a vibrant and inclusive urban paradise.

Humanity has always been drawn from the Darkness to the Light. Ideas didn’t come to our ancestors as they were chasing their prey across the tundra: only later, as they gathered round the campfire, clustered around the light, did they begin to tell stories, sing songs, make music – and come up with ideas that would change the world. Light and creativity have always been closely associated, and Vivid Sydney is when creativity shines on Sydney, showcasing a free, diverse, tolerant, democratic, accessible, beautiful and creative city in Winter.\(^\text{113}\)

Ironically though, the first ever projection on a Sydney Opera House sail (in October 2001) was staged by guerrilla activists campaigning for better government treatment of asylum seekers arriving in Australia by boat (Image 2.2-7). The outcome of a series of workshops run by Sydney artist Deborah Kelly, the event was startling for its boldness as well as the novelty of its technical means. It comprised a 15m-tall image of a traditional sailing ship underscored by the text: “\textit{We are all boat people.}”\(^\text{114}\) The choice of the Opera House as site was highly strategic given its Indigenous significance as a gathering place as well as its historical status as landing place of the first fleet of European colonists. Within ten minutes of the projection appearing, security guards closed in and forced protestors to leave, yet the image became an icon of the emerging refugee advocacy movement.\(^\text{115}\) J. Olaf Kleist suggests its potency lay in linking founding myths of a modern Australian nation arriving from Europe in tall ships with today’s boat arrivals from Asia and the Middle East, a timely reminder of a national history built on maritime migration.\(^\text{116}\) Despite its brevity, the installation enacted an effective layering of the material surface of the building, the cultural significance of its site, and the message of the projected image itself. The ghostly sails-on-sails of \textit{We are all boat people} pre-empt the building’s future life as lumentectural celebrity and remind us that projection’s most powerful spectacle may lie in darker, quieter moments.

Yet sound has also become a key component in the staging of many contemporary lumentecture events. Just as Robertson used the magic lantern to project phantoms that challenged and confused the senses, the design companies of today deploy new technologies to create illusory architectural manipulations enhanced by evocative soundscapes. Like the phantasmagoria of two centuries before, contemporary light


\(^\text{114}\) The image was subsequently reproduced in newspapers, on T-shirts and on postcards as well as projected onto other buildings. See J. Olaf Kleist (2013) ‘Remembering for Refugees in Australia: Political memories and concepts of democracy in refugee advocacy post-Tampa’ in \textit{Journal of Intercultural Studies}, 34:6, 665-683.

\(^\text{115}\) Kleist, op. cit., 670.

\(^\text{116}\) ibid, 670–671.
festivals invest heavily in spectacles of magic and illusion, even as they deliver powerful promotions for the rational achievements of science and technology. Where Robertson’s audiences were aghast at the appearance of ghostly human presences, the new tropes of illusion cause audiences to gasp as solid façades – through a seamless partnership between sound and moving image - seem to extrude and retreat, change colour and texture, crack, collapse to the ground, fill with water and spout leaks, catch fire, develop new openings, dance, cough, and become transparent to reveal their interiors. Architecture’s stoic monumentality morphs into a more volatile sense of presence and agency as buildings take on an uncanny subjectivity. True to its phantasmagoric genealogy, lumentecture conjures its phantoms by positioning science itself as spectacle.

As government and corporate bodies move to capitalise on lumentecture’s startling achievement of rendering the monumental surfaces of the city contingent and unstable after dark, arts administrators, practitioners and audiences are recruited into a commercial enterprise known as ‘place-marketing’ or ‘urban-branding.’ While narratives and images of place have always been produced and circulated, as geographers Johan Jansson & Dominic Power point out, this process has recently become far more purposeful and sophisticated. Neo-liberal discourses of global capitalism and economic crises position cities and regional towns as potential centres for innovation and development, a form of renewal contingent on construction of a favourable ‘image’ of place. The notion that urban centres now compete in changed conditions of a global knowledge economy implies that they must be able to “attract new influences, assemble existing strengths, and act as arenas for the exchange and development of new ideas.”

Within this frame, arts festivals are viewed as a cogent mechanism for generating authorised narratives of place and public space. They are swept into the ambit of intense international competition for trade and investment, tourism and spectacular events. Conveniently, the commodification of place is underpinned by the more attractive construct of ‘the creative city’ – an idea inspired by the basic proposition put forward by Richard Florida – that a 21st century economy could be driven primarily by a vibrant creative industries sector. Serious flaws in Florida’s arguments have long been

119 ibid, 9.
121 This discourse gave creedance to the now discredited arguments put forward in Richard Florida’s books: *The Rise of the Creative Class: And how it’s transforming work, leisure, community & everyday life*
exposed, yet cities around the globe continue to ‘rebrand’ and market themselves as hubs for exciting new ideas, vibrant arts communities, and visionary ventures in sustainable architecture and urban design. Sponsored by government tourism departments and private industry stakeholders, arts and culture festivals are now the outward markers of a creative city ethos. The appropriation and repackaging of grassroots community celebration and ritual under cover of the arts strikes an ironic note within neo-liberal economies founded on deregulated privatised competition and individual consumption.

There is thus a compelling need for scrutiny of how neo-liberal political agendas may be served or undermined by the arrival of lumentecture’s new forms of phantasmagorical encounter within the fabric of urban space. Throughout history, carnivalesque celebrations have been tolerated, even encouraged, by those in authority as an outlet for community tensions and the personal frustrations associated with the day-to-day banalities of work and life. In reality, as Carly Osborn points out, festivals offer only a temporary window of release for grievances or break from monotony for, at their end, there must be a return to the established order. If arts festivals have now primarily become effective platforms for encouraging the public to take short, spectacular holidays from the austerity of global economic gloom, then festivals emerge as a kind of metaphantasmagoric commodity within discourses of 21st century capitalist consumption.

Interrogation of these issues appeared in a special issue of the Canadian journal Public: Art Culture Ideas in mid-2012 and contributors explored a spectrum of views on ways in which the new festivals contest or entrench neo-liberal agendas. Max Haiven, for instance, asks how particular festivals offer a form of public address by and for a city. Conjuring the unsettling spectre of “a city’s image frozen in spectacle” he suggests that “in an age of the “creative class,” notions of the value of creativity and the moral and economic uplift of the arts define and delimit the debate over urban revivification within a neoliberal frame, displacing the voices of those whom the city would wish to forget.”


125 Max Haiven (2012). ‘Halifax’s Nocturne versus(?) the Spectacle of Neo-liberal Civics’ in Public: Art, Culture Ideas. 23: 45, 86.
Against this view, Eric Moschopedis argues that festivals generate “temporary public spaces and infectious modes of operating in the world” that are conducive to the renewal of civic agency and altered subjectivity.  

In a critique of the creative city ethos, with a particular focus on Sydney as exemplar, Oli Mould suggests that it is vital to mark out a clear distinction between ‘Creative Cities’ – the discourse of urban branding – and the ‘creative city’ – the willingness of a city to foster multiple viewpoints and creative interventions in public space. Mould argues that neo-liberal discourse of Creative Cities – while framed around references to ‘tolerance’, ‘difference’ and ‘inclusivity’ – in fact seeks to represent ‘the city’ univocally. This demonstrates a failure, he says, to grasp how the conduits of human creativity often arise from the messiness, complexity and diversity of communities. In the worldview of Creative Cities, diversity tends to be “repackaged as a sanitised simulacrum of creativity, aggressively pushed within a corporate agenda, and advertised as good cause for investment.” The ethos of the Creative City, Mould argues, promotes celebration of all forms of diversity that can be appropriated, repackaged, neutralised and depoliticised. Against this trend, a truly creative city would radically resist and subvert the kinds of individual, collective or civic creative practices imposed top-down by dominant political and economic organisations.

Mould argues that the Creative City is also (re)producing an active movement, around the globe, of alternative creative practices as ‘the other.’ Practices of ‘urban subversion,’ he says, are proliferating and becoming more ‘creative’ in reaction to the Creative City ideology. He points to a range of visible urban subcultures – such as parkour, street art, graffiti, skateboarding, urban exploration, yarn-bombing, building and flash-mobbing – but also beyond these to “a less teleological and more fluid, rhizomatic and experimental universe of everyday urban practices, where people are simply reconfiguring the city around them to express their cultures, beliefs, anxieties, frustrations, happiness and a whole range of other affective and emotional occurrences.” Mould enlists Deleuze’s concept of desire as the motivating force for anarchic experimentation with innovative ways of using and transforming urban environments.


129 ibid.
PART 2. Contextual Matters

Melbourne’s Gertrude Street Projection Festival exemplifies a form of organised resistance that détournes elements of projection as mega-spectacle into a community-based, collaborative affair. Brisbane’s U.R(BNE) Collective\textsuperscript{130} is a ‘grass roots’ movement that characterises participants as ‘tactical urbanists’ dedicated to utilising public spaces for ephemeral art interventions using new media and projection. Reflecting on this group’s ethos of reclaiming the lost and forgotten spaces of the city, Kerry Turnbull argues that festivals are important and can work in support of artists whose practices defy exhibition within the constraints of the traditional gallery. He argues that festivals not only open opportunities for audiences to engage with a wide range of ephemeral public artworks, but also foster creative communities and collaborative approaches to innovative use of technology.\textsuperscript{131}

Yet, ironically, perhaps lumentecture’s most powerful potential as a medium of resistance against corporate-sponsored spectacle lies its unique facility for returning a post-cinematic 21\textsuperscript{st} century phenomenon to its pre-cinematic roots in the first decade of the moving image’s invention. A century after Robertson’s phantasmagoric spectacles in Paris, the Lumière brothers pioneered the first successful technologies for moving image projection in Lyon.\textsuperscript{132} The mid-1890s marked the beginning of modern cinema and an inaugural decade of experimentation with technical, stylistic and structural elements of film. Formerly termed ‘pre-cinema’ by film scholars, this decade was viewed as a primitive antecedent to development of the narrative form that came to dominate most of the 20\textsuperscript{th} century. Tom Gunning destabilised this accepted view of cinema’s first decade in a seminal essay published in the film journal Wide Angle in 1986 where he argued for its reimagining as a ‘cinema of attractions.’\textsuperscript{133} Gunning drew attention to distinctive characteristics and contributions of early cinema, specifically its emphasis on sensory intensities and affects of spectacle, to directly address audiences and bring them into a heightened sense of embodied place and presence formed through shared ritual and connection.\textsuperscript{134} The cinema of attractions was the antithesis of the later development of a classic cinematic dispositif where, in the darkened space of the movie theatre, distractions


\textsuperscript{132} Mannoni (2000, p. 417) argues that the Lumière brothers cannot solely be credited with the invention of projecting chronophotographic images but were part of a large group of inventors and ‘newcomers’ such as the Lathams, Jenkins, Armat, de Bedts, Joly and Skladanowsky who between them launched cinematography as both industry and spectacle.


\textsuperscript{134} Gunning borrowed the term ‘attraction’ from Russian film-maker and theorist Sergei Mikhailovich Eisenstein who had used it in his search for new modes of theatre that would subvert its realistic representational forms.
were minimised and audiences were expected to sit immobilised, disembodied in order to focus full attention to the narrative diegesis.

Associated with the popular and sometimes extreme sensory pleasures of the fairground, such as the rollercoaster ride, ‘attractions’ bring the spectator into experiences of forceful “sensual or psychological impact.” Success of the attraction rests on its intensity of audience encounter rather than on development of a sustained narrative and in-depth characterisation by actors, on “exhibitionist confrontation rather than diegetic absorption.”

Gunning’s depiction of early cinema has gained broad credence among film and visual culture scholars and led to renewed interest in its distinctive character and sensibilities, particularly the sense in which these continue to reappear in modern cinema. In a reworked version of his earlier essay in 1990, Gunning summarises early cinema’s distinctive features:

> [T]he cinema of attractions directly solicits spectator attention, inciting visual curiosity, and supplying pleasure through an exciting spectacle – a unique event, whether fictional or documentary, that is of interest in itself. The attraction to be displayed may also be of a cinematic nature…or trick films in which a cinematic manipulation (slow motion, reverse motion, substitution, multiple exposure) provides the film’s novelty…Theatrical display dominates over narrative absorption, emphasizing the direct stimulation of shock or surprise at the expense of unfolding a story or creating a diegetic universe. The cinema of attractions expends little energy creating characters with psychological motivations or individual personality. Making use of both fictional and non-fictional attractions, its energy moves toward an acknowledged spectator rather than inward towards the character-based situations essential to classical narrative.

Driven primarily by a dramaturgical impulse, the cinema of attractions explored alternative temporal structures to linear narrative forms. Its primary investment was in utilising cinema’s abilities to show something extraordinary about the real world, favouring direct address and presentation of a series of displays or magical attractions.

In pre-cinema, the fascination of the moving image lay not in its capacity to replay naturalistic images of the world or to take up the dramatic narrative traditions of theatre, but in its power to harness new forms of visibility. Early modern avant-garde art movements (Futurists, Dadaists, Surrealists for instance) were quick to appreciate the radical potentials of the new medium and saw as misguided its deployment into forms

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135 Gunning, op. cit., 66.
136 ibid.
138 Gunning’s (1990) article republished in Strauven, 384.
139 Gunning (1986) op.cit., 5.
140 ibid, 63–64.
that resembled conventional theatre.\textsuperscript{141} The Italian Futurists, for instance, commented favourably on cinema’s potentials as an agile medium, “the ideal instrument of a new art, immensely faster and lighter than all the existing arts” with the capability of delivering poly-expressive forms.\textsuperscript{142}

Contemporary lumentecture installations reinvigorate this pre-cinematic ethos of the popular attraction with its embrace of non-narrative structures, sensational effects, vivid colour, temporal manipulations, evocative soundscapes and direct address of audiences. As Gunning notes, even in an era of media saturation, antiquarian cinematic forms can inspire a new generation of artists to explore the possibilities of projection beyond the usual contexts of experimental film and video, “thus dealing less with the established formal paradigms of frame and screen and audience, and playing with ambiguities of space, motion, and ontology.”\textsuperscript{143} Unique to lumentecture’s post-cinematic revival of the cinema of attractions is its focus, not on the seductive play of imagery \textit{per se}, but on how the moving image can be brought into direct synergies with the surfaces of the city to transform embodied relationships and reveal new facets of public space. The attraction arises as pure force of light re-articulates architecture’s everyday material presence under cover of darkness, immersing audiences in radically altered relations with familiar surroundings. Architecture becomes protagonist in the unfolding of a sensational non-narrative event.

Appropriated to serve the interests of global capital, lumentectural spectacle becomes a prime target for the kinds of concerns expressed by Debord and his interlocutors since the 1960s. Innovations in digital technologies of visualisation, ubiquitous mobile media and augmented reality have radically altered the ways in which we consume and (re)produce the spectacle. The ‘model’ of state power to which Debord and the SI were reacting has altered dramatically, subsumed by the new conditions and globalisation’s pervasive reach. The tools and strategies of neo-liberal growth – city branding, PR and marketing notions such as the Creative City – profess to seek out difference and celebrate its novelty yet, in reality, often serve to undermine community-based activities that are truly productive of diverse experience.\textsuperscript{144} Artists and design collectives can nonetheless seize opportunities that arise in lumentecture’s increasing presence in urban spaces to utilise commercial resources and identify effective points of resistance – new strategies of

\textsuperscript{141} ibid.
\textsuperscript{142} Statement from the Italian-based Futurist movement of the early 20\textsuperscript{th} century cited in Jackie Hatfield (2005). ‘Expanded Cinema and Cinema of Attractions’ in \textit{Art: In-sight}, 27:1, 5.
\textsuperscript{143} Gunning (2009), op.cit., 34.
détournement or dérive. As Mould reminds us, it is important to remain cognisant of the positive driving forces of desire in exploring multiple social and cultural configurations alongside, against, or in the cracks of corporate spectacle.

Audiences, too, exercise agency in shaping their own terms of engagement with the economic and political vectors producing lumentecture’s new cultural terrain. Reflecting on the significance of his experience of the Gertrude Street offerings for 2014, Guy Rundle suggests that projection festivals present a paradox in their capacity to render private fantasies and obsessions public, while at the same time offering a form of collective public worship reminiscent of ancient moon festivals, ecstatic processions and unique ceremonies.145 Night festivals, he says, open up different ways of inhabiting and remembering familiar urban spaces:

The Projection Festival allows you to simply be in your city, to see it, in the dark, in a different light. It is a being with the place that seems to reconcile the city as spectacle and the city as backdrop, as the where-you-live. It is an event that is not an event, a happening that doesn’t happen. It is an extraordinary thing, whatever it is, that will linger in the mind long after it has gone. What will it look like in the memory, like that achingly naive film of a vanished world? If it is very lucky, it will leave no trace at all, save in memory itself.146

PROVOCATIONS 2.3

What are the implications of ‘painting with light’ with new technologies that allow precise mapping of moving images/sound onto irregular planes and architectural details, making possible the illusory manipulation of static objects?

How might artists exploit, navigate, resist or subvert neo-liberal capitalist agendas of ‘urban branding’ through the arts?

In what sense is lumentecture uniquely able to reveal extraordinary insights into real world – to harness new forms of visibility as in cinema’s first decade of moving image ‘attractions’?

How do specific lumentecture installations position audiences and structure possibilities for participation and interactivity?

2.4 Review

Since the invention of the magic lantern and its popularisation in 17th and 18th century Europe, projection artists and designers have been experimenting with effects of light, shade, sound and movement to simultaneously overwhelm the senses and call them into


146 ibid.
question. The history of projection has been driven forward by the engineering of intense and remarkable experiences, aimed at producing mystery and wonder in audiences presented with seemingly inexplicable apparitions and sounds under cover of darkness. For, as Gunning suggests, it seems that the projection’s long-standing capacity to conjure fear, surprise and delight in audiences has not lost its force, even in the intensely mediated world of the digital era.  

Lumentecture’s contemporary post-cinematic configurations thus arise in hybrid convergences of strands from a varied heritage of innovative practice over several centuries. Dedicated to exploring the possibilities of new technologies as they emerged were the phantasmagoria of late 18th century Paris, the ‘cinema of attractions’ in film’s first decade from 1896–1906, the ‘expanded cinema’ of avant-garde movements in the 1960s and 70s leading through to the large-scale public interventions of pioneer projectionists from the 1980s onwards. The spectacular phantoms of the projected image also spurred development of significant bodies of critical theory in the Marxist tradition – in particular the contributions of Walter Benjamin and Guy Debord which continue to circulate well into the 21st century.

Contemporary lumentecture practitioners, on one hand, benefit from the affordability and facility of digital media in exploring new modes of creative encounter between audiences, art, architecture and place. Yet, on the other, they must navigate complex cultural terrain prone to the discursive tensions that inevitably arise between the demand for conceptual rigour in the arts and hegemonic forces of global capitalism. New forms of projection-as-public-art are clearly subject to the manipulative intentions of commerce just as surely as they contain possibilities for dynamic and diverse encounters between people and place, provoking new relations that may be political, playful, poignant, critical or meditative.

Discussion of each of these key moments in the history of projection has thrown up provocations for contemporary artists, researchers and critics. They offer departure points for reflecting on the implications of lumentecture as an evolving art form and for assessing the efficacy of specific site-based projects.

147 Gunning (2009), op.cit., 34.
Part 2 Images

2.1-1 Étienne-Gaspard Robertson (circa 1798) Phantasmagoria, Paris. 148

2.1-2 Étienne-Gaspard Robertson (circa 1798) Phantasmagoria, Paris. 149


149 Ibid.


150 Wodiczko image downloaded from http://www.k-wodiczko.com/#hirshhorn-museum-projection/svbsi

151 Holzer image downloaded from Creativetime website: http://creativetime.org/projects/for-the-city/
2.2.3 Rafael Lozano-Hemmer (2001). *Body Movies*, Rotterdam, Nederlands.  


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2.2-5 Susan Fereday (1994) *Culture is Business*. Slide projection on the QBE building, Melbourne.\(^{154}\)

2.2-6 The Electric Canvas (2002) *Neon Colonial*, Sydney.\(^{155}\)

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\(^{154}\) Fereday image downloaded from http://www.susanfereday.net/PhotographyByProxy/D6/6.html

2.2-7 Refugee Activist Group (2002) *We are all boat people*, Sydney Opera House.\textsuperscript{156}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{boatpeople1.jpg}
\caption{Photo by Tina FiveAsh}
\end{figure}

\textsuperscript{156} *We are all boat people* image downloaded from http://photos1.blogger.com/img/38/4497/640/boatpeople1.jpg
PART 3: LUMINOUS MATTERS

3.0 Elements of Projection as Spectacle

The historical contexts of lumentecture discussed in Part 2 offered a series of provocations for theorists and practitioners and serve as a base for more detailed examination of the significance and implications of its contemporary manifestations in Australian arts and culture. As a hybrid medium emerging from confluences of cinema, architecture, experimental art and new media, lumentecture offers multiple historical frameworks for theorisation and critical assessment. In the 21st century, it is a rapidly changing phenomenon that continually evolves into new expressive contexts and configurations.

My particular point of departure within this developing field of interdisciplinary discourse is a body of writing that emerged in response to cinema’s major cultural and technological transitions as digital modes of production and reception began to accelerate towards the end of the 20th century. As noted in Part 2, lumentecture practice began to transition, in the first post-millennial decade, beyond its former configuration within the arts as an avant-garde intervention in public space using large-scale still slide images. Whilst this earlier format continues to be used in some Australian events (Enlighten Canberra, for instance), by 2015 lumentecture had predominantly become a medium of the moving image, incorporating animation, video and sound. It can now be understood as one strand of post-cinema’s multiple dispersals out of the movie theatre and across new contexts and viewing arrangements. Straddling its history as art form with gravitas and its present as popular cinematic spectacle, lumentecture continues to challenge the previously clear boundaries between the cultures of fine arts and mass entertainment, a confusion exacerbated by its regular appearance as free outdoors event within arts festivals, albeit clearly sponsored by deep corporate purses. The speed of lumentecture’s recent developments appears to have outstripped the pace of critical response from film and media scholars.

In the 1990s, notions of what constituted ‘cinema’ began to shift away from its established association with the material practices of a single medium and towards converging formations of multiple media, old and new. Pre-empted by avant-garde expansions of moving image arts in the 1960s and 70s, the term ‘cinema’ began to signify a broadening range of moving image practices and philosophical discourse. As Jackie Hatfield notes: “A cinematic configuration could involve intermedia, performance, spectacle, video, art
PART 3: Luminous Matters

and technology in addition to film, and could be located within the ‘black space’ or the ‘white cube’ of the gallery.”

The rapidly changing conditions of a new digital media landscape further destabilised cinema’s classic heritage in the 20th century movie-theatre. By the turn of the millennium it seemed that celluloid film, and indeed the industry’s whole industrial infrastructure, might be moving toward obsolescence. Not only were miniature black boxes beginning to proliferate within galleries as art embraced video as a mainstream medium, but outdoor projection was embedding the cinematic within public space. Critics feared cinema might be replaced with “an amorphous, aesthetically impoverished audio-visual culture that mirrors the barbarity of neo-capitalist consumerism.” Susan Sontag most famously and forcefully articulated this angst in a New York Times feature of 1996. She despaired that cinematic traditions established in the first century of the moving image were being undermined in an increasingly spectacular flow, speed and facile approach to moving image production. Digital technologies were not only impacting on the speed of moving image production, but also leading to development of new cinematic forms, lumentecture among them. Sontag particularly targeted what she saw as the glib qualities of new forms of display that had begun to take hold in public space:

The reduction of cinema to assaultive images, and the unprincipled manipulation of images (faster and faster cutting) to make them more attention-grabbing, has produced a disincarnated, lightweight cinema that doesn't demand anyone’s full attention. Images now appear in any size and on a variety of surfaces: on a screen in a theater, on disco walls and on mega-screens hanging above sports arenas. The sheer ubiquity of moving images has steadily undermined the standards people once had both for cinema as art and for cinema as popular entertainment.

Film and media scholarship has largely moved on from this pre-millennial preoccupation with the ‘death of cinema’ to focus on the reinventions, expansions and new contexts of moving image arts in a digital landscape. Francesco Casetti, for instance, argues for a reconceptualisation of ‘cinema’ as a broad range of practices of production, distribution and reception. Cinema, he asserts, not only survives but is thriving by weaving together and incorporating a wide assortment of contemporary changes within its traditions. In so

doing, cinema is unfolding a new identity not reliant on simple repetition of the same, but on the acceptance of variations and differences.\(^5\)

Casetti suggests that the earlier emphasis of expanded cinema on the centrality of *audience experience* should be key to an examination of contemporary cinema, rather than focus on any particular technology or creative practice. Since experience is inextricably tied to embodiment, it can only be understood within a cultural context and grounded in place. Effective scrutiny of the contemporary condition of the moving image therefore requires a far more fluid and nuanced set of conceptual tools than the customary approaches of 20\(^{\text{th}}\) century cinema scholars with their investment in notions such as canon, repetition, apparatus and spectatorship. Approaching the cinematic though an experiential frame places critical focus less on aesthetic, symbolic or narrative concerns to favour focus on contexts, sensations and affects producing and produced by particular cinematic events and encounters.

Casetti suggests cinema’s reinventions in the digital era can fruitfully be examined utilising seven key concepts: *relocation; relic/icon; assemblage; expansion; hypertopia; display;* and *performance*. He details how each of these terms takes post-cinematic formations in a new direction, yet does so by continually enlisting characteristics of classic 20\(^{\text{th}}\) century cinema as a normative frame of reference. This renders them of limited use to theorising contemporary outdoor projection since, as demonstrated in Part 2, it emerges from quite a different heritage not subject to classic cinema’s *dispositif*. Casetti’s concepts nonetheless prompt the identification of a more appropriate scaffolding of terminology for critical engagement with lumentecture’s vectors in contemporary Australia. Through field studies, practice and theoretical reading – as well as reflection on Casetti’s terms – I arrived at five elements that seem central to defining lumentecture’s particular formations as 21\(^{\text{st}}\) century spectacle. These elements are: *cartography; surface; milieu; temporality;* and chorography. They form the basis for theoretical discussion and exemplars explored in this section as well as offering provocations for discussing practice in the next.

### 3.1 Cartography

From the 1990s, metaphors of ‘mapping’ have been widely embraced in academia as tools for critical inquiry across the arts and humanities, vastly expanding traditional premises and preoccupations of the field of cartography. The uptake of mapping in cultural analysis is commonly referred to as the ‘spatial turn’, a shift that focussed attention both

\(^{\text{5}}\) ibid, 7-8.
on maps themselves as cultural artefacts and on the power-laden processes through which they come to be produced. Teresa Castro explains:

The latter is understood to cover much more than the conventional techniques and operations deployed in order to produce traditional cartographic objects. In this new critical context, mapping can therefore refer to a multitude of processes, from the cognitive operations implied in the structuring of any kind of spatial knowledge to the discursive implications of a particular visual regime.

Deleuze & Guattari critique the concept of maps as objects of representation and suggest that mapping is a process of construction achieved in making connections between different planes of experience in an open and rhizomatic fashion:

The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a mediation.

Maps, they say, are part of a continuum of reality and are not clearly distinguishable from the thing being mapped; they are constantly being redrawn and reconnected to it. This rhizomatic character of maps renders them dynamic and non-hierarchical, “not trapped in the rigid formations of the state, the unconscious, or language” but able to move freely and flexibly between and within these formations. Cartography therefore opens a field of enquiry premised on a strategic practice of questioning “the intricate particularities of site and community.” As Michael Tawa suggests, this process constructs understandings of place by articulating relations between its elements in “seams, sutures, joints and connectivities; and by folding site upon and through site in different scales and registers.”

Remapping Public Space

Urban terrain and architecture itself are undergoing novel forms of remapping as night festivals and other projection events mushroom across disparate Australian locations. New maps of urban precincts, redrawn as routes through constellations of luminous architectural landmarks, are the outward signs of deeper and darker forces struggling for

7 ibid, 144.
11 ibid.
urban renewal within a global economic downturn. Often as bright and colourful as the projections themselves, these maps are throwaway artefacts that remain current only for a festival’s duration: for several weeks in the case of *Vivid Sydney* (Image 3.1-1) and for just one night in *White Night Melbourne* (Image 3.1-2). They are material guides to on-the-ground walking itineraries through the ‘Creative City’ ideal, images that powerfully convey the conflation of meaningful community engagement in the arts and the enchantments of postmodern spectacle. Marjana Johansson & Jerzy Kociatkiewicz suggest that festivals not only chart new routes through the city in transitory reconfigurations of urban space and time but, more fundamentally, are designed with a view to evoking and inspiring a city’s *imagined* potentials.\(^\text{12}\) Night festivals perform this task by enlisting the capacity of spectacle to transform mundane and familiar environs into landscapes imbued with novelty, surprise and wonder. The sense in which this strategy serves as a Trojan horse for furthering neo-liberal political traction – and its effects of exacerbating social inequity – is an important new area for researchers.

In an investigation of covert agendas, socio-political vectors and power relations driving *White Night Melbourne*, David Mercer & Prashanti Mayfield draw attention to the particular character of Melbourne’s emerging cartographies as ‘branded’ city.\(^\text{13}\) They demonstrate ways in which powerful groups such as the police, judiciary and government authorities influence differential public access to Melbourne’s city spaces and control how these spaces are used. Their examples point to a pronounced dichotomy between occupation of public space for political protest\(^\text{14}\) and for highly managed commercial events such as festivals. Reiterating Mould’s cautions about hegemonic approaches to the role of the arts in urban renewal,\(^\text{15}\) Mercer & Mayfield argue that events such as *White Night* epitomise a centralised ‘top-down’ approach to arts and culture, promoting the passive and distancing kind of engagement with the idea of ‘spectacle’ as articulated by Debord.\(^\text{16}\) They draw attention to the opaque operations of power in public space and assert that commodification of the arts within a global economy serves to disregard local voices and community-based forms of agency.


\(^\text{14}\) Mercer & Mayfield give the example of the harsh treatment accorded peaceful protesters of the anti-capitalist *Occupy Melbourne* movement in 2011 by the police, judiciary and government authorities. The Mayor ordered protestors to “return the City Square to the people of Melbourne, to the events that take place there” (3). This demand implies that protest is an illegitimate use of public space since it poses a nuisance to Melbourne’s ever-expanding calendar of events and festivals that are curated and mediated through formal channels and, therefore, deemed ‘acceptable’.


\(^\text{16}\) ibid, 22.
Clearly, then, it cannot be assumed that projection festivals introduce inherently democratic and liberating conditions of post-cinematic spectatorship simply by virtue of their provision of free access, flexible entry and exit points, and mobilisation of bodies in public space. While these particular viewing arrangements certainly offer radical departures from the enclosed and immobilising constraints of the movie theatre, the disembodied spaceless darkness decried by 20th century critics and avant-garde movements, they are no less the product of capitalist industrial forces geared to contriving novel forms of spectacle and its consumption. The complex forces remapping today’s Australian cities with the large-scale projection installations are a world away from the former avant-garde practices of independent artists exercising a critical voice and operating with modest means. Festivalesque projections now require big budgets to employ the services of professional design companies with expert technical and creative teams and an assemblage of high-end equipment. While there are a handful of successful Australian-based lumencuecture design companies (that also operate internationally), there are numerous instances of overseas teams commissioned to work here, particularly with respect to Vivid Sydney and, more recently, White Night Melbourne. That these companies are commercial players within a global economy suggests that attunement of lumencuecture production to local circumstances and cultural nuances, or of fostering home-grown creative enterprise, is not a priority for the corporate interests behind festival sponsorship.

While the cartographies of corporate hegemony attempt to fix Australian night festivals to marketing tactics of ‘urban branding’ or the ‘Creative City’, they also offer openings for creative intervention and strategies of resistance against the flattening forces of globalisation. Deleuze & Guattari suggest that life itself is an ongoing cartographic process through which bodies and their affects are constructed.17 Reimagined as a dynamic and fluid process, cartographic practice actively creates and dismantles territories, not in the conventional sense of spaces bounded by physical coordinates, but as malleable sites of passage or processes open to intervention and transformation.18 As Deleuze & Guattari’s concepts of mapping, cartography and territory deconstruct the fixities of stable and bounded relations with place, they shift understandings of power relations. Public space becomes a multilayered and interconnected field of possibilities for creative intervention and points of effective resistance to oppressive regulating forces. Deleuze & Guattari remind us that the particular business of the arts is to delineate new

17 For further explanation of Deleuze & Guattari’s concept of cartography and individuation see Kaufman, op. cit., 5-6.
territories and set in motion their various effects. Artists, they say, are often the first to “set out a boundary stone, or to make a mark” in order to establish a new domain or space of habitation. Lumentecture artists of today can refuse co-option into vacuous formations of projection’s spectacle and further the tradition of a critical practice with powerful techniques for questioning the cultural, social, ethical and functional constructs of our environs.

Craig Walsh’s *Monuments*, commissioned for *White Night Melbourne* 2014, offers a cogent example of how lumentectural practice can subvert authoritarian discourse by challenging the selective histories embedded in the concept of the urban monument. Walsh projects a series of video clips of closely framed portraits of ‘everyday individuals’ onto trees along the banks of the Yarra River. Viewed from the opposite bank in calm conditions, the row of tree-faces appears doubled in ghostly upside down reflections on the surface of the water (Image 3.1-3). In giant scale, the projected faces turn inwards or return the gaze of the audience and bear witness to narratives of local history and the lives of ordinary people who have been denied a presence in public space (Image 3.1-4). They demonstrate an alternative mapping of the city focussed on making visible what has been suppressed or simply ignored. Unlike the stasis of architectural façades, trees offer a mobile and textured projection surface that responds to airflow and rain. As living monuments, they form an exquisite partnership with Walsh’s projected faces, whose expressions change almost imperceptibly as foliage stirs in the breeze. They invite audiences to explore the darker, quieter spaces of the city, creating apertures for slow encounter and contemplation away from the blaze of bright lights and milling crowds.

More than that, Walsh’s projected faces take us on a line of flight out of Melbourne’s enactments of city branding into an epic journey of creative engagement. *Digital Odyssey* of 2010-2011 was a touring and residency program sponsored by Sydney’s Museum of Contemporary Art in which Walsh blazed a trail of large-scale projection works in far-flung locations around the country. Working with local communities, he responded to sense of place and identity, local history and narrative, to capture and map community faces onto distinctive features of their local environs. Further to this epic tour, the MCA partnered with mining giant Rio Tinto in 2012 to commission Walsh to create a series of

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19 Deleuze & Guattari, op. cit., 316.


works exploring the unique heritage of rock art in the Burrup Peninsula of the Pilbara region. Walsh was confronted with the spectacle of large-scale iron ore mining at work in a dramatic landscape dotted with ancient rock art. Working with Murujuga elders, Walsh recorded traditional stories about the ancient art works and the importance of keeping them safe. Embedded and In Country (2012) (Image 3.1-5) are tributes to the history of the traditional owners and their living spiritual connections to country. The steady gaze of the craggy, lined faces of the elders blended with the textures and cracks of the ancient rock faces is a potent statement about an enduring relationship. Even in the remote spaces of the Pilbara, Walsh manages to channel the resources and ‘brandscaping’ project of a big mining company toward powerful alternative cartographies that return power to the land’s traditional owners. His work points to the relational and interstitial nature of projection as a cartographic practice, one that not only charts disparate spatial coordinates, boundaries and passageways, but also addresses temporal and kinaesthetic dimensions of experience.

Artistic directors of festivals have a vital role to play in directing sponsorship towards artists, designers and the kinds of collaborations likely to promote grass roots social connectivity, democratic agency and creative community approaches to festival as urban renewal. An instance of the realisation of such possibilities can be found in a collaborative project commissioned for White Night Melbourne 2016. Under the artistic direction of Nuno Maya, Portuguese video-mapping company Ocubo and a Ballarat-based group of Aboriginal men from the community cooperative, Pitch Makin Fellaz, were brought together to create an installation on the Royal Exhibition Building. The resulting work, Six Seasons in One, depicted images and sounds evocative of the annual cycle of the Aboriginal calendar, transforming the vast horizontally elongated expanse of the building’s Victorian façade with fast-moving abstract animations depicting weather changes, seasonal rituals and animal migrations. Ocubo drew on the group’s artworks – made with analogue art materials such as stamps, stencils and acrylic paint on board – to


25 Tawa points out that cartography is essentially a “heterotopic and heterochronic choreographic or kinaesthetic practice” that deals with the in-between of the matter of place. See Michael Tawa (1998). ‘Mapping: Design’ in Architectural Theory Review, 3,1: 36-37.

26 The Royal Exhibition Building was built for the International Exhibition that opened in Melbourne at the beginning of October 1880. It was designed to showcase assorted wonders in an incredible array of items that included products, machinery, ethnographic items and fine and decorative arts from around the globe.

create colour palettes and map the group’s key design elements onto structural features of the building (Images 3.1-6 and 7). The skills and creative practices of both groups were expanded and taken into new contexts through this unique international exchange. Ocubo, for instance, described the work’s distinctive combination of analogue image-making techniques and digital animation as productive of a “new language” of video mapping.  

**Cartographies of Surface and Surfacing**

Walsh’s imaginative cartographies of human faces in relationship with their familiar environs demonstrate the sense in which commonplace material surfaces are actually never neutral or vacant like the screen of the movie theatre. Not only do outdoor surfaces become scarred over time by the vagaries of wind and weather, but they are also inscribed with markings of cultural relations and tensions that play out across them. These appear in configurations of memory and imagining as well as in material signs such as graffiti, political posters, advertising billboards and, now, light projections. As previously noted, public spaces and their surfaces can become zones for contest over rights of use, activating tensions between communities with different interests and motives. They can therefore be used as instruments of power and oppression just as surely as they lend themselves to the expressions of diverse community voices.

The particular implications of applying light-based text and images to architectural surfaces have been a recurring and contentious topic of debate since the 1960s when architect Robert Venturi advocated attaching electronic displays to façades to promote democratic public communication.  


create content, cut to the heart of lumentecture’s cartographies as a potentially vibrant and socially engaged mode of expression.

Abigail Susik offers a critique of architectural projection from within broader and ongoing debates about the constitution and mediation of human relations within commodity cultures saturated by images, Debord’s ‘society of the spectacle’. We need to be cognisant, she says, of ways in which particular installations serve to reinforce “the replacement of human relations with an exchange of representations in a spectacle-oriented society.” She emphasises that an emerging “screen politics of architectural light projection” must centrally address oppositions between the momentary conditions of projection’s realisation and other fields of meaning attached to the past and future of its host sites and surfaces. If all aspects of the built environment are seen as available for occupation and manipulation, as readymade objects that can be appropriated from within the public sphere and transformed by personal vision, then there is bound to be friction between competing interests claiming ownership. This implies that lumentecture installations should, properly, always be subjected to public debate and negotiation. Susik’s views mount a direct ethical challenge to independent projection artists concerning the terms of their own authorised or non-authorised practices in public space. Artists also need to address a second – and perhaps more perplexing – issue of how to clearly distinguish their own creative interventions from the sophisticated tactics of the advertising industry for, as Susik points out, projection’s commercial potentials have been readily embraced.

The indiscriminate use of buildings as canvas or billboard, albeit temporary, raises a raft of legal and ethical questions concerning un/authorised use of publicly viewable surfaces, light pollution from powerful projectors, rights of owners and occupiers, and what constitutes trespass. These issues became a topic of hot debate in Adelaide in 2014 after Woolworths provoked the outrage of the Australian Broadcasting Commission (ABC) by projecting a large advertisement onto the façade of its building without permission. Regarding the incident, the Law Society of South Australia suggested that the “victim” of such activity actually had little recourse to protection under existing

30 Guy Debord, op.cit., Society of the Spectacle.
31 Susik, op. cit., 111.
33 Marketing company Adlights, for instance, boasts that it has mounted guerrilla projections “in every Australian city for over 80 different companies over the last 10 years” and that they “have what it takes to get your brand up in lights – anywhere!” See Adlights (2012). Guerilla Projections all over Australia by Adlights. YouTube clip [4:30]. <Accessed 22/7/2016> https://www.youtube.com/watch?v=GlAdZPe4FxY
legislation since projection of images did not constitute trespass, given that Woolworths had not actually entered the property. Nor, it said, did the action warrant a graffiti or vandalism charge since the building itself was not physically altered. The only possible legal recourse for the ABC, it suggested, rested on a Federal act concerning false or misleading representation of sponsorship approval or affiliation. Ultimately, the Law Society concluded that existing property law does not recognise a right to prevent advertising via projection. This conclusion suggests that artists, as well as advertisers, are free to engage in guerrilla projection with a fair degree of legal – if not moral – impunity.

As one line of approach to developing critical discourse on architectural projection as art, Susik suggests investigating ways in which particular works offer the kinds of détournement advocated by Debord as resistance to the dehumanising impacts of commodity culture. This well-rehearsed avant-garde tactic can, however, be embraced as a mode of site-writing that goes well beyond the scope of the individual artist or one-off project. Pre-dating White Night Melbourne and focussed on varied strategies for community engagement is Melbourne’s Gertrude Street Projection Festival (GSPF). Established in 2008, the festival is run by a not-for-profit volunteer group dedicated to exhibiting new media artworks in public space. The festival runs for two weeks each year in winter and occupies a ten-block stretch along suburban Fitzroy’s main shopping street. Organisers facilitate collaborations between artists, residents and local retail outlets to produce diverse installations that work with and against elements of projection as spectacle. Over the years, with the aim of presenting familiar spaces and buildings in novel ways, GSPF has sponsored immensely varied installations to be viewed on building façades, through shop-front windows, in laneways and cafés, and on trees, footpaths and awnings.

A core group of experienced projection artists participate each year, working with the local community and mentoring developing artists. Artistic experimentation is encouraged and is underpinned by “a strong social and cultural inclusion ethos” grounded in the history, culture and architecture of Gertrude Street itself. Dominating the street are the massive high-rise towers of the Atherton Gardens Housing Estate, home to a less prosperous and more culturally diverse demographic than is typical of patrons of the café strip and up-market shops in the precinct below. One aim of this festival is to

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bridge the divide between these sectors of the community, with particular emphasis on inclusion of Indigenous locals. Various approaches to involving and addressing Atherton Gardens residents have been explored over successive festival iterations.

In 2015, for instance, two young artists participated in the festival’s inaugural mentorship program to create complementary works on and beside the towers. Long-term Atherton Gardens resident, Guled Abdulwasi, was mentored by Nick Azidis to produce a series of huge black-and-white images titled *Form Work* up onto the façade (Image 3.1-8). An architecture student, Abdulwasi’s work took the geometrical forms, lines and shapes characteristic of architectural drafting as metaphor for the bustle of Melbourne’s busy urban lifestyles and the density of “symmetrically constructed tasks we have to overcome day to day.” The work reflects the artist’s strong connection to the area as well as his African background in exploring themes of home and cultural interpretation. A complementary work by Indigenous video artist Gabi Briggs was projected on the ground in the gardens below the tower within a grove of eucalypts. Mentored by Arika Walau, Briggs created *Urala*, using video footage from the protest rallies against forced closure of remote Aboriginal communities (Image 3.1-9). Projected onto paperbark and sand, with subtitles in Vietnamese, Arabic, Mandarin and Anaiwin – Briggs’s own Indigenous language – the work presented an alternate narrative of closure from an Indigenous perspective. In particular, it sought to address local immigrant communities to raise conversations about place, community and ownership “in a location where a long history of urban Aboriginal community intersects with those of recent migrants, the disenfranchised and the upwardly mobile, under a stand of trees suggesting a time before white settlement.”

The Melbourne festivals and exemplars of projection works discussed here point to this city’s embrace of lumentecture as a multi-layered and diversifying field of practice with multivalent potentials, as yet barely tapped, for remapping the urban imaginary. On one hand, centripetal forces of the commercially driven phenomenon of urban branding introduce novel cartographies of the old trope of the ‘luminous city’ and promise urban renewal by repackaging the arts’ diverse critical voices as vacuous mass entertainment. On the other, centrifugal forces set loose by artist collaborations and community-oriented

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organisations deflect the phantasmagoria of neo-liberal discourse into unique opportunities for luminous détournement.

3.2 Surface

Swept into the vortices of new cartographies of the luminous city, architecture itself is remapped as popular attraction. Emergent configurations of projected surface in the digital age differ markedly from its 20th century history as public art intervention. Projection artists once approached façades as politically charged screens, as a solid material presence that complemented and contextualised the projected image. They deployed façades as screens for projection of still-slide images in a sense quite other to the function of movie theatre screens whose bland materiality is designed to disappear under the force of light, to serve as a transparent window into a different world.

Reflecting on the significance of Krysztof Wodiczko’s early body of projection works, Giuliana Bruno draws attention to his incisive use of slide images “to interrogate the face and façade of architecture as a dense surface: a permeable site for the mediation of memory, history, and subjectivity.”\(^{40}\) Wodiczko, she says, was unfailingly sensitive to the material presence of the building beneath the illumination, emphasising and revealing its tangible qualities rather than rendering it invisible under a blanket of projected imagery. Susik, too, remarks on this characteristic of Wodiczko’s work as one of the key demarcations between the tradition of critical interventionist art projections and contemporary installations primarily oriented to entertainment or promotion. Invested in upsetting official hegemonies and rigidified social systems, “Wodiczko’s projections unmask the identity of the selected building or monument rather than veil it in a cloak of projected costuming.”\(^{41}\)

Bruno points to a fundamental distinction between this historical understanding of the façade as material ‘screen’ – primarily an instrument refined around operations on the visual field – and contemporary notions of ‘surface’ as encompassing not only the visual but also extending to the realm of the tactile. The surfaces of buildings, as Bruno points out, are subject to touch and weight and being bumped up against as much as they lend themselves to being gazed at from near or far. She argues that, in the digital age, surface materials in themselves are of less import than the ways in which material relations – or ‘surface tensions’ – are made manifest through the interplay of different media forms. It


\(^{41}\) Susik, op. cit., 113.
is, she insists, the reciprocal tangible contact between subjects, objects and environments that enable us to appreciate art’s objects and experiences and suggest the need for a shift of theoretical focus away from the purely optic and toward a haptic engagement with materiality. This is a useful frame for scrutiny of the embedded (in public space) and embodied (mobile, flexible) nature of lumentecture’s post-cinematic configurations.

**Synergetic Assemblages**

Where artists such as Wodiczko approached the façade-screen as a uniquely privileged plane for revealing tensions produced by the material presence of an iconic structure, 3D projection mapping now positions architectural façades as, themselves, subjects of postmodernism’s proverbial fascination with surface play. Already textured and tinted by tectonic features set in construction, buildings are now further costumed in precisely fitted animations, amenable to professional tailoring and makeovers. They emerge, transformed and mobilised, as flamboyant celebrities of the night. Thorsten Bauer of German design team Urbanscreen describes this new blending of effervescent light play with architecture’s enduring material stasis as the formation of “a new synergetic object.”

One could maintain that the architecture, due to its extremely strong reality assertion, manages to drag the otherwise timeless and placeless medium into relation with the present. A present moment in which ‘I as a spectator’ also takes place… a kind of pulse transmission takes place where stone, through its weight and its temporal arrest, decelerates the digital medium from shimmering micro cycles and forces it into relation with the present. Thwarted from a virtual non-place, the medium binds itself to the object, sticks to it and becomes defined in space and time. The medium is refined from a reproducible copy to the original of a thing... The architecture on the other hand follows the impulse with gentle acceleration. Unleashed from its millennia-old static existence, the architecture becomes dynamic and is converted from an object into the subject.

Produced in dynamic mediations between surface, animated imagery and sound, lumentecture’s synergetic objects are perhaps better understood, in Deleuzian terms, as surficial assemblages comprising an interplay of differential rhythms, speeds and spatial connections that rouse architecture from its ontological condition of stasis. They exemplify what Karen Beckman and Jean Ma have called the “still moving” – phenomena emerging from the interface and tensions between stasis and motion in hybrid intersections of photography, cinema and digital media. Manifest in a spectrum of

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42 ibid, 3.
45 ibid.
projection practices designed to create convincing illusions of tectonic movement, they offer a phantasmagoric display that appears orchestrated by the host structure itself. Just as Robinson incorporated live synchronised sounds to enhance the impacts of projection’s capacity to disrupt and question his audiences’ known world, amplified soundscapes intensify architecture’s own contravention of its customary state of viscous monumentality. Buildings appear fluid and unstable with walls that twist, bend or wrinkle; extrude or retreat in parts; breathe or cough; become transparent, translucent, or porous; develop cracks and collapse to the ground.

Exemplars from recent iterations of Vivid Sydney demonstrate how the new cartographies of projection mapping work at transforming iconic city buildings into surficial synergetic assemblages – architectural attractions that deploy various modes of audience address.

German design team Urbanscreen were commissioned to create Lighting the Sails for Vivid 2012. Contrary to the up-beat pace and colour-drenched visual treatments of many previous Opera House illuminations, Urbanscreen staged a leisurely unfolding of images and sounds with a subdued colour palette of muted blues and greens, white, grey and beige. The 20-minute video loop begins and ends with the building simply illuminated in white, a familiar presence stark against the harbour and the city. This still image morphs into (at the beginning) and out of (at the end) the slow moving image of sails that billow and undulate to the creaking sounds of a galleon’s rigging. Shadowy figures pass back and forth across the sails, acknowledgement of the site’s traditional owners. The projected bodies of two dancers curl, stretch and roll across the sails and the tessellated tiles support but also flex in response to their movements, seeming to become malleable and sensitive to touch (Image 3.2-1). The agile bodies slide over the sails in compelling 3D illusions, appearing and disappearing, then fragmenting and becoming engulfed within the surface. These tensions are supported by a slow-moving meditative musical score overlaid with grinding and scraping noises, rumbles and clicks in synchronicity with the tectonic moves.

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47 Urbanscreen is an artist collective and creative company based in Bremen, Germany. Since 2005, it has enlisted interdisciplinary teams of architects, media artists, musicians, academics and technicians to work collaboratively on projects, particularly site-specific media installations for public spaces. These include architectural projections, augmented sculptures, media façade concepts and virtual theatre. The team works in advertising and promotion as well as across the arts and entertainment, completing commissions from major art galleries, international festivals and opera companies. Artistic director, Thorsten Bauer, coined the term ‘lumentecture’ to describe the company’s site-specific practices that brought projected imagery into equal partnership with architectural forms and façades.

These precise technical mappings of performing bodies are inter-spliced with animated cutaway images that incorporate Jørn Utzon’s hand-drawings to reveal aspects of the building’s conception, tectonics and aesthetics. Bodies become architectured and architecture becomes embodied in this tribute to the Opera House’s iconic status as a home for the performing arts and Utzon’s unique aesthetic and design intricacies. In ever-shifting layers and reversals of surface and depth, interior and exterior, the projections render the building as animate subject caught between opposing desires to reveal itself or retreat within. The work articulates a sense of the Opera House as a folded shell, fragile and vulnerable to changing exterior forces, yet porous – even becoming transparent – to reveal creative forces that continue to rise to the surface. Urbanscreen’s crafted synergies play light’s agility and delicate intricacies in counterpoint with Utzon’s own.

Yet lumentecture’s evanescent destabilisations of iconic architecture holds no enchantment for Melbourne art critic Philip Brophy. After attending an evening of Vivid in 2014, he attacks projection as an affront to the sensibilities of the arts.⁴⁹ He particularly decries the irony of transforming Sydney’s home of opera – that most conservative, exclusive and classically oriented arts tradition – into a sensational popular attraction, bemoaning how the arts have been co-opted into supporting such forms of crass commercialisation. While Vivid might be presented as an ‘art event,’ he complains, it is of the kind “that first and foremost pleases the marketing departments of large arts institutions, consoled in knowing that plebeians will be transfixed by vulgar momentary distraction.”⁵⁰ He asserts that projection spectacles on public buildings can be understood simply as the post-millennial equivalent of fireworks, a contemptible descent of the arts into Disney-like scenarios of “family-friendly” and “lower-common-denominator stuff.”⁵¹

Buildings… now perform like outlandish clowns, hysterically trying to attract the attention of those in their immediate vicinity. Buildings are no longer forms or objects – let alone sculptures or installations. They are forced performers; mimes for hire; fancy-dress party-goers; strip-o-grams. Within the logic of global millennial urban renewal, buildings are there not to be renovated, but to be tizzed-up, frizzed and permed. And the most effective means for this type of drag is public projection. It can be rudimentary still dissolves à la PowerPoint, or smarty-pants projection mapping. It doesn’t matter; the result is the same. That old building is deemed to suddenly ‘come to life’.⁵²

Brophy’s concerns are vividly exemplified in two interactive installations by French team Danny Rose, both mounted on Sydney’s Old Customs House at Circular Quay. Move

⁵⁰ ibid.
⁵¹ ibid.
⁵² ibid.
Your Building for Vivid 2013 was a Disney-to-Bollywood spectacle in which the building appeared to respond with unrestrained *joie de vivre* to the moves of a succession of audience members dancing on a plinth interfaced with the projection apparatus. The rock-fusion score and psychedelic visuals were clearly designed to evoke ‘youth culture’ with brash glitzy exuberance (Image 3.2-2). The venerable old building shimmied and shook its hips, twirled its top bits, and performed impressive architectural gymnastics in whimsical defiance of its usual Georgian gravitas. *Play Me! for Vivid 2014* was a similarly conceived work, albeit with a focus on musical instruments that could be played through the gestures of individual audience members conducting from the interactive plinth.

Susik, too, is highly critical of these forms of “architectural ventriloquism” on the grounds that surfaces, not originally intended for the purpose, are appropriated for large-scale totalising projections that are not necessarily sensitive to a building’s appearance, purpose, history or environmental context. She argues that any claims made of site-specific art as a political intervention are undermined when the site itself is simply used as support and subjugated to the play of ephemeral images. When a façade is completely blanketed with imagery, its underlying textures and distinctive features are obliterated and its cultural significance downplayed. In this sense, Susik points out, projected images may actually serve to obscure rather than enhance a sense of space and place. Danny Rose’s *Move Your Building* and *Play Me!* are formulaic installations that could be adapted to any building anywhere. They pay no respect to the particular character or history of the Old Customs House as host structure or engage with significant aspects of its harbour-side site.

**Surface Qualities**

As Urbanscreen’s *Lighting the Sails* demonstrates, projection installations can follow contemporary architectural practices of questioning and dismantling traditional boundaries between exterior surface and interior volume. As Alicia Imperiale explains:

> Architects compress allusions to the depth of the interior into the surface or skin, evolving structures that question the dichotomy between exterior and interior. The living skin of an organism provides a striking metaphor for architecture. Skin varies dramatically as it adapts to the exigencies of the body and as it moves in depth from the surface to the interior of the body. Skin is in a constant state of evolution – shedding itself and regenerating itself. By analogy, the skin of architecture can also be highly differentiated so

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55 Susik, op. cit., 109.

56 Susik, op. cit., 116.
as to question the boundary condition of the exterior and interior through a gradual movement from outside to inside.⁵⁷

Understanding architectural surfaces through the metaphor of skin forestalls their characterisation as flat, directing attention to qualities such as depth, contour, texture, porousness, opacity, elasticity, folds, scars and wrinkles. In reality, the material properties of surfaces render them receptive to manipulation and transformation by light in particular ways. Changing conditions of daylight across surfaces, for instance, produce shifting atmospheric effects that are temporal as well as spatial. Architecture’s material stasis is thus activated by the immaterial forces of light, even without the additional effects brought to the surface by projected imagery. The precise craft of mapping images onto façades to create 3D illusions of texture and mobility further reifies a sense the tactile qualities of architectural surface. Bruno suggests that the conflation of canvas, wall and screen in contemporary artworks is becoming magnified with projection’s revival in new screen-based practices whose textural qualities are exaggerated against their context of a world colonised by proliferating digital screens.⁵⁸ Unlike the latter, the hybridity and depth of projection’s current surfaces reflect and articulate its emergence from a long history of theory and experimental practice.

Part of Vivid 2016, The Matter of Painting on the façade of Sydney’s Museum of Contemporary Art exemplifies how projection can offer an exposé of the pure visceral fascination of surface textures explored through qualities of paint. The work was conceived by an international cast of artists, including Sydney’s Huseyin Sami, supported technically by French design team Danny Rose.⁵⁹ It is not paintings in themselves, objects customarily displayed on walls within the gallery, that form the primary focus of interest in the work but, rather, various active processes of painting and working with painted surfaces that are brought to the exterior (Image 3.2-3).

The MCA façade became host to a series of dynamic meetings between paint and surface in a compelling exploration of qualities of texture, colour, viscosity, gravity, and different kinds of surface treatments. The 16-minute loop began with a highly magnified view of thick, brightly coloured drips of paint sliding down the full height of the building, slower thicker streams alongside thinner ones that plummeted, converging and mixing together in a mesmerising cascade. Splattering colours formed abstract Pollock-like landscapes

⁵⁹ Artists who contributed to The Matter of Painting (2016) on Sydney’s Museum of Contemporary Art for Vivid 2016 were: Huseyin Sami (Australia); Danny Rose (Sergio Carrubba (France); Paola Ciucci (France); Lucia Frigola (France); Cédric Péri (France); Emanuele De Raymondi (Italy); and Jacopo Carreras (Italy).
before being torn like paper and rolled away from the façade to reveal other lushly textured layers beneath. Waterfalls of thick paint gushed, bounced and mingled, seeming to interact with architectural details of the building. Buttery wads of colour invaded the surface and morphed into undulating clouds before being slashed and smeared into long horizontal ripples. Throughout the cycle, the character of the architecture beneath the overlay of light images was never obliterated or compromised, but revealed in disruptions to the unfolding dynamics. The audience was offered a privileged close-up view of a surface in process, a giant canvas being dripped on, painted, torn, blown across, cut and brushed on a massively enlarged scale. The work exemplifies how projection can articulate the interior life and matter of a building as textured layers on its outer surfaces without resorting to the visual strategies of cutaway or ‘onioning’ – the illusory peeling back of a building’s skin to allow visual access to the interior. A slow-moving musical score of resonant, droning chord progressions further enhanced the visual impact and meditative atmosphere of the work.

The exemplars discussed in this section show how, when projected light images touch an architectural surface, they unleash a play of significations in the interstices between the material and the virtual, the monumental and the ephemeral, stasis and motion. Lumentectural events draw audiences into an intimate contest of forces and tensions between a building’s material qualities, its inscribed cultural meanings, and imaginaries unfolded by the ineffable play of light. Outdoor projection’s potentials as an arts medium do not lie primarily in the content or aesthetics of the projected images per se, but rather in qualities of the material relations they are able to activate at the architectural surface in order to reveal something of significance about a building, its immediate site, or place in the wider world. In appropriating the surfaces of the built environment as screens we can use them, as did the phantasmagoria of old, to transform our sense of place and its imagined possibilities.

3.3 Milieu

Audiences attending a lumentecture event are immersed within a multi-sensory outdoor milieu that allows highly mobile and flexible viewing arrangements. This scenario is antithetical to the experience of classic cinema, premised on the desirability of occluding real space, time and bodies in order to intensify absorption in the narrative diegesis playing out on the screen. Cinema’s industrial machine evolved around the idea that ‘spaceless darkness’[^6] would “guarantee the highest degree of bodily detachedness and

seek to alleviate the shortcomings of the individual’s fixed and local bondedness.” The architecture and apparatus of the movie theatre were specifically designed to support this aspiration by ensuring viewers’ physical comfort and blocking out potential intrusions and distractions from the world around. Embodied awareness and sense of physical surroundings could be minimised by the use of padded seats, surround sound, and a giant screen that filled the visual field.

From the 1930s onwards, film theorists and avant-garde practitioners began to problematise this hegemonic “extinction of the bodies of spectators, the dematerialisation of their environment, their extraction from real time and real space, and their unwitting ensnarement within an ideological apparatus beyond their control.” This arrangement was seen to pose ideological risks for spectators entrapped as passive consumers and coerced into attending only to the play of images on the screen. The reinstatement of embodiment, sensation and agency to audiences became one of the prime motives for the expanded cinema movement that gathered momentum from the 1960s with the advent of video.

As the digital era unfolds, it becomes increasingly clear that post-cinematic configurations are orchestrated across a broad array of terrestrial and temporal conditions that are considerably more complex and less transparent than those of the classic dispositif. Practitioners and theoreticians wrestle with the implications and potentials of a cinematic terrain that seems to be expanding, almost of its own volition, on many frontiers at once. Casetti observes a conceptual shift in academic discourse towards assemblage theory, based on the idea that “cinema consists of – and has always consisted of – a collection of heterogeneous elements... which coalesce based on circumstance” and that can be “reintegrated, rearranged, and put to different functions.” Drawing on the rich œuvre of Deleuze & Guattari, this approach destabilises earlier conceptions of the dispositif as a fixed and binding apparatus and investigates cinema as a dynamic ‘assemblage’ of elements and operations that unfold over time.

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61 ibid., 25.

62 Le Grice, op. cit., 163.


64 Casetti, op. cit., 69.

65 ibid., 75.

66 ibid., 69.
Assemblage is one of a suite of conceptual tools devised by Deleuze & Guattari that can be deployed to reimagining the arts, architecture and cinema in terms of their dynamic affects, as productive encounters within force-fields, rather than as isolated objects defined by aesthetic qualities, technical configurations or value as commodities. Assemblages comprise open and flexible sets of elements, generate multiple connections, act on and produce things in the world, and are responsive to interventions. A radical departure from the dispositif of fixed elements, assemblage theory offers a far more agile frame for inquiry into the rapidly changing technological and cultural conditions of a post-cinematic landscape. As J. Macgregor Wise explains:

The concept of assemblage shows us how institutions, organisations, bodies, practices and habits make and unmake each other, intersecting and transforming: creating territories and then unmaking them, deterritorializing, opening lines of flight as a possibility of any assemblage, but also shutting them down.  

Post-cinematic configurations such as lumentecture form new assemblages embedded within the complexity of the quotidian, drawing the related terms of ‘milieu’ and ‘territory’ into consideration. Deleuze & Guattari use milieu in all three senses of its meanings in French: ‘surroundings,’ ‘medium’ (as in chemistry), and ‘middle.’ Assemblages function by selecting elements from their milieus (the surroundings, context, mediums in which they operate) and bring them together in a particular way. Assemblages also create and dismantle territories. For Deleuze & Guattari, territory refers not to the idea of space as a fixed volume defined by physical coordinates but, rather, to malleable sites of passage that derive elements from their intersecting milieus. Territories are never fixed, but constantly being made, unmade and remade. Territory, they suggest, can be understood as “an act that affects milieus and rhythms, that ‘territorializes’ them.” Territories comprise or act within many kinds of milieu that overlap and intersect.

The wittily named Enlighten Canberra projection festival exemplifies the usefulness of these concepts to the project of investigating lumentecture’s contemporary manifestations of spectacle. Each year in March, the festival engages the expertise and technical
resources of The Electric Canvas (TEC) to mentor artists of diverse material practices in creating installations on buildings of national import, located within the Parliamentary Triangle. Artists are invited to create works for the National Portrait Gallery, Questacon Science Museum, the National Library and the Museum of Australian Democracy (old Parliament House). Expressions of interest are called for annually and five artists are selected. No prior experience in digital media or projection is required since artists are given professional coaching and full technical support by TEC. As well as mentoring and producing artists’ works, TEC is also commissioned to contribute artworks to all sites but, in particular, to create a major projection feature for the National Gallery of Australia for promotion of whatever large international touring exhibition is on show at the time. Artists are requested to respond to the respective mission statements of their institutions of choice and are given access to material collections, exhibitions and staff expertise over the development period. They are not required to collaborate as a group or cross-reference ideas, so outcomes are idiosyncratic and disparate.

Across the whole precinct, installations consist mostly of slide transitions (or still images made to drift) rather than video, animation and sound. Eschewing the animated fast-paced projections that often dominate other major festivals, Enlighten Canberra thus offers a slower, more meditative assemblage of works reminiscent of lumentecture’s pre-millennial formations.

**Milieu as Surroundings**

A wide variety of elements and forces that play through the sites where lumentecture events occur – geographic, architectural, social, cultural, linguistic, atmospheric – all impact on and inflect their character in significant ways. The lay of the land, the scale and spacing of host structures, ambient lights, traffic noise, temperature and weather, human voices, shifting assemblages of attentive audience and casual passers-by all become part of the work itself. Milieus are characterised by rhythm and vibration. Since they emerge out of the chaos of the world, they are always vulnerable to its intrusions and exhausting effects, yet they resist returning to chaos through periodic repetition of their ‘code’ of defining elements.

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72 *Enlighten Canberra* is part of the broader Canberra Festival that occurs around the celebration of Canberra Day, 12 March. <Accessed 10/2/2013> See http://enlightencanberra.com.au/

73 *Enlighten Canberra 2012* artists were Nicola Dickson, Josh Dykgraaf, Racket, Julie Ryder and Paul Summerfield. *Enlighten Canberra 2013* artists were Eleanor Gates-Stuart, Betty Holdsworth, Houl, Martin Ollman and David Sequeira.

74 Practices range from painting and drawing to photography and graffiti.

75 This was, for instance, the Renaissance exhibition in 2012 and *Toulouse-Lautrec and the Moulin Rouge* in 2013.
For *Enlighten Canberra* the code encompasses the convergence of various assemblages: a spot within an annual calendar of events; an after-dark time frame; a group exhibition of artists’ works; an expansive lakeside park cut through with pathways and roads; a set of iconic national cultural institutions within easy walking distance and sightline of one another; clusters of TEC’s distinctive booths housing high-end projection equipment; marketing material that issues an open public invitation to audiences; accessible public transport to the site; a terrain heavily coded with political power – most overtly by the prominent government-military axis running down from Parliament House and across the lake to the National War Memorial on the other side. As a national capital fully planned from the ground up, the domain of the Parliamentary Triangle is central to Canberra’s formal cartography of relations between major political, military, economic and cultural institutions, all strategically planned out in interlinked hubs, spokes and roundabouts (Image 3.3-1). Yet while this same set of *Enlighten* assemblages were activated in the festivals of 2012 and 2013, audiences were immersed in dramatically different territorial processes wrought by fundamental variations within the code of elements defining their respective milieus.

What no political power has so far been able to govern are the vagaries of wind and weather. Such indeterminate elements of the atmospheric milieu play a vital role in shaping the character of a lumentecture event. The first weekend of *Enlighten 2012* for instance, presented unseasonably chilly temperatures aggravated by gale force winds and driving rain. The weather was not conducive to being outdoors at all, let alone to go wandering around a large open precinct after dark, intent on executing a photo shoot from under a large umbrella that continually blew inside out. Images from the evening capture angled sheets of rain illuminated within the powerful beams of projected imagery (Image 3.3-2) and the particular intensity of colours on the saturated façades. Only a few bedraggled groups braved the wild weather and the striking designs, textures and colours illuminating each iconic façade floated like oases in a dark and desolated expanse, conjuring an intense, uncanny and spooky experience.

*Enlighten Canberra 2013*, the year of Canberra’s centenary celebrations, unfolded through a markedly different scenario. Canberra Day was sunny and the projections were embedded in a balmy evening program of public arts events, food stalls, and bars catering to an assembled crowd of thousands. The illuminated architectures no longer floated as isolated images within a dark and hostile terrain blasted by extreme elements,

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76 *Enlighten Canberra 2013* was developed as part of Centenary Celebrations under the artistic direction of Robyn Archer.
but as a flamboyant assemblage embedded within a celebratory milieu of noise, colour and movement. The clarity of the atmosphere was perfect for photography in tandem with a leisurely stroll and long pauses to take in the artworks. A large part of the enchantment of the immersive experience offered by outdoor projection events is that their assemblages and de/territorialising effects are forever subject to the indeterminacies of a milieu that produces its intensities according to opaque rules beyond human control.

**Milieu as Medium**

The sense in which a milieu functions as a *medium*, an environs or set of conditions that support and nurture growth, invites reflection on how a lumentectural milieu might foster opportunities for developing new forms of creative engagement with place – for artists, community groups and audiences – even within the top-down programs of government and commerce.

*Enlighten Canberra* offers a mentorship model by which artists from disparate visual arts backgrounds benefit from the expertise and resources of a high-end design team. This model potentially enriches the commercial focus of design companies with the more critical perspectives or conceptually nuanced approaches of independent arts practitioners. It offers a platform for using new technologies to create impactful public artworks and reaches a broad audience demographic. Many works from *Enlighten* artists over the years lend credence to the success of this approach, offering large-scale multisensory provocations with a conceptual nuance that is all too often lacking in the parade of crowd-pleasing clichés so often brought to the surface in contemporary lumentecture installations. Canberra artists have worked particularly well with still slide sequences projected on the columns and panels of the National Library’s stark modernist façade, drawing inspiration from the institution’s various significant collections. In 2012, for instance, Nicola Dickson’s delicate treatments of native plants and animals and Julie Ryder’s *Cabinet of Curiosities* drew on unique historical publications of Australian natural history (Image 3.3-3). In responding sensitively to particularities of the tectonics and program of the National Library, these artists bring their own distinctive style and vision to a growing assemblage of projection works that draw the interior riches of the building across its façade for public view.

*Enlighten*’s model is also problematic in some respects. Artworks of 2012 and 2013 demonstrated artists’ reluctance to address all manner of pithy issues that must surely have emerged in conducting research within any of the four key institutions. Some artists

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77 *Gertrude Street Projection Festival* enacts a different, but equally effective, form of mentoring artists in relation to the works developed on the high-rise towers of the Atherton Gardens Housing Estate. See discussion in 3.1.
appear to evade any substantial engagement with the sites at all and simply adapt their own pre-existing artworks for projection, following idiosyncratic lines of flight into reverie and personal myth with only odd tangential references – or none at all – to the building at hand. The colourful imaginary landscapes of Betty Holdsworth in 2013 exemplify this curious lack of attention to the particularities of place and, indeed, to the unique possibilities of the medium itself (Image 3.3-4).\textsuperscript{78} Such works can be read as opportune advertising for an artist’s marketable objects. They fail to take advantage of the larger possibility of contributing to strategic deconstruction of the milieu of the Parliamentary Triangle through the deterritorialising effects of well executed and politically astute public artworks.

\textbf{Milieu as Middle}

Since its invention, the cone of the projection beam – the in-between milieu of the image material and the material surface where it is deposited – has continued to pierce the dark and provoke questions about how light structures and creates its own worlds. Projection throws forwards shadow, as well as light, to collide with a surface and open up another space, “a space of illusion perhaps, or representation, or simply of the play of light.”\textsuperscript{79} Lumentecture applies its particular craftings of projected slide or cinematic sequence to the changed conditions of the after-dark outdoors in order to destabilise, dislocate and disorient audiences’ customary relations with a site or a structure. The strategically produced deterritorialising effects of projection can potentially introduce fresh insights or meanings, shifting how they are further inhabited and remembered. Different focal points emerge and spatial relations are reorganised, creating “a new centre of gravity, shifting points of stasis and passage, and altered relations between pre-existing elements.”\textsuperscript{80} Tawa uses the term ‘gloaming’ to evoke this intimate play between light and dark with their strange configurations of presence and absence.

Existence and light are often implied together. To be is to dwell, to have a place, hearth or shelter – to be clothed or invested with existence. To come into existence, to become, to shine, to glow – these involve a turning, converging and inclining: a being turned towards the world. In this turning of the day into night into day, there is an iteration: the sun duplicates itself, folding as a reflux, and promises a re-turning.\textsuperscript{81}

Lumentecture installations, in many senses, express and explore milieus that mark out a \textit{middle} ground of qualities held in tension between extremes. They conjure a material

\textsuperscript{78} Betty Holdsworth’s artwork projected on Questacon in 2013, for instance, was inspired by a recent stay on an island in Cambodia.

\textsuperscript{79} Gunning (2009), op. cit., 23.

\textsuperscript{80} Casetti, op. cit., 130.

realm marked by the in-between of stasis and motion, the transient and the enduring, light and dark, real and virtual, interior and exterior. Culturally, festivalesque projections open troublesome cracks between art’s claim to critical and conceptual rigour and the supposedly facile attractions of popular spectacle, between purist ideals and commercial agendas, between enclosed ticketed venues and open public spaces. Lumentecture is a medium uniquely positioned to explore tensions that arise between familiar and alien worlds, between the reassuring presence of buildings and disturbing or bizarre elements introduced by the transient play of light. They unsettle what has congealed into banality to evoke a more fluid sense of place, architecture and alternative modes of their inhabitation. These various interstitial tensions generate potentials for new forms of creativity and critique to emerge. As Michael Tawa explains:

The milieu is not an intermediate terrain vague, an empty pause or chasm – it is itself a world, or a whorl of worlds within worlds. The mythological tradition is full of such intermittent middle-places... the intermediate world of human existence, poised between giants and dwarfs, gods and demons, heaven and hell. The interstice, or the gape at the core of every junction, is what makes possible the strength of a connection, the capacity of a space and the rotation of a wheel. Yet the gap is also a site of deconstruction. Deconstitution or deconstruction is fundamentally a process that takes place at the joints – where analysis loosens... and liquidates the knots that constitute an assemblage.82

Tawa suggests that something significant, even uncanny, transpires when the normative conditions of two arts are reversed. When the stasis of architecture and the kinetics of cinema swap places, so that architecture temporalises and cinema spatialises, the equilibrium of everyday reality is disturbed. Encounters with the uncanny, Tawa says, can be troubling yet also liberating and productive in that they prompt memory and reflection. In enabling architecture to dramatise temporality and duration, lumentecture installations “frame and foreground the characteristic qualities of place, putting place it into relief, magnifying or raising it to a higher power.83 Projections may work with scale, for instance, to make something small – perhaps easily overlooked – adopt an enlarged and forceful presence in the public realm.

A fascinating exemplar emerged with the TEC’s projections on the NGA for Enlighten Canberra 2012. Sitting to one side of the Enlighten artists’ mentorship model, the NGA commissions TEC each year to create a showcase of whatever major international touring exhibition happens to be current at the time of the festival. In a blatant marketing exercise, images of iconic artworks are mapped onto the irregular angles and shapes of the gallery’s multiple façade surfaces. In 2012, this comprised a series of portraits from an

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exhibition of 15th and 16th century Italian Renaissance paintings. The oddity of these famous European artworks seeping out through concrete walls to float massively enlarged on the gallery’s façade could simply have been comical. Yet there were unexpected and poignant resonances that lent gravitas to the spectacle, disjunctive elements transported from the gallery’s interior milieu to startle the senses of those lingering outside. Of particular note was Raphael’s painting of Saint Sebastian (c. 1501-2), depicting the sad but beautiful face of a young man who had been severely tortured for his beliefs. The phantasmagoric spectacle of this massively enlarged visage on a towering wall that ran with tears in the heavy rain was breathtakingly powerful in the context of contemporary debates about illicit torture practices on suspected terrorists by western nations (Image 3.3-5).

In sharp contrast, images for 2013 were drawn from a visiting Toulouse-Lautrec exhibition. The spectacle of displacing these exotic works – into a contemporary medium and out of context on the walls of a foreign city – seemed emblematic of a globalised world playing with art and architecture as readymades, amenable to any chance conjunction that might amuse the public (Image 3.3-6). In fact, the NGA did not stop at plastering its exterior walls with Toulouse-Lautrec posters, but extended their sensibilities into a live ‘pop-out’ in the streets below. In a simulated Moulin Rouge complete with pavement bars and cafes, baristas in costume served up Gallic refreshments to the lively accompaniment of popular tunes from the era.

On this auspicious occasion of Canberra’s centenary celebrations, it seems an extraordinary oversight that no resonating gesture was made in the configuration of projections for that year. It would have been gratifying to see images that magnified the unique contributions of the NGA to national culture with examples from its rich collection of Australian images and artefacts from diverse parts of the country and from all historical traditions, particularly the extensive assemblage of works from Indigenous artists. These surely would have been more appropriate to a centenary celebration of national import than promotion of a visiting European show.

Lumentecture’s milieus of surroundings, medium and the in-between or interstitial demonstrate their volatility, the sense in which they are constantly passing from one into another. Deleuze & Guattari characterise this process as one of transcoding or transduction, defined by processes of becoming – or movement between – rather than

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stasis. Milieus, they suggest, are comprised of multiple assemblages that form and fade away in a dynamic process of arranging, organising and fitting together complex constellations of objects, bodies, expressions, qualities and territories that come together for varying periods of time, to renew or create new ways of functioning. Such processes are not amenable to tight organisation or singular interpretation, but bring multiple elements into a dynamic encounter, cluster or expansion of connections.

3.4 Temporality

Within the physical world, time is commonly understood as a unidirectional succession of fixed segments that can be quantified by counting repetitions of precise movements in space: the swing of a pendulum, the sweep of hands around a clock-face, the rising and setting of the sun, cycles of the moon or seasons. Alongside this concept of time as an exterior phenomenon, a quantifiable ‘relentless march,’ are other more fluid understandings of temporality that are founded in qualities of experience and imagination. From its inception in the mid-1890s, avant-garde practitioners embraced cinema as a medium with unique potentials for experimenting with alternative modes of structuring relations between time, movement, space and spectators. In so doing, they provoked new lines of philosophical inquiry into how the moving image represents and challenges time in the real world.

In this section, I reflect on lументecture’s place within this ongoing exploration of cinema’s distinctive contributions to understanding temporal experience. Like music, cinema can be understood as an art dedicated to structuring time. Where music does so through sound alone, cinema orchestrates sound and image to intensify the affects of both. Lументecture complexifies cinematic practice even further by bringing a real-world context into the convergence of temporal structure, multiple timelines and differential tempo.

Structure

Long before publication, in the 1980s, of Deleuze’s influential taxonomy of time and movement within cinema’s classic dispositif, successive avant-garde movements had been experimenting with alternative temporal structures to the linear narrative feature film that dominated cinema for most of the 20th century. Early practitioners explored a range of temporal structures and direct audience address to demonstrate cinema’s unique

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85 Deleuze & Guattari, op. cit., 313.
abilities to reveal extraordinary insights into the real world. The most interesting potentials of the moving image, they believed, lay in its capacity to exploit new forms of visibility rather than in simply replaying naturalistic images of the world or adopting the dramatic narrative tradition of theatre. Against the movie industry’s embrace of narrative diegesis and montage in the feature film, avant-garde movements – throughout the 20th century and beyond – have investigated non-narrative structures, sensational effects of texture and colour, evocative soundscapes and temporal disruptions such as reverse motion, speeding or slowing frame rates, juxtapositions of stasis and motion, abrupt departures from a predictable narrative flow.

Philosophy offers a more fundamental approach to time and perception in cinema through Deleuze’s theoretical distinction between two basic approaches to structuring cinematic temporality. On one hand is the ‘movement-image’ typical of conventional narrative diegesis, based on a rational organisation of sensory-motor schema in time and space. In this approach, cinema attempts to directly represent a quotidian sense of time as a linear progression of events governed by a logic of cause and effect. On the other hand, the ‘time-image’ departs from representation of time through movement in order to bring audiences into direct confrontation with perception of time as pure duration. Deleuze does not suggest that these are opposing systems of meaning but, rather, a single principle that flourishes as two alternate modes. Where the ontological basis of the movement-image rests on movement within the cinematic apparatus itself, the time-image is premised on facilitating conscious awareness of this reliance, thus opening the possibility for leaving it behind. Rancière proposes that the two kinds of image exist in a spiralling interdependence, as if constituting a kind of cinematic DNA.

Many contemporary forms of cinematic art, including lumentecture, enlist this organising principle of the time-image. Michael Rush describes Bill Viola’s video works as conveying a strong sense of ‘timelessness’ through a temporal sensibility that unfolds beyond the perceived progression of measured time through structures “that they had no

88 ibid., 63-64.
89 Montage is an editing technique in film production in which segments are juxtaposed through editing, often in a fast-paced manner, to compress time and convey a great deal of information succinctly.
92 ibid.
narrative arc or denouement and, certainly, no conclusion.” 93 Devoid of beginning, middle or end, Viola’s installations allowed for random entry and exit points so that “viewers could pass through experience at any time, move, return, and move on again.” 94 While lumentecture spectacles generally manifest a markedly different aesthetic and lack the conceptual nuance of Viola’s work, they too deploy the time-image and the recursive structure to defy any sense of narrative logic, remaining open to infinite points of encounter and interpretation. Lumentecture installations are typically structured in repeating loops of between 12 and 20 minutes, comprising a montage sequence of short clips, and continue to play over a number of hours beginning at dusk. The clips, and the transitions between them, are generally full of playful and sensational elements, lightweight conceptually and interfacing the speed of light with the weighty temporal endurance of the host structure.

Density

The synergetic object (assemblage) so eloquently described by Thorsten Bauer95 is configured through a layering not only of architecture, environment and image, but of their multiple intersecting timelines playing in different speeds and directions. The temporal density this produces is the antithesis of the heterotopic space of the movie theatre, premised on the suspension of routine time and activities in order to immerse the audience in the illusory temporal flow of a carefully crafted narrative diegesis that stands in for, pretends to be, or creates an illusion of a reality that seems to unfolding before us. 96 The architectural design and cinematic apparatus of the movie theatre evolved to facilitate the disembodiment of audiences by isolating and immobilising them in a ‘spaceless darkness’ insulated from intrusion of outside stimulation or distraction. Daniel Fairfax reminds us that there was once a clear barrier between everyday life and the world of cinematic experience. Decisive steps had to be taken to transit from one realm to the other and a sense of liminality was intensified in the moments between the dimming of the theatre lights and the start of projection… “the borderland between one world – our flesh-and-blood reality – and another: the kingdom of shadows.” 97 Embedded within the greater complexity of an outdoor milieu, lumentecture invites audiences into spaces

94 ibid.
of sensory bombardment from multiple input channels – material and immaterial – and intersecting temporal flows. In witnessing the magical transformation of architecture from immobile object to dynamic subject, lumentecture’s attentive spectator is whirled into awareness of time, as a forward-moving linear sequence of passing events, but as a dense vortex of relational forces.

Out on the wide-open spaces of Western Victoria’s wheat belt, the small rural town of Natimuk has transformed its most dominant industrial landmark into a unique synergetic assemblage. As part of its biennial Nati Frinj Arts Festival, Natimuk has deployed the towering walls of its 30-metre-high wheat silo as surfaces for vibrant engagement between arts professionals, local community groups, school children, and a substantial audience of visitors. Performed in 2003 and 2004, Space and Place was a collaborative work with projections by David Jones, a live aerial performance by Y-Space, and a cast of community participants providing Indigenous dance, shadow play, live music and sound. Organisers described it as “a collection of poetic images that explore a community’s unique relationship to land, space and… sense of place.”

Jones’ projections – extremely innovative for their time and place – intersected with puppetry, music and sound across the walls of the silos and bodies of performers, both airborne and on the ground (Image 3.1-3). What emerged was not a grand narrative of the town, nor did the work rely on the conventional recursive movie loops of most outdoor projection works. Space and Place offered an ingeniously engineered collage of layered fragments of local experience, a panorama of insights into the co-existence and interweaving of many individual and collective timelines lived out in and around the town.

It builds a complex and multivalent temporal structure. What emerges is an orchestration of layers and rhythms of time-images that simultaneously evoke the deep history of Indigenous observance of seasonal cycles, contemporary bodies performing creative tasks (in fragments of naturalistic video clips), the architectural presence itself, the highly visible projection apparatus, and the always-unfolding moments of the city around. Just at this moment of film’s obsolescence, Bruno suggests, we are presented with a renewal
of the original impulse of phantasmagoric projection in which manifold times and spaces appear simultaneously, inviting temporal movement backward and forward.¹⁰⁰

The show begins with live Aboriginal performers on the ground casting giant dark shadows up the walls of the silo, projected with traditional paintings to the soundtrack of a didgeridoo and singing in language. Aerial performers in stark white suits begin to walk vertically up the paintings, adding trails of dots into the design until giant shadow-fingers from a raised hand below creep up the wall to frame their tiny bodies. The projected silhouette of a harvest machine operates beneath a map of its trajectory up and down a field, traced out by aerialists high on the wall. A parade of mice and snakes, shadow puppets carried by children, travel across the scene against the movie projection of a local mouse plague. Aerial performers swing like slow pendulums across the silo then bounce against the surfaces, instantly producing a craze of cracks that resemble parched earth in drought. A windstorm of musical notes sweeps up and across the walls, accompanied by sounds of a cello and moaning voices. A large pair of anxious eyes watches as fire breaks out, crackling around the feet of the aerial performers before it engulfs the entire silo structure. A real-life fire engine and firefighters arrive on the scene, sounding off a loud alarm and producing hoses as the pounding rhythm of live instruments builds to a crescendo in synch with the flashing lights of the engine. Rain falls in torrents and the silos fill, prompting the aerialists to make swimming movements, their bodies overlaid with much larger live projections of themselves. Shadows of the live performers and shadows of the live projections of performers make shifting patterns play across the walls. The animated eyes of a stick figure – apparently drawn by a child – peer down from the top of the silo façade as the rain clears and blue skies break through. The white-clad aerialists ascend and descend, sway and rotate against the silo, bathed in red, while their long black shadows stretch out and contract up and down the walls.

*Space and Place* exemplifies how lumentecture can contribute effectively within a hybrid work that sutures the temporal layers of architecture, live performance, shadow play, imagery and sound into the cultural dynamics of its location. It unfolds through intricate temporal convergences and layers of the real and virtual, sonic pulses and rhythms, silences and visual pauses. A matrix of temporal layers complexify and change gear in the mesmerising flux of live performers interacting with projected imagery and sound, with live projections of themselves, with shadows of themselves. *Space and Place* affirms, rather than minimises, their audience’s sense of embodied presence in real place and imagined times, inviting a more richly drawn engagement with their prosaic world.

Natimuk has since mounted further installations on the silos and exemplifies community embrace of the possibilities of large-scale outdoor projection within its recurring rituals of renewal and connection through the arts.

**Tempo**

I have suggested that cinematic temporality in lumentecture installations is typically structured by recursive sequences of time-images of pure change, as well as through the rhythmic and often startling expressions of multiple timelines within a milieu. It is also profoundly inflected with differential registers in the tempo of movement within a clip and in the tempo of edits and transitions between clips. Manipulation of tempo through filmic effects such as slow or reverse motion, substitution and multiple exposure continues to be a favoured strategy in avant-garde cinema for unsettling conventional representations of time.

The ‘Society of Freed Time’ was founded in Dijon in 1995, for instance, to promote experiments with flexible time in cinematic art, just at the moment when creative practitioners were coming to grips with the new logic and facility of digital tools and processes. Sven Lütticken suggests that the broad embrace of film and video art within galleries in the nineties “was accompanied by an ideological narrative that presented art as a haven for a different temporality, for slow and contemplative images, in opposition to the mass media’s action-packed frenzy.”

A retrospective exhibition titled *Slow Motion*, held in Rotterdam in 2006, epitomised the antithesis between the temporal underpinnings of mainstream cinema and alternative approaches to time in projection art. Held at the Museum Boijmans van Beuningen, it displayed recent acquisitions in film, video and photographic art on the basis that they questioned the value of media images and led the viewer towards more intense forms of visual experience. Lütticken questions the validity of such claims, suggesting that the rhetoric of opposition between ‘the Big Bad Other’ of mainstream cinema and the supposedly ‘liberated’ temporality of film and video art has largely resulted in facile expressions of artistic difference. This rhetoric of opposition against mass-media cliché, he says, has itself succumbed to clichés such as slowness, ‘painterliness,’ and non-diegetic or absent montage that, taken up widely and uncritically, become just as problematic and impoverished as mainstream spectacle.

103 ibid., 57.
104 ibid.
105 ibid., 58.
suggests, is to address the crucial question of how the ‘liberation of time’ can be become more than just advertising and achieve “some degree of reality, however ephemeral and intermittent.”106

Lumentecture installations are more likely to unfold through a fast-paced montage reminiscent of music videos than of the slow meditative reveal typical of gallery-based moving image artworks. As a transient, dynamic medium that is easily adapted to whatever tempo seems to suit a particular context, projection pushes against the grain of Australia’s long history of investment in public artworks that signal sedentary monumentality. Evident in a host of large-scale public sculptures rendered in enduring materials such as steel, bronze, plastic and stone,107 the privileging of this ethos might be interpreted as a deliberate political strategy directed to embedding conservative values in public space: materialism, stability, predictability, nostalgia, ocularcentrism, and (masculinist notions of) heroism, for instance. Yet since the 1990s in Australia there has been a growing movement against what has been disparagingly referred to as “plop art” or “plonk art” – monumental public art objects funded by government or corporate sponsors and dropped at random into environments with little or no community consultation.

Natimuk has continued to produce ambitious work on its silo using similar approaches to Space and Place, but also adding new elements. In 2005, the team worked with the local community to create Cirque du Silo in 2005, an hour-long program in which fragments of narrative and image addressed memories of history and place by focusing on the theme of circus.108 In this fast-moving spatially expansive work, the silo morphs from circus tent to stage to screen to scaffolding as context for Y-Space’s aerial performance. Massively enlarged on the silo, stick figures drawn by school children and animated by David Jones, spoke the recorded memories of community elders about their own childhood experiences of circuses visiting the town. In 2011, Highly Strung offered a slow-paced work in strong contrast to the temporal pace of Cirque du Silo, but continued the theme of childhood experience.109 This work immersed the audience in a realm of children’s secret fears, fantasies and philosophies, again with voices captured from local community participants. Conceived by David Jones, projections played on both the silos and a 14-

106 ibid.
metre-high child-puppet operated by ten puppeteers from above and below (Image 3.4-4). Jones worked with local school children on projection artwork, which he animated, and with Y-Space aerial performers. To create the illusion of a speaking mouth, a projector was mounted inside the puppet’s head and connected to an iPod that could be controlled wirelessly from the ground below.¹¹⁰

The Natimuk silo installations make no attempt to suspend a sense of bodily presence in their audiences, but rather invite them into a more richly drawn sense of their everyday world. Even as the silos bombard the senses with an intense mix of evocative imagery, mesmerising aerial performance, refined shadow-play, and compelling soundscapes, they continue to serve as icon and reminder of the prosaic activities of a farming town. Natimuk serves as a remarkable example of a small rural community that has embraced lumentectural installation as a recurring ritual of renewal and community connection through the arts.

Over the past two decades, ephemeral, pop-up and short-term installations have come to constitute a substantial sector of public art commissions. Buzzwords such as “interactive” and “immersive” are circulated as desirable attributes in transient works capable of offering more dynamic and fluid experience of spatial and temporal relations, an evolving poiesis and poetics of place. Commenting on a new wave of projection installations in Brisbane, Kerry Turnbull suggests that “displaying temporary art in public spaces is part of the contemporary aspiration to communicate rapidly with an audience, echoing the pace of social media and the notion that the public are co-generators of conversations and meaning.”¹¹¹ This ethos is associated with fostering a sense of “relational space” through shared public rituals and symbolic connection. Within the broader movement towards ephemeral forms of public art, lumentecture holds a unique position. It relies fundamentally on architectural forms to inspire and host its play of creative imagery, setting the weighty enduring materiality of architecture solidly at its core. Yet its key tactic is disruption of gravitas through agile displays of luminous manipulation that make light work of the complacencies of concrete, stone, steel and glass.


3.5 Chorography

Just as the new wave of night festivals across Australia are generating new maps of urban precincts to reflect shifting cartographies of power in commerce, culture and the arts, so too are they redefining the nature of embodied experience in relation to cinema and to the physical spaces of the city itself. For audiences, outdoor projection events demand multi-sensory engagement beyond the cinematic frame and a walking itinerary through real-world spaces framed by darkness, but transformed and articulated by light. These new spatial and temporal arrangements are profoundly at odds with those experienced in viewing a two-dimensional image hanging on the wall of a gallery or a movie projected on a movie theatre screen. In the first instance, depth is constituted through movement and multi-sensory forms of engagement. In the latter instances, it is presumed primarily in the imagination. Lumentecture events invite audiences to engage in chorographic journeys that encompass kinaesthetic, haptic, sonic and olfactory modalities as well as vision. These new forms of spatial and temporal navigation signal potential for revival of the ancient practice of chorography, of walking the landscape in order to experience slower and richer sensory experiences and understandings of place. Emerging forms of chorography may reference its traditional ethos, yet also incorporate new technologies of navigation, observation and communication.

Topological Itineraries

As Michael Shanks and Christopher Witmore demonstrate, Europe had a strong history of antiquarian chorographic practices from the 16th to the 19th centuries, contingent on performative relationships with place and focused on understanding the rich diversity of life in particular regions.112 Antiquarian practitioners were interested in “the way you walk the land, hear the voices of the past, witness deeds done and take home those experiences”.113 Shanks & Witmore make a pertinent distinction between topographical and topological modes of engaging with place. Where topography is concerned with the spatial geometry of place and consistent approaches to creating maps as tools for navigation, topology deploys chorography to explore “the folding of history and time through land and place”.114 A topological itinerary is not a series of locations along a line on a map, nor even points connected by a road, but is “revealed in a mingling of the particulars of natural history, genealogy, ruins, antiquities, folklore, stone, water and

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113 ibid., 98.
114 ibid., 104.
earth”. Topology is as much concerned with memory and recalling events that occurred in particular places as with immediate lives and landmarks encountered in the present.

Topological conceptions of space incorporate human and temporal relations, qualities and processes, departing from the classic notion of space as a fixed volume contained within geometrically defined boundaries. This profound shift in spatial understanding opened the way for a wide range of cross-disciplinary projects dedicated to investigating space and place as fluid, contested and performative social constructs. The profound implications of topological theory for rethinking the terms by which we occupy and traverse territory were explored in a series of seminar events held at London’s Tate Modern in 2011-12. Participants sought to develop alternative understandings of movement-space, of multiplicity, differentiation and exclusive inclusion that in turn have led to new ideas of power, subjectivity, and creativity. As Bernard Boyne explains:

Topology investigates the fabric of space. It looks into the texture of not merely physical space, but of all conceivable other spaces – spaces of phrases, spaces of colours or sounds, spaces of moods and passions, all spaces of operations on the human soul. Topology resolves the problem of what it is that holds a space together: of what it is that ties a point to its neighbouring regions. Human subjectivity is investigated using concepts of pathway, frontier or boundary; many formulations are possible – neighbourhood; limit; region; inside; outside; openness or closure – all of these can be used to formulate the secret of space.

The chorographic sensibility can be linked to a recurring aspiration of avant-garde movements throughout the 20th century to devise embodied and multi-sensory forms of engagement between artists and audiences, with and within artworks. It surfaced in particular as ‘site-specific’ installations gained favour from the late 1960s and critical attention focused on the aesthetics and politics of the contexts in which creative works were produced, exhibited and received by audiences. Whether inside or outside galleries, museums or theatres, exhibition spaces were no longer regarded as semantically void and vacant sites, but as multivalent places underpinned by power

115 ibid., 104.
116 A major shift in understandings of space and place gained momentum from the 1970s in the wake of influential philosophical writers such as Henri Lefebvre and Michel de Certeau.
relations and richly inscribed with shared constructs of value and memory. Accordingly, relations between the work, the site and the audience came to be seen as intimate and inextricable. As Miwon Kwon explains, “the epistemological challenge to relocate meaning from within the art object to the contingencies of its context; the radical restructuring of the subject from an old Cartesian model to a phenomenological one of lived bodily experience; and the self-conscious desire to resist the forces of the capitalist market economy, which circulates art works as transportable and exchangeable commodity goods – all these imperatives came together in art’s new attachment to the actuality of the site”.121

Lumentecture events transform the city itself into a theatre conducive to highly mobile and indeterminate forms of encounter. They generally accommodate multiple access points, fluid trajectories, alternative perspectives across the viewing space, and flexible points of stasis. They are embedded within a clamour of competing attractions – theatres, cinemas, restaurants, bars and cafés all vying for a share of patronage – and distractions – crowds, traffic, noise. Audiences are thus obliged to take a far more active role in navigating these new cinematic viewing arrangements than was ever required within the traditional dispositif of the movie theatre or even, more recently, the black box spaces within the gallery. Casetti suggests that the model of the spectator attending a film as witness is now eclipsed by various scenarios in which he or she is more aptly described as a performer122 or, perhaps, a bricoleur who constructs an experience by taking advantage of a series of opportunities and materials, combining them in a desired arrangement.123 Each participant has options for pursuing an idiosyncratic trajectory through physical and cinematic space and time, within a multi-layered social and sensory milieu. They are encouraged to become co-producers and promoters of an event as they document, edit, archive, interpret and circulate their experiences through mobile networked devices. Nanna Verhoeff terms this new coincidence of movement and the co-creation of spatial representations a “performative cartography”.

This simultaneity of making and image makes movement itself a performative, creative act. Movement not only transports the physical body, but affects the virtual realm of spatial representation. This implies a temporal collapse between making images and perceiving them. In other words, the navigational paradigm… entails a shift of focus from texts or objects to relations, practices and processes.124

122 Casetti, op. cit., 185.
123 Casetti, op. cit., 189.
Songlines

In Australia, the European heritage of historical chorographic practices is by far eclipsed in historical longevity and conceptual depth by the living heritage of Indigenous Australia’s ‘songlines’. Bunurong elder and author Bruce Pascoe\textsuperscript{125} describes songlines as an ancient network of walking routes, extending right across the country, connecting up all the different nations and clans. He emphasises both their antiquity and their ongoing contemporary importance in proper care for country.\textsuperscript{126} Songlines are revitalised in the passing down and ongoing site-specific performance of stories, songs, dance and language in order to renew knowledge and spiritual connections.\textsuperscript{127} Rhoda Roberts, Head of Indigenous Programming at the Sydney Opera House, describes songlines as “a living map and an archive of our culture… steeped in tradition but so contemporary and relevant today”.\textsuperscript{128} Richly grounded in mythologies of ancestral creation spirits, she says, the maintenance of songlines is a living tradition that reconnects all Aboriginal people with their spirituality and culture, as well as paying homage to the old trade routes that interconnected clans and nations right across the country:

\begin{quote}
The songlines are like a vast fishing net. If you were to hold out a fishing net and look at all the lines that are interconnected, they are like the trade routes, the Dreaming tracks, the ancient tracks. And the diamonds that are formed within that net are all the clan groups across this great country. The reason it’s called a songline is because you actually sing it. When you get to a moment in that song, you know you’re at a particular place. They are a reflection of not only the earth but also the sky and how we navigate the land. The songlines also dictate whom we should marry and how we should respect other people’s country.\textsuperscript{129}
\end{quote}

Michael Tawa draws attention to the stark contrast between this multi-sensory mode of inhabiting ‘country’ and a prevailing European approach to ‘landscape’ as an ocular-centric panoptic phenomenon. Epitomised in notions of the picturesque, the latter adopts a distancing, generalising stance and limited sensorium. Indigenous ways of knowing country, through recurring chorographic cycles, references many layers of experience from the mythical to the factual. The land is experienced “kinesthetically and

\textsuperscript{125} Bruce Pascoe is an Indigenous author and elder of Victorian (Bunurong) and Tasmanian heritage. 
\textsuperscript{<Accessed 13/7/2016> http://brucepascoe.com.au}


\textsuperscript{127} Bruce Pascoe (2016), ‘NAIDOC week: knowledge and preservation of Aboriginal songlines and star maps’. Interview with Fran Kelly on \textit{Breakfast}. 7/7/2016. ABC Radio National. \textsuperscript{<Accessed 10/7/2016> https://radio.abc.net.au/programitem/pg4OGn9Dd7?play=true}


\textsuperscript{129} Rhoda Roberts (2016). ‘Lighting the Sails ‘Songlines’ 360 experience’ on Sydney Opera House. \textit{Vivid} 2016. \textsuperscript{<Accessed 11/7/2016> https://www.youtube.com/watch?v=33O08xQpR8}
dialectically, as a resonance or shuttling between body and memory.” Against European imaginings of landscape as a panoptic whole, the sense of a totalising snapshot frozen in time, Indigenous relations with country are premised on attention to detail, fragmented spatial experiences, on multiple registers and extended journeys over time. Cultural practices of care and renewal are reiterated rhythmically through story-telling, ceremony, hunting, harvesting, and management of flora and fauna.

The rhythms of walking play out a negotiation of position and trajectory. They affect the pace and disposition of movement and experience. The direction, density and viscosity of movement change according to the body’s relationship to the contours, and the trail being followed. Space pulses between dilation and contraction. It fields networks of spatial dynamics, experienced in terms of relative speed and shape of movement, rather than in terms of proportion and geometric configurations. In this temporal and gestural pulsational practice, landscape and body are assimilated to a choreography which traverses space, but which also performs it. Choreography – a praxis of corporeal movement, is allied to chorography – a praxis of spatial articulation. In this place-specific kinesthetics, country motivates and shapes the experience. But the experience also functions as a way of construing and actualising country – of recreating and remembering it, of orchestrating and reconstituting its fractal parts.

Traditional songlines practices are strictly Aboriginal business, embedded within a rich cultural heritage not generally accessible to Australia’s immigrant communities. Yet they offer a powerful metaphor for walking practices that promote community connection, greater sensitivity to the spaces we inhabit, and concern for the broader environmental impacts of our lifestyles.

In mid-2016, the newly popularised after-dark walking practices associated with Australia’s night festivals crossed tracks with the ancient choreography of the songlines. Part of Vivid 2016, Songlines was the title for the first collection of Indigenous artworks to be projected onto the Opera House sails. Directed by Rhoda Roberts, Head of Indigenous Programming at the Opera House, the work serves as a reminder that the site of the building has long been a gathering place for community, ceremony, songs, storytelling and celebration for the east coast Gadigal people. The Songlines installation comprised a 16-minute recurring loop of animated images featuring the work of six established artists from diverse regions right across the country: Karla Dickens, Djon Mundine, Reko Rennie, Gabriella Possum, Donny Woolagoodja and the late Gulumbu Yunipingu. Each artist offered an interpretation of the songlines with reference to traditional

130 Tawa, op. cit., 48.
131 ibid., 49.
symbols, designs, totem animals and plants, and mythologies of country and cosmology from their own clans and communities. Digital design company Artists in Motion transformed the static two-dimensional artworks into dynamic sequences that were precisely mapped to the three-dimensional volumes of the Opera House sails. The team’s account of this vital part of the creative process provides a unique insight into the challenges of respectfully reconfiguring artworks in order to bring them into intimate relationship with architecture and, at the same time, capitalise on the volatile capabilities of a contemporary digital medium.

Supplied with only photographs of the artworks, our team of artists needed to re-create each piece and recompose it to work on the curved surface of the sails. We designed it in such a way that we could create movement, build structure and story from one sequence to another. We wanted each stage to feel like a perfect composition and to give every artist their own unique moment. Once we created compositions to suit each artist we began developing different effects and traditional hand crafted animation techniques that were unique to each style. This process allowed us to create content that established a physical relationship with the building going beyond simply projecting beautiful textures and imagery onto the surface.

The results of Artists in Motion’s mediations between artists and architecture proved extraordinary. The group mapped and animated iconic Indigenous cartographies of country with fine precision across the sails, crafting intimate synergies between Utzon’s unique architectural forms and the fluid tableau of imagery. The full sails, evocative of European invasion, present as the perfect site for articulating the Indigenous culture’s powerful messages of care for the land, spiritual renewal and community connection. Songlines emerges as a seminal work against the general swell of banal and garish lumentecture installations that eschew conceptual vigour in favour of Disney-like spectacles. The work morphs steadily from one vibrant scenario to another, each artist displaying a distinctive approach to imagining country and the abundance of native flora and fauna found in their disparate regions in a journey from east to west across the country. Sonically, the work progresses to a driving rhythm over a pad of drone-like chords and ethereal riffs, punctuated by the iconic sounds of clapsticks, didgeridoo, traditional songs and language.

The journey begins with Karla Dickens’s vibrant gridded maps of country arching across the sails. A flock of crows settle, ruffling feathers, as richly drawn landscapes and native flora and fauna begin to unfold around them (Image 3.5-1). Djon Mundine’s

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136 ibid.

interpretations of ancient rock art from the Sydney basin clothe the sails in soft ochres overdrawn by white outlines of human and animal forms, reminding the audience that painting is an ancient practice in this area. Artists in Motion unleash a group of goannas with striking white ochre markings, convincingly 3D as they crawl lithely up and over the sails. The sails themselves darken and are daubed with ochre, resembling shields, before morphing seamlessly into animated turtles, thick snakes that glide sinuously across the curved surfaces, and finally into billowing red nets that snare fish and stingrays. Reko Rennie’s bold diamond designs, derived from shields and skin markings, repeat on each sail in kaleidoscope animations – black-and-white or the colours of the Aboriginal flag (Image 3.5-2). They finally resolve, pixel-like, into the shapes of the white tessellated tiles of the sails, returning the building fully to itself for a moment before the work drives on. A rippling mosaic of black, yellow and red tiles shifts into patterns and bands that drape the sails with the colours of the Aboriginal flag, background to the brief appearance of a traditional warrior with spear. Abstract maps of land and sky by the late Gulumbu Yunipingu from Arnhem Land appear in folded bands of ochre-and-white, fan-like within each sail. The fans unfold across the sails, their elements fragmenting and drifting upwards like flocks of birds riding the wind, then settle back down again, a cycle repeating through several different works. Yunipingu’s earthy ochres give way to deep sky blues in her cosmological icons (Image 3.5-3), a segue into the star patterns and the myth of the Seven Sisters in the Pilades constellation by central desert artist Gabriella Possum. Aerial views of country reveal the extraordinary abundance and vibrant colours of native flora and fauna in the desert. Kimberley artist Donny Woolagoodja introduces images of that region’s unique Wanjina art with its highly distinctive spirit figures of humans and animals (Image 3.5-4). Floating in the night sky over Sydney, reminders of these ancient images offer a powerful and poignant moment of temporal, cultural and geographical connections.

Of course, not all night festival participants will appreciate the nuances of the chorographic invitation laid out here to remember the deeper histories of urban spaces and to explore slower, more attentive, multisensory modes of engagement. Nor can we assume that these new open-air spaces are inherently more democratic than those enclosed within the walls of traditional arts and culture institutions. In her reflections on cinema’s recent integration into the art museum, for instance, Erica Balsom reminds us that underlying political and economic motives of both institutions may be buried within the apparent permissiveness of neoliberal discourse with its emphasis on the agency of an autonomous self-directing individual.138 The “jubilant celebration of the false freedoms
of neoliberalism” fail to acknowledge ways in which the internalised workings of power that characterise contemporary life are more difficult to discern than overt forms of centralised disciplinary control. While the spectator traversing lumentecture’s public terrain may be ‘liberated’ from certain constraints of enclosure or immobility within the theatre or museum, this does not signal an escape from power. We need to remain mindful, Balsom suggests, of the covert manner in which government and corporate bodies now exercise power within public institutions. The form of disciplinary power enacted within the movie theatre, holding the spectator immobile, has simply been replaced by more subtle forms of control to manage the apparent freedom of mobility of crowds. Such concerns were raised in the earlier discussion of *White Night Melbourne*.

One of the dangers posed by contemporary forms of lumentecture is their cultural positioning in sophisticated intersections of the arts and commerce where it is not always easy for audiences to discern underlying agendas and appropriate modes of response. Susik expresses concern at the prospect of an approaching deluge of immersive spectacles that evade proper critical response.

Might such immersive spectacles be critiqued by their audiences, or will onlookers assume a largely passive, distracted, and unconscious relationship to this imposed image inundation, in which the flâneur finally evaporates entirely into the personage of the apathetic voyeur? Will future audiences have the chance to choose to participate in ubiquitous advertisement consumption, or must they instead be automatically folded into unavoidable “participation” by sheer force of their presence in a technocratic culture? Finally, if such choice exists, will it merely be limited to a prefabricated notion of “interactivity,” in which outcomes are predetermined by the pre-coded limitations of software?

What is needed, Balsom suggests, is recognition of particular ways in which each expression of internalised power opens new possibilities for resistance. Asserting community ownership of public space, for instance, may call for all manner of creative strategies to disrupt the hegemony of corporate-sponsored spectacle in community rituals, counteract the commodification of novelty as surrogate for arts experience, or expose the detrimental outcomes of popular contemporary discourse on the ‘Creative City’ with its deployment of the arts into various forms of urban branding.

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139 Balsom, op. cit., 57.
140 ibid.
141 ibid., 62.
PART 3: Luminous Matters

3.6 Review

In this section of the discussion, I have put forward an original conceptual scaffolding for critical discourse and developing practice. My reflections build on the historical background articulated in Part 2 and draw further on theoretical reading, field studies, and online research into documented examples of installations across Australia. This theorisation of lumentecture’s hybrid practices encompasses cross-disciplinary perspectives from cinema, architecture, spatial and visual culture studies, experimental art and new media. That this medium is set to become a significant new field for research and critique is signalled by major technical advances in projection and mapping technologies, the medium’s recent meteoric rise around the globe as a popular free event in arts festivals, and the new wave of night festivals – dedicated primarily to light sculpture and architectural illuminations – inspired by the nuit blanche movement. This rapidly developing field is as yet embryonic, particularly in Australia, and is therefore open to development of terminology appropriate to addressing its unique cultural vectors. My conceptual scaffold is founded on a set of five key elements that emerge in lumentecture’s dual and often overlapping formations as spectacle and as critical art intervention. They offer departure points for critical reflection as well as a toolkit of provocations for practice.

Cartography draws attention to the recent emergence of urban night festivals intent on redrafting maps of familiar urban terrain to offer guided itineraries through precincts whose architectural surfaces are, themselves, remapped by the powerful transformations of projected light images. These new cartographies of public space raise troubling questions about appropriation of the arts in the service of neo-liberal political agendas and the powerful commercial interests that underpin them.

Surface takes note of the sense in which lumentecture revitalises far older traditions in the use of walls for public art and communication, yet does so within the radically altered conditions of a digital era. Negotiation over creative and commercial uses of physical surfaces in public space occurs not only within discourses and practices of the local, but also in relation to the priorities of a networked globalised world where screens have become ubiquitous, diverse in scope and scale, and highly interactive.

Milieu unfolds three senses in which lumentecture is produced within intersecting force-fields that dynamically shape its configurations across a wide variety of situations. The surroundings of an outdoor event can encompass a range of indeterminate influences from the vagaries of weather and seasonal change to competition from other proximate attractions and distractions. Milieus also serve as medium, in the chemistry sense of conditions for nurture, and lumentecture events may foster convergence and creative
collaboration between artists working in traditional practices and design teams well versed in the new. A *middle* ground marked by tensions between extremes is also a characteristic trope of projection installations: light-dark; stasis-motion; real-virtual; inside-outside; slow-fast etc.

**Temporality** explores ways that avant-garde movements have sought, throughout cinema’s history, to question and experiment with alternative approaches to time. This project has especially focused on temporal forms that depart from its naturalised representation in filmic narrative as an action-based linear progression. Considering temporality from the perspective of structure, I reference Deleuze’s philosophy of cinema with its concepts of the movement-image and the time-image and suggest that lumentecture installations most commonly work with the latter, presenting repeating sequences of fragmented images of pure duration and sensation rather than narrative montage based on sensory-motor schema. Also discussed are lumentecture’s distinctive qualities of temporal density – in multiple intersecting timelines – and of speed, most often fast-paced rather than aligning with recent avant-garde moves to valorise slowness in cinema.

**Chorography** suggests that urban night festivals offer potential for a revival of the ancient practice of walking in order to gain slower and richer sensory experiences of place and history. This practice is premised on topological understandings of place as a performative construct of human and temporal relations, qualities and processes that are fluid and forever subject to contestation and renegotiation. While the implantation of European traditions in Australia bring a history of antiquarian chorographic practice, the far older Indigenous tradition of the songlines offers a powerful metaphor for the fundamental significance of community connection, rituals of renewal, and finely honed care for country.

The numerous Australian examples discussed in this section reflect lumentecture’s phenomenal post-millennial surge around the globe. Within, alongside and beyond this increasingly complex terrain of projection’s configurations, artists continue exploring its potentials as a mode of critical intervention into the functioning of specific architectures in public space. Commercial deployments of lumentecture as marketing tool also open opportunities for independent artists to create installations that challenge, resist, disrupt and pose alternatives to totalising discourse and asymmetrical power relations. My own practice was inspired by the tradition of lumentecture as a critical art form with powerful techniques for questioning cultural, social, ethical and political constructs. Yet, equally, I was fascinated by spectacle itself and the capacity of large-scale urban projection works to transform familiar daytime terrain into after-dark magical landscapes imbued with novelty, surprise and wonder.
Part 3 Images


Image downloaded from *RealTime* magazine online – courtesy and copyright of Craig Walsh. http://www.realtimearts.net/article/issue103/10316
3.1-5 Craig Walsh (2012). *In Country*. Collaboration with Murujuga Aboriginal Corporation in the remote Pilbara region of Western Australia.\(^{148}\)


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3.1-8 Guled Abdulwasi (2015) *Form Work*, Atherton Gardens Housing Estate, Melbourne.\textsuperscript{150}


\textsuperscript{150} Image extracted from video clip. https://vimeo.com/147668943

3.2-1 Sydney Opera House, Lighting the Sails, Vivid 2012. Urbanscreen.  

3.2-2 Danny Rose (2013) Move Your Building, Old Customs House Sydney, Vivid Festival.

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152 ABC website at http://www.abc.net.au/reslib/201205/r948197_10095061.jpg

3.2-3 Danny Rose (2016) *The Matter of Painting, MCA, Vivid Sydney*.\(^{154}\)

\(^{154}\) Image downloaded from http://photos.prnewswire.com/prnfull/20160316/344792
3.3-1 Canberra’s cartography of power relations & the Parliamentary Triangle, site of *Enlighten Canberra.*

3.3-2 Rain in the projection beam on the National Library of Australia [Photo: Jen Brown]

3.3-5 Rafael’s portrait of *Saint Sebastian* (1501-02) National Gallery, Canberra. [Photo: Jen Brown]

3.3-6 The Electric Canvas (2013) *Toulouse-Lautrec* showcase, NGA, Canberra [Photo: Jen Brown]


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https://vimeo.com/89576198

3.4.4 David Jones (2011) *Highly Strung*, Natimuk Silos, *Nati Frinj Festival*.\(^{156}\)

\(^{156}\) Image of *Highly Strung* extracted from video by David Jones. https://vimeo.com/36189776
PART 3: Luminous Matters


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4.0 The Site

The new wave of urban night festivals and projection events fulfil to excess the anticipation of 1920s Europe that the ‘luminous city’ would continue to evolve and deploy emerging lighting technologies as an art form capable of radically transforming urban spaces after dark. Yet at this moment when phantasmagoric assemblages seem to be gathering intensity and scale in their play with the iconic surfaces of the city, what has become of dark itself? In what sense does dark ‘matter’ – or perhaps become suppressed – within the new cartographies of the luminous city? As the 24/7 urban imaginary takes hold in a networked globalised world, it seems that darkness itself becomes an elusive condition. The post-millennial utopian dream of the model city is one that remains open around the clock, as Oliver Watts elucidates:

In this place there are no curfews; transport runs all night; bankers working foreign stock exchanges go to dinner after trading; comedy writers drink litres of coffee and order takeout; and live music plays through the evening… The modern city wants to accommodate a broad spectrum of life, from work to carnivalesque excesses… They are the places of play, of celebration, of dance and imagination. The birth of the city saw a huge explosion of cultural and artistic pursuits (for all the new theatres, bars, galleries and halls) all driven by the energy and appetites of the residents. The city itself became not only a venue but a muse.1

In the city that never sleeps, darkness comes under assault as pervasive illuminations fortify ocularcentric modes of perceiving and navigating space – suburban as well as urban, private as well as public. Questions concerning what is lost in this elision of the dark became a foundational provocation as I began to shape the practice component of my research. Equally as pressing as my interest in experimenting with projection of light images onto buildings was a desire to reclaim and investigate the unique qualities residing in spaces and experiences of light’s absence.

This led to abandonment of my initial plans to situate the project close to home base in the regional city of Launceston and to focus instead on the ‘outer space’ of a remote rural location, well away from city lights. A friend’s farm at Karoola was a place I visited often and, with her consent, it became a laboratory for my developing practice. Descended from several generations of Tasmanian shearers, now all passed on, my friend carries on the family links to the wool industry with a small flock of sheep and alpacas, alongside a professional career in the arts. Her family has owned the farm for over fifty years so, for her, it is steeped in memories, family stories and nostalgic artefacts. Her sense of

connection to this particular place runs deep although she is also a seasoned world traveller. For myself, a non-Tasmanian and committed urban dweller, the farm presented an alien – albeit intriguing – domain for investigating and responding to the complexities of working in the dark.

I began by wandering about the place on a dark-moon night without a torch to gain a sense of it from alternative sensory perspectives – sonic, tactile, olfactory. This chorographic practice differed markedly to that of night walks in city festival precincts within the managed flow of huge crowds. Despite my familiarity with the farm’s daytime milieu I found the experience profoundly disorienting, but also instructive. The open expanses of neatly fenced paddocks, the scattering of tall trees, the house, the collection of ageing farm sheds, the grazing animals, accustomed pathways all vanished. Yet my experience of this overwhelming loss of visuality in no sense recalled the disembodied ‘spaceless darkness’ of the movie theatre, so problematised by 20th century film criticism. Nor did it confirm, as Merleau-Ponty suggests, that we may not be able to think in the dark, disoriented in a void where elements cannot be linked into coherent spatial relationships and we are immersed in “pure depth without foreground or background, without surface and without any distances separating it from me.”

My experience points to ways in which thinking processes simply activate different coordinates in the dark. Losing sight of the ground, I was compelled to navigate site by the sounds my feet made on different surfaces, by varying consistencies, by the direction of airflow across my face, by groping tentatively at surfaces, by the sounds of animals, by sensing what structures were near or far. I shivered in the cold and damp that descended even after a bright sunny day, encased within multiple layers of clothing and rubber boots. Overhead, the canopy of stars was brilliant even though it shed no light on the ground. I entered a zone demanding full activation of my sensory apparatus and a recalibration of its habitual hierarchy for, as Robert Macfarlane points out:

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\text{At night new orders of connection assert themselves: sonic, olfactory, tactile. The sensorium is transformed. Associations swarm out of the darkness. You become even more aware of the landscape as a medley of effects, a mingling of geology, memory, movement, life. The landforms remain, but they exist as presences: inferred, less substantial, more powerful.} \]

My Karoola night walks intensified a sense of ways in which place unfolds through time in layers of memory, narrative and imaginings. Far more rapidly and directly than in the city, questions about place, race, history, memory and belonging surged across its

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surfaces. Perhaps it is easier to ignore or overlook ghostly presences and absences in the busy flow of urban life. Perhaps curiosity rises with greater force in extraordinary circumstances. Perhaps, out in open country, there is a looser grid of markers denoting colonial hegemony, allowing old and enduring landmarks to come more strongly to presence. The dark makes time and space for reflection on vanished lives and cultures, on loss of former place names and territorial boundaries, on the mechanisms of history’s erasures. I discovered the pleasures of the dark’s unique configurations of sensory stimulation and intensity and my lifelong apprehension about being out alone at night began to subside. This experience led to reflection on deeply rooted cultural stereotypes about the dualistic relationship between light and dark. Nina J. Morris suggests that western thought, through history, has held light as a powerful metaphor for existence, clarity and truth. Associated with notions of goodness, salvation and the divine light opposes the dark as a “realm of fascination and fear which inhabits the edges of our existence, crowded by shadows, plagued by uncertainty, and shrouded in intrigue.”

The ecological thinking of Deleuze & Guattari seeks to dissolve such dualistic conventions and bring oppositional concepts such as nature and culture, environment and humanity, and biology and technology into relationship within an open and dynamic whole that does not follow one logic. They suggest “man and nature are not like two opposite terms confronting each other – not even in the sense of bipolar opposites within a relationship of causation, ideation, or expression (cause and effect, subject and object, etc.); rather they are one and the same essential reality, the producer-product.” This implies a need for new approaches to thinking through the relations between the human and the non-human as complex overlapping and intersecting systems. This network of relations, Jane Bennett suggests, will be marked by persistent tendencies but also by variations in mobility, transience, conflict: this new understanding of ecology is not premised on earlier notions of harmony or equilibrium: “To be ecological is to participate in a collectivity, but not all collectives operate as organic wholes.”

7 Herzogenrath, op. cit., 2.
Navigating the farm after dark led, for instance, to intense awareness of the sonic rhythms of my walking feet and invoked a sense of deep time marked by generations of Aboriginal feet that had walked this country for millennia before me. Desire to know more about this history led me to Patsy Cameron’s carefully researched account of her own Indigenous forebears in Tasmania’s northeast region. Her maps show that the land now occupied by the farm, several kilometres east of the Pipers River, lies within the traditional lands of the peebeerrangner on country she identifies as arobeberer-murgenner. It was once part of an ancient trade route running from the east coast right across to what is now Launceston. This ancient palawa route was neutral ground that allowed free travel across the multiple northeast clan territories for shared rituals, hunting, trade and diplomacy. Regular controlled burning maintained this passage as open grassland, conducive to free movement and hunting, some way south of the primary clan lands along the coastal fringe and hinterland where food was varied and plentiful.

Cameron’s account of palawa history in the northeast draws attention to the significance of the night sky in traditional spiritual beliefs and mythology. The northeast clans, she says, counted by the lunar cycles and used the iconography of the crescent moon in spiritual ceremonies and body markings. Recounting a creation story told by her direct ancestor, Mannalargenna, Cameron draws attention to the northeast people’s intimate connection to the Milky Way. In traditional mythology, she says, the black spaces of the constellation were as significant as the stars themselves, denoting a cosmological cartography with sophisticated intricacies of meaning and in which people “not only observed the night sky extensively but also believed they were at one with it” in a worldly existence that extended into the sky.

This traditional philosophy of equal relations between the night sky’s black spaces and starry illuminations offers a powerful metaphor for rethinking cultural relations, destabilising simplistic hegemonic discourses that align whiteness with stereotypes of light and, conversely, blackness with stereotypes of the dark. Cameron deftly navigates

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10 Cameron cautions on the provisional nature of accurately mapping clan territories, see 16-17.
11 ibid, see map 126.
12 ibid, see map 127.
13 Cameron says that Manalargenna told this creation story to George Augustus Robinson who travelled across the northeast in 1830-31 on a mission to persuade Aboriginal people to move to the Bass Strait Islands.
14 Cameron, op. cit., 20.
15 ibid, 27
this kind of ecological complexity in unpacking the intricate relations that enabled her forebears to survive the catastrophic impacts of colonisation and violent territorial struggles of the ‘Black War’ through the first three decades of the 19th century.16

Historian Henry Reynolds asserts that Australia’s European colonisation was not a wholly mercenary process since, from the outset, “people have expressed their concern about the ethics of colonisation, the incidence of racial violence, the taking of land and the suffering, deprivation and poverty of Aboriginal society in the wake of settlement.”17 Yet my own recurring experience in present-day Tasmania suggests profound evasion of the realities of the island’s history and a pervasive sense of entitlement among colonialism’s heirs. In a decade of travelling the island, queries about the Aboriginal history of particular places have consistently drawn blank looks from locals and a return to narratives of European heritage of the past two centuries. A common response is to assert that Aboriginal people never actually inhabited the places in question, but were only ever “just passing through.” This dominant and politically charged narrative of palawa peoples as drifting nomads neatly derails attempts to interrogate and acknowledge the uncomfortable realities of Tasmania’s past and its longstanding reputation for genocide.

As Reynolds points out:

These questions would matter less if they were not intimately related to the stories which the colonists and their descendants have always liked to tell about themselves – those sagas of progress and burgeoning settlement, tales of triumph over adversity, of battlers making good in the new world and uniting in praise of equality and a fair go for all. The fate of the Aborigines cast long, deep shadows over those sunny narratives. Indeed the two stories are as closely interrelated as light and shade.18

In line with this oddly truncated sense of history on the part of immigrant Tasmanian cultures is an account of Karoola in Margaret Tassell’s heritage study of rural areas round Launceston.19 Tassell offers narratives of white occupation from the 1830s onwards, initially the timber getters and later farmers and miners. Millennia of Aboriginal history are covered in just two sentences that reiterate the narrative of Indigenous lack of tenure within a European framework of land ownership.

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18 Ibid, 245.

Little is known of the extent of Aboriginal occupation of the region. No sites were recorded here in Kee’s 1991 study, but it is likely that Aborigines travelled along defined tracks and maintained clearings, particularly in the valleys of the Pipers River and its tributaries, on their way to the northern coastal plains.20

Cameron and many other scholars21 offer far richer and nuanced understandings of the complex ecological relations that positioned places like Karoola as corridors of passage, within a system of strongly defined relations with country and regular seasonal maintenance practices. Research into these histories became folded into my understandings of how modes of inhabiting country in present times, albeit differing profoundly in so many respects, must also respond to the relentless cycles of seasonal change, of how recurring rhythms and rituals produce conditions for ongoing renewal as well as new possibilities. I began to consider how projection installations might be deployed, not as means for transforming or dominating a whole milieu, but as strategy for punctuating and articulating embodied multisensorial experiences of the dark in small luminous attractions, oases for pause and meditation.

4.0-1 Aerial image of the farm’s layout with dwelling and main sheds.22

20 ibid.


As well as the possibility of a truly dark environment lit only by the fluctuations of the night sky, the farm offered a collection of ageing farm sheds of various sizes, materials, and degree of active use. These offered suitable surfaces for a modestly scaled cluster of projection installations conceived against the grain of festivalesque appropriations of grand and iconic urban architecture. Over the course of the project I experimented with many of the farm’s larger and smaller structures, but settled on just three for the development of final works. These are the haybarn, the bunkhouse (once the shearing shed used by the current owner’s grandfather), and a vintage caravan housed within an open bay of the workshop. After Dark is an assemblage of projections and soundscapes developed for each site. Three installations – Grass, Fleece and Spin – draw on video documentation of events and forces that play in, through and around each structure. Each title is selected for its ambiguous connotations.

In negotiating use of privately owned rural land as laboratory and installation site for the project, it was agreed that audiences should be limited to invited groups of a size commensurable with easy management and maintenance of the integrity of the rural environment. This restriction on visitor numbers does not preclude the possibility of opening the site to public audiences (for example by bringing groups to the farm by bus), however, it flags that careful management will always be required to avoid any adverse effects on its ecology. Risk assessment with regard to participants, factoring in provision for optimal but safe after-dark experiences, is also essential to managing the matrix of relations opened up through such forms of site-specific arts engagement. A succession of events in which friends and colleagues were invited to view work in progress demonstrated that groups from twenty to forty could comfortably be accommodated.

Abandoning the city in favour of this remote rural location at Karoola enables me to offer participants far more indeterminate and multisensory forms of chorographic exploration of place than available in structured walks through the brightly illuminated and crowded precincts typical of large urban night festivals. My cluster of three small-scale lumentecture installations on farm sheds and caravan are of interest in themselves yet, like the ancient cosmologies of the place, equally draw attention to the significance of the dark spaces between, where there are no obvious paths to follow or points to pause and

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23 In wet weather, for instance, the farm has limited areas of firm ground suitable for parking.

24 Safety measures implemented include groundworks such as removing all trip hazards and mowing spaces around the installation sites as well as ensuring there are no low-hanging sharp branches that could pose a risk to eyes. Power leads are carefully laid away from walkways and they are covered if this is unavoidable. All electrical equipment including power boards is housed within small ‘doghouse’ shelters that can be battened down against animal intrusions. Events are cancelled if weather is deemed to pose safety risks, e.g. strong winds that might bring down branches.
rest. Away from the warming bonfire and the bright cones of light where projectors pierce the darkness, it is possible to attend to an orchestra of sensations playing through the feet, the bones, the organs, the skin, the ears, the nose, the fingers… or simply to study the fabric of dark spaces held within the brilliance of the night sky.

4.0-2 Landscape of the Karoola farm with shearing shed in the foreground. [Photo: Jen Brown]
4.1 Haybarn Installation: Grass

The haybarn was owner-built in an era less regulated by government building codes and council surveillance than present times. It demonstrates a vernacular tradition of simple Euclidian geometric design and reflects the do-it-yourself ethic of the bricoleur of limited means, ready to improvise with whatever materials might come to hand. Rough-framed using local timber, it breaks with the widespread practice of using corrugated iron for wall cladding in favour of recycled metal panels made by hand cutting and flattening drums discarded from a nearby aluminium smelter. Yellow letters spelling ‘Comalco’ recur in stencilled patterns against the patina of rust encroaching across the original bone-coloured paint. This rough homemade style of farm building has become a template for the prefabricated metal sheds dispersed across the rural landscapes of the present.

4.1-1 Haybarn. Owner-built by Bill Greig circa 1965. [Photo: Jen Brown]

John Vlack suggests that barns are not simply working buildings with vital roles to play in the present, but also serve as archival ‘documents’ that lend themselves to interpretation. They express particular historical practices, available resources, and ideologies particular to successive phases of land occupation.

Among the most durable elements of everyday life, barns reveal ethnic origins, mark the rise of new designs and construction techniques, and signal important shifts in their users’ daily routines. If we may assume that old artefacts, like documents from earlier times, offer us messages about the past, then barns may “speak” as forcefully as the other forms of evidence on which we usually depend. Anchored to the ground and often changed only slightly since the time of their construction, barns offer some assurance about what

happened on a particular plot of ground. Surveying barns thus constitutes what might be called "above-ground archaeology." 26

This particular barn has been in continuous use for around half a century for storing winter feed for grazing animals. It rests on country maintained for thousands of years as open grasslands of native pasture attractive to wild game, a prime human food source. As Europeans began farming from the 1860s, native grasses were steadily over-planted with introduced pasture species regarded as more suitable for grazing sheep and cattle. Colonisers assumed entitlement to occupy Tasmania and intervene in its ecologies to suit their own needs. 27 One outcome of many years of colonial disregard for Tasmania’s heritage of native species is that the original grasses of this valley are fast disappearing and survive only in small remnant patches.

Yet the barn sits like a rusting hinge between old traditions and new regimes of managing grazing pasture. Out in front of the building where its big slatted doors allow tractor access is a sloping stretch of mowed lawn. Inside the main section of the building, the stacked up bales of dried grass-hay comprise a mix of introduced pasture crops harvested from the paddocks each year in early summer. Behind the barn, a small remnant forest of wattles and eucalypts form a canopy over a dense understory dominated by clumps of native grasses: sagg (Lomandra longifolia) and cutting grass (Gahnia grandis) mostly, with a few scattered patches of kangarooos grass (Themeda triandra), silver tussock (Poa labillardierei) and one lone grass tree (Xanthorrhoea australis). This grassy cartography testifies to the age-old importance of pasture for animal and human survival, just as surely as it marks an interface between two cultures with antithetical approaches to understanding and managing the land.

At night, when the installations are running, the approach to the barn offers a long view of projections along the façade as well as into the partially illuminated open end-bay where farm implements are housed. This establishes a sense of the building as a sizable three-dimensional mass and forestalls the flattening effect of seeing only a single plane of projected surface within dark surrounds. From in front, it is possible to see how the projections filter in through the big slatted doors to make barred patterns of movement on the walls of hay inside. This penetration of light from exterior to interior reinforces a sense of the building’s 3D integrity, but also unsettles a clear inside/outside divide and draws viewers in closer to watch the play of light on the rough textures of the hay. Referencing the installations of urban spectacle, Grass offers no narrative unfolding, but simply a play of time images that allude to an unfolding of events and relations through

26 ibid.

Grass comprises interspersed clips of introduced pasture\textsuperscript{28} and native grasses\textsuperscript{29} whose sculptural forms sway in the force of wind, thrashing wildly with the strongest gusts.

Two parallel projectors cover the full span of the façade with images precisely masked to its dimensions so that there is no spillage of light onto the bush behind. They run from a single source, but the image is doubled horizontally with one projector set to reverse it. The twin projections are aligned down a vertical seam to meet at the mid-point of the barn’s façade. Their rhythmic patterns of movement cast a forcefield across the building, intensified by slow motion and a kaleidoscopic effect produced down the mid-seam as grass stalks and seed heads ceaselessly merge together and pull apart in synchrony. A strange trick of light occurs as bodies cross the cones of projection beam close in to the façade, casting shadows that suddenly disappear at a certain point into the seam. This presents the startling spectre of black human silhouettes, in wholes or parts, fracturing and disappearing into the surface of the building.

A soundscape plays from within the barn, multi-layered tracks of field recordings captured from its interior on a day of strong winds and digitally manipulated to produce certain effects. The clatter of sticks and branches falling on the roof plays staccato rhythms that periodically disrupt the uncanny howling of the wind, slowed dramatically to the point that it begins to resemble a chorus of singing or moaning voices. This is overlaid at times with the strange tones of slowed birdsong recorded on site. The drones and rhythms extracted from the barn’s milieu denote the circular temporalities of an architecture firmly embedded within the seasonal rituals of planting, growing, harvesting, baling, carting, stacking, feeding out over winter.

At random intervals, another soundscape breaks through the first. A projection of burning grass erupts on the stack of hay that lines the inside back wall of the barn, its crackling sounds enhancing the veracity of the illusion. Projected from the left just inside the front opening, the flames are easily seen from outside through the slatted doors, most vividly in the grid of shadows cast by the other two projectors outside. This installation within the barn’s interior references multiple assemblages that have de/territorialised the intersecting milieus of the site, past and present.

\textsuperscript{28} A mixed field of phalaris, fescue and rye.

\textsuperscript{29} Poa, themada, xanthorrhoea, gahnia, lomandra.
For the *palawa* people fire was more than a vital means of keeping warm, cooking, hardening spears and creating a focus of communal life.³⁰ It was a key technology of land management through regular burns, a practice referred to as ‘fire-stick farming’. On the basis of extended nationwide research, Bill Gammage asserts that Indigenous communities had far more systematic and scientific systems than colonisers had ever recognised.³¹ He cites numerous examples from around Tasmania as evidence that island clans had refined their uses of fire to create a mosaic of lush grasslands and forests with a relatively open understory, as well as to crack open native seeds and regenerate growth, make clearings within or alongside forests, replace one plant community with another, and stimulate new grass shoots to lure game.³² Gammage argues that the targeted use of fire enabled Aboriginal people across Australia to engage in a range of planned cyclical food production practices that supported hunting and gathering in alignment with their choice of a nomadic lifestyle, a preference to “walk their country.”³³  

In the Black Wars of colonisation Aboriginal people used fire as a weapon. The flammability of hay rendered barns a prime target for attack. The recurring motif of fire in the barn installation challenges the rationalisation of European land seizure on the basis of a mythology that links notions of ‘civilised’ society to settled forms of agriculture. A clip of the flames captured through the enlarged slats of the barn doors also appears, periodically, within the projected sequences of grass images outside on the façade. The slats make vertical striations through the image of flames behind, enclosing their bright energy like prison bars. These layered images of burning grass signal the complex ecologies of this site in a palimpsest of practices that, for millennia, have been working with and against the rhythms and rituals of seasonal change.  

Hay is notorious for its tendency to spontaneously combust if baled and stacked while still too moist. As Silas Deane noted back in 1797: “Regard must be had to the situation of a barn. It should be at a convenient distance from the dwelling house... but as near as may be without danger of fire.”³⁴ The Karoola haybarn is sited, accordingly, well away

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³⁰ Plomley, op. cit., 40.  
³² Gammage illustrates these claims with reference to early landscape paintings of northern Tasmania by John William Lewin (The Second Cataract on the North Esk near Launceston, 1809. See Plate 14: 37 in Gammage) and by John Glover (Mills’ Plains, Ben Lomond, Ben Loder and Ben Nevis in the distance, c1832-4, Plate 16: 39).  
³³ Gammage, op. cit., 3.  
from the farmhouse and other sheds yet it remains a fire risk to the adjacent patch of bush where the only native grasses left on the property are to be found.

*Grass* draws its audience into a dark encounter with an architectural icon of Tasmania’s past land struggles between cultures whose philosophies and practices were profoundly at odds. In setting these restless images of flora against the rusting barn façade, the work is designed to position the building at the heart of a larger contest for survival of many native species under threat from the ongoing and forceful impacts of modern farming practices and introduced varieties. This biological struggle unfolds within a complex system of post-colonial ecological relations where many other battles for Indigenous survival – human and animal – have already been lost.
4.2 Bunkhouse Installation: *Fleece*

The bunkhouse was a shearing shed in a former life, and sits in line of sight to the shearing shed currently in active use. Owned by the grandfather of the farm’s present owner, the bunkhouse was built in the 1940s at Longford, 50kms away, and moved to Karoola from its original site in the late 1960s. These two ageing sheds are icons of colonial Australia, a nation that characterised itself as ‘built on the sheep’s back’ up until the 1950s when the wool industry began to decline. Both express a vernacular style, common within the tradition of owner-built farm sheds, of simple geometric forms framed and clad in bush timber and with gable roofs of plain corrugated iron. After many former lives, the nomad bunkhouse has been reinvented yet again as an indeterminate space, hollowed out and open to creative processes and social encounters that might unfold within and around.

![Image of the bunkhouse](4.2-1 Bunkhouse (Old Shearing Shed), Karoola. Owner-built circa 1940. [Photo: Jen Brown]

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35 Tim Fischer (2012). Foreword to Michael Chapman (2012). *Woolsheds*. Scoresby, Vic: The Five Mile Press, vii. Fischer notes that: “The wool industry with its rich heritage is prominent in our folklore and national psyche. Woolsheds engendered an immense community spirit. Once the big sheep stations resembled small villages and it was common for several generations of the one family to work on the property. For shearers and shearing teams it was a badge of pride to work in the famous woolsheds... Shearing fostered the fierce camaraderie that gave rise to workers’ unions, bitter strikes and profound industrial labour reforms.”

The bunkhouse surfaces are used in *Fleece* for projection of moving images captured in and around the shearing shed. Through the work, the old shed is thus brought into dynamic encounter with scenes that recall its own history. Four facets of the building are used for the installation: the front façade; east end wall; front slop of the roof; and a single louvre window within the front façade. The first three of these surfaces are covered from just one powerful projector set outside at a diagonal to the building. This is achieved by driving content from a laptop using 3D mapping software that is capable of running three separate movie clips simultaneously.\(^{37}\) It allows each clip to be precisely shaped to the surfaces. The window is hung with a semi-translucent screen and rear-projected from inside the shed. The various sequences of clips repeat in loops of differing duration.

On the bunkhouse’s weathered façade are projected images, abstracted to white outlines against black, allowing the qualities of its weatherboard surface to blend through. Three different kinds of sequence show hands at work with the wool: shearing the animals, throwing the fleeces out onto the slatted sorting table, and knitting the spun yarn into garments.

Two separate shearing sessions were filmed a week apart: a female shearer working on the alpacas and a male on the sheep. The shearers’ bodies are not visible as they bend double to hold each animal steady, only the deft movements of arms and hands are framed in close, sweeping the electric cutters back and forth around contours of muscle and bone to sever the woolly growth close down to the skin. The images are slowed so that textures and lines of movement are more clearly revealed as the fleece peels away and the pristine clouds and clumps of crimped fibre emerge beneath the outer surface. Close up and enlarged on the shed wall, the images reveal an energetic kaleidoscope of skin and fleece as human and animal bodies merge, struggle, and break apart. Shearing is a matter of intimate bodily encounters – an exchange of heat, sweat, force, blood, shit and spit against a swell of human and animal vocalisations. Shorn, the animals emerge half their former size, opened and vulnerable to the elements of their outdoor milieu. It is backbreaking work for the shearer\(^{38}\) and clearly a traumatic event for the animal.\(^{39}\) While the shedding of skin is often used as a metaphor for renewal and regrowth, in this

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\(^{37}\) An Apple Powerbook running MadMapper software.

\(^{38}\) Hand-shearing with electric shears is still currently the most widely used method. However, according to the State Library of NSW website, *Discover Collections*: ‘Sheep Shearing’, experiments with robotic shearing began in the 1970s and some shearing is now partially robot automated. New techniques in the 21st century are attempting to dispense with shearing altogether by developing an injection which breaks the wool and enables it to be peeled from the sheep.

instance it seems more like theft. Yet, through centuries of selective breeding, the ongoing well-being of the animal has come to depend on it.

Interspersed with images of shearing are others that show the freshly clipped fleece, still warm from the animal, as the roustabout scoops them up and throws them out onto the thick dowelling slats of the sorting table. There is a pause after each throw as she sweeps the board ready for the shearer to begin again on the next animal – a rhythm of tasks that continue until all are done. The sorting table is the high altar of shearing ritual where the wool is classed, tidied, rolled into a tight bundle, then pressed into a large bale. In these images, the throw and its aftermath are slowed to a fifth of the actual speed, a warping of time that focuses awareness on this moment when animal fleece is severed from its living assemblage and becomes object, a commodity within a chain of human processes of intervention and exchange: a woolly phantasmagoria.

Another set of images, a link in this chain, reveals the delicate movements of knitters’ fingers as woollen yarn is crafted into handmade garments. While traditionally regarded by western cultures as a banal female pastime, embedded within the lesser-valued domestic sphere, knitting actually has a long history of political subversion. In 1760s America, for instance, colonists knitted their own garments to break their dependence on imported English textiles subject to ever-increasing taxes. Generally excluded from public political forums and activism, women gathered under the guise of “spinning bees” where they could share information and debate the issues of the day whilst spinning, weaving, knitting and sewing to clothe their families and communities in lieu of imported fabrics. These meetings became vibrant focal points for whole communities, including men.40 Several decades later in France, ‘Les Tricoteuses’ sat silently knitting at the base of the guillotine, protesting women’s exclusion from political participation during the French Revolution’s Reign of Terror, bearing public witness to its atrocities. In 21st century northern NSW, the Knitting Nannas Against Gas knit in protest against political decisions they see as driven by powerful corporations rather than the voices of ordinary citizens. They stage ‘knit-ins’ at government offices and farm gates, making objects with explicit political messages and circulate a ‘nannafesto’ against corporate greed – in particular, the pursuit by mining companies of coal seam gas and its concomitant environmental destruction. This choice of activism is premised on the view that knitting in public places is deeply unsettling, an anomalous intrusion of the traditionally private,

feminised, domestic sphere into the public arena. Hands appearing in the Fleece projections belong to a group of academic women who continue this tradition of collective knitting as occasions for building collegial connections while, at the same time, resisting the hegemony of a global clothing industry built on exploitation of women’s labour.

Cutting into the dominant projections across the façade is a single louvre window, rear-projected with a series of closely framed animal portraits. Playing against the larger images of hands at work on the fleece, framed within them, the faces of sheep and alpacas turn in profile to peer into the distance or gaze directly at the audience watching from outside the shed. Spliced into these window images are still slides of woollen surfaces – finished products of the knitters. The direct gaze of the animals towards the human audience reverses the usual order of ecological relations and challenges the propensity of humans to objectify animals as products for use and consumption. No longer viewed from a distance, the faces assert a dignified presence even in the aftermath of struggle and loss through the shearing process. A second reversal occurs here by virtue of the odd circumstance of animals looking out from inside the building while humans peer in, voyeuristically, from outside. This displacement of an accustomed perspective unsettles the viewing subject, questioning who is on show here. This same sequence of animal portraits is doubled, much enlarged, on the outside end wall of the shed. This projection plays at right angles to the façade images, the corner forming a hinge between the two planes of action, signalling potential for movement within this seemingly closed circuit of power relations. Meanwhile, the live animals themselves may graze close by, fenced off in an adjoining paddock, but near enough that their movements, nocturnal munchings and occasional articulations may be heard and sensed in the darkness.

Occasionally, within the sequence of animal portraits, a small figure makes an appearance. The Tasmanian brushtail possum is a wild card in the animal pack, the persistent return of the Indigenous ‘nuisance’ who refuses to be displaced from its traditional lands. The possum continues to break in and occupy farm sheds everywhere and helps itself to gourmet snacks from paddock crops, fruit trees, or household veggie gardens. It startles humans from sleep in the early hours by thundering across corrugated iron roofs or squabbling with mates in unearthly screeching immediately outside a bedroom window. Yet, in asserting its unruly power with brazen disregard for human disquiet, the brushtail may well be risking its ongoing survival as a species. In Indigenous tradition possums were a valuable food source and skins were carefully sewn

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into warm cloaks that lasted a lifetime. Now farmers often shoot possums as ‘vermin.’ New Zealand’s development of high quality thermal garments made from a combination of merino wool and possum fur is contingent on shearing one and slaughtering the other: fur must be plucked from the pelt. The wide-eyed gaze of a brushtail clinging to the rafters in an Australian shearing shed is an image of some complexity.

Emerging from within the shed, but clearly audible from outside, is a soundscape composed from recordings of shearing in progress and the ambience of the building itself while not in use. The mix of sounds comprises a layering of rhythms, drones, rising and falling volume, startling interjections, differential speeds and pauses in the cacophony of hands-on action: human banter; animals calling; the drone of electric shears; the periodic staccato of traditional hand clippers; hooves stamping and milling within the pens; flies buzzing; the outside ambience of wind in branches, birdsong, dogs barking, distant traffic. The temporal textures of the soundscape thicken or thin, fade to silence, speed up or slow to a snail’s pace, change direction or focus, create parallel trajectories and counterpoints. Orchestration of these qualities is designed to engender a sense of how time flies and flows through the shearing shed. Not regulated by the clock so much as by long annual cycles with extreme fluctuations of activity and repose, the shearing shed is a quiet space for much of the year. Yet when shearing is on, it becomes alive with a swirl of action and sound, the intense pulse of age-old rituals driven by an ethos of efficiency and skill.

The viewing trajectory for this installation is a shallow arc around two facets of the shed. From shifting perspectives, further out or closer in, the gable roof is visible to a greater or lesser degree. It is projected with a series of still images of knitted wool textures that hold for 10 seconds and cross-fade gradually from one to the next. This ephemeral form of ‘yarn bombing’ strikes a more playful note than this same set of images embedded within the sequences of animal portraits. It crowns the bunkhouse with a woolly hat whose textures morph and blend into intriguing relations with the corrugated channels of the metal surface beneath.

Positioned midway between the haybarn and the shearing shed, the bunkhouse installation fabricates a woolly assemblage that, in one sense, pays homage to the classic ecologies of European farming that have been actively rewriting this site for a century and a half. Yet, balanced against the inevitable evocation of cultural myths of the heroic shearer – immediately embodied in the family that has worked this farm – it raises

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42 Fischer (cited above) describes the life of the big sheds as being “full-on with colour, action and movement as the sheep fly across the board and the wool hits the table for the skirting and sorting into bales, or it is deadly silent in the long months between shearing”.
questions about the fundamental premises of ‘civilised’ societies that place humans at the centre of a world in which all other life forms and earthly materials are simply resources for consumption.43

4.3 Caravan Installation: Spin

Within an open-fronted workshop, poised for action, tractor and caravan rest side by side. Each displays the residue of its own collection of stories, spanning nearly seventy parallel years. The one signals life on the land with its longevity of purpose and commitment, hard labour, battling with ‘nature’ to produce raw products for sale, earthiness, farm animals, familiar landscapes, predictable cycles and rituals, a work regime leaving little time for travel, the material accumulations of a settled home. The other gestures toward the open road, the unknown, the unpredictable, adventure, ever-changing vistas, a vacation from onerous responsibilities, a mobile existence where home can be everywhere and nowhere. Where one maps out paddocks in tight recurring furrows, plantings, and harvestings, the other traces maps of country across an endless maze of highways and country roads. Where one asserts territory, the other promises a line of flight.

The tractor arrived at the farm as a shiny new utility in 1949. The caravan first rolled in, battered but triumphant, in 2010. It had narrowly survived an accident on a freeway north of Melbourne and so had I. My car was not so lucky. The vintage van had come to me via an eBay auction and I had plans to renovate it for an arts project. Home-built in 1952 by a Shepparton sheep farmer for family holidays, it had fallen into disuse and languished for decades in a farm shed. When I took possession it was full of junk and its surfaces were all coated with thick red dust… yet it oozed nostalgic charm. Unfortunately not in my possession, as I headed jubilantly down the freeway with my prize in tow, was the fact that the axle was fused to the wheel hubs – residue of a bygone practice long abandoned for safety reasons. The blast of a passing road train sent the van into a fishtail
that began quite gently, but soon amplified until it was zig-zagging wildly out of control, wrenching the wheel from my grasp. For a slow-motion eternity, I anticipated my demise before the crazed object behind circled halfway round the car then rolled the whole assemblage upside down across the freeway with a grinding roar of crumpling metal. I found myself hanging upside down in the seatbelt, miraculously intact and deeply grateful that no other vehicles had been swept into the maelstrom. A month later, I borrowed a friend’s car and collected the van, with a new axle and wheels, from the ship at Devonport and towed it across to Karoola – one of the most terrifying drives I have ever undertaken. It was not an auspicious beginning to the relationship.

The caravan remains housed, nonetheless, in the workshop at Karoola. Repaired and resurfaced with a fresh coat of bright orange and ochre, it is implacably ‘other’ to the prosaic life of the farm. It has no purpose there at all, except to serve as reminder of a wider world, the value of mobility, of city spaces antithetical to country’s wide-open paddocks and forests. It escapes, at times, on special assignments.

On a national election day in September 2013, for instance, the van headed off for a leisurely spin around Launceston. It made a series of slow loops through the city and out around the suburbs in an hour-long meandering trajectory that finished back where it began in the carpark beside the Arts Academy at Inveresk. Its mission was to create an urban panorama, inspired by a sweeping image of old Launceston, captured and composed by Stephen Spurling in the 1890s. Spurling created his panorama by stitching together a series of photographs taken from a rotating centre-point on top of the old fire bell tower. In this, his approach followed the concept of the panorama devised and patented in the 1780s by Robert Barker in the UK. Barker’s invention led to the construction of circular buildings with interior walls that could display a single continuous painted image of landscape from a 360-degree hilltop centre-point. The spectator could view this architectural spectacle from the centre of the building, spinning around on the spot to browse every perspective.

The digital era offers new tools and approaches to making and viewing panoramas, reviving interest in this once popular attraction. Mobile phones, for instance, can now capture sophisticated panoramic images in all kinds of lighting conditions and with

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46 Ibid, 8.

47 Ibid, 10. Panoramas remained popular throughout the first half of the 1800s.
minimal effort from the photographer. Yet this is not the concern of the caravan as it makes its way steadily around the city, recording video on four small cameras that shoot continuously throughout the journey. Two, mounted left and right, capture passing vistas through the side windows of the van. Two more shoot forwards from the bonnet of the tow-vehicle and backwards through its rear window. They capture an environs blitzed with signs of the political spin that has led up to the election event. The locals are out to vote, out shopping, out playing sports, doing coffee, heading for the Saturday Harvest Market, busking, walking the Gorge, cruising the city streets, window shopping, mowing. Like an anthropologist aboard a space probe the van makes sketches of human behaviour, terrain, effects of weather, architectural banalities and landmarks, constructing a unique cartography of the city as it travels. Using this material the van will, itself, transform into a panoramic spectacle, a phantasmagoric attraction that reverses Spurling’s distancing, expansive, static view of the city.

*Spin* offers a novel configuration of urban panorama comprised of multiple, fragmented and mobile viewpoints in place of a seamless fixed singularity. Its direction is centripetal rather than centrifugal, reversing the traditional positioning of viewers at the centre of the architecture and, instead, drawing them into orbit around it. In this installation it is not the outer skin of the caravan that hosts the display of projected images, but all of its five windows hung with semi-translucent screens and rear-projected from within. The caravan forms a centre, its four sides offering an assemblage of multiple moving-image panoramas that play across the windows like reflections or, perhaps, remnants of early cinema’s actuality movies. Spectators must circuit rather than spin, pursue a chorographic arc around the outside, moving closer or further away, pausing to peer into each window as bits of Launceston roll past.

The projected windows block vision to the caravan’s interior, yet hint at an uncanny presence lurking there, an alien subjectivity. In the single left-side window, Launceston’s urban façades and suburban dwellings slide past in slowed down sequences shot from this same window on the caravan’s journey around the city. Likewise the two right-side windows, but here the same movie plays twice, slightly out of synch so that the window to the rear is a second or two behind the front one. When signage appears in reverse, it becomes clear that subject position and temporality in relation to these images is uncertain. Perhaps the viewing subject is located outside with the audience, watching mirror reflections that would have passed across these windows during travel. Or perhaps the audience is being granted a privileged view from the inside, from the other side of window screen where they are not reversed, sharing the subjective view of the van itself as it dreams or remembers its travels.
Outside, from front on, the van plays the joker in a blatant selfie. Framed within the mid-space of the window is a full frontal image of itself on the move, lurching and swaying towards the viewer. Receding around this dominant image are fragmentary views of the road and its surroundings, rapidly disappearing behind to either side. A soundscape of creaks and groans plays in synch with the images, falling to silence when the van stops, taking on particular volume when it gathers pace on a bumpy road. The caravan selfie contains an image of the frame that, in the material world, frames it. This frame is, in turn, framed within the front face of the caravan which is framed within the structure of the work-shed – an infinite sequence of contextual unfoldings in which inside passes seamlessly to outside and back again. Prompting this deterritorialisation, the selfie also conjures the primordial figure of the Cyclops of Greek mythology: the one-eyed grumpy giant with a bad reputation for violence. This apparition is simultaneously disturbing and comic in its persistent lunge towards the spectator who remains, always, just out of reach.

Outside at back, the caravan’s wry humour is confirmed. The viewer sees the front interior of the van, swaying in motion, framing the front window within which there is a clear view of the oncoming road ahead. Oddly, there is no tow vehicle in sight. The caravan careers along as a free and autonomous agent, navigating the city with a wilful forward momentum that is apparently produced entirely under its own steam. This illusion is achieved by a collaging of three temporal layers within the one frame: firstly, the original movie shot from the front of the tow vehicle on election day; secondly, some months later and late at night, that first movie rear-projected onto the front window from outside and recaptured by the videographer, standing and swaying inside the van, so that the front interior is part of the whole image; thirdly, the second movie played back in the present, rear-projected on the back window. Vision of the oncoming vistas is supported by a soundscape that reflects distinctive elements of Launceston’s urban milieu.

Gathering into itself a strange assemblage of ambiguous perspectives, random juxtapositions of images/sounds, and multiple temporalities from the alien milieu of the city, the caravan is an enigmatic thing. As Jane Bennett suggests in her treatise on non-animate material presences, there are occasions in everyday life “when the us and the it slip-slide into each other” and we are confronted with the knowledge that “things too are vital players in the world.” Even in stasis, the caravan seems propelled forward into the night by its own restless visions.

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4.4 Review

Development of my own practice has been the focus of this section. My choice of a remote rural site in northern Tasmania, well away from city lights, was prompted by a desire to gain familiarity with sensory experiences of darkness as well as to work with projection of light images as modes of engaging with place. The ‘outer space’ of a friend’s farm at Karoola presented a rich milieu of ecological relations, historical and contemporary, that posed provocations of various kinds for creative practice. I sought to identify and respond sensitively to ways in which these played in, through and around the array of buildings spaced around the property. Working on this site, I was able to sink deeply into meanings and memories of place and people, experiment freely in ways not possible in an urban environment, discover what worked or not, and invite a series of audience groups for commentary and critique. My explorations and discoveries over an extended timespan included after-dark meanderings without a torch as well as purposeful daylight forays to capture photographic and video images and record soundscapes. Mapping this material onto the architectural surfaces of the farm through projection and audio amplification created luminous oases within an open expanse of darkness.

Yet while farm was in many ways an ideal setting in which to explore experiences of night chorography and work with outdoor projections over an extended period of time, the project was not without major challenges over its five-year duration: technical, logistical and financial as well as artistic and conceptual. It came, for instance, with a bracing southern climate that was unkind for much of the year and scheduled practice sessions often had to be abandoned because of cold, wet or windy weather. Summer evenings were certainly warmer, but required working late into the night since darkness did not fully arrive until 10pm. I had no prior experience of working outdoors with projection and architecture, despite years of creating works in digital media. Commitment to a practice-led mode of inquiry thus initiated a major learning curve as I researched equipment and began to improvise suitable configurations of hardware and software. Gaining access to projectors was an ongoing challenge relieved only by gradual acquisition of my own equipment, a solution that placed considerable strain on my slender student budget for a lengthy period of time.

Over the span of the project, I experimented with projections on a number farm structures, finally producing an assemblage of three installations: These works were shaped by provocations emerging from historical research (see Part 2: Contextual Matters) and with reference to a theoretical scaffolding of five key concepts of lumentecture practice identified through studies of contemporary Australian works: cartography, surface, milieu, temporality and chorography (see Part 3: Luminous Matters).
Photographic documentation of the works included here are offered with the proviso that still images (and, indeed, video recordings) can give only a diminished sense of the work devoid of the immersive embodied experience so central to lumentecture as a medium.

*Grass* challenges the status of the hay-barn as a benign icon of European culture by bringing to presence an array of native species that have been steadily disappearing since colonisation through the spread of introduced pasture grasses for grazing stock. Images of native wind-blown grasses, supported by an ethereal soundscape of slow wind noise, play on the façade in muted colours and in slow motion – a sharp contrast with the colour-saturated fast-paced works typical of urban illuminations. The slow unfolding of these grassy images is punctuated periodically by bursts of flames projected on hay within the barn, startling memories of fire used as weapon against invaders, of older traditions of managing the land through controlled burning.

*Fleece* conveys, via extreme close-up and black-and-white outlines, the vigorous and intimate encounters between people and animals in the annual ritual of shearing, essentially a process of forcibly divesting animals of their woolly growth for human use. The premises underpinning such commonplace farming operations are directly challenged by a series of animal faces returning the gaze of the audience, refusing to be distanced or objectified, commanding relationship. The juxtaposition of still images of neatly knitted surfaces on the roof, side wall and façade window of the building likewise draw attention to the commodification of animal products. Yet they also point to ways in which knitting itself can become a form of resistance to capitalist exploitation.

*Spin* animates a bright orange vintage caravan in somewhat quirky fashion via a collection of rear projections into its five windows. Four different movies of the same journey around the nearby city of Launceston play in and out of synch to offer panoramic views of landscape from competing perspectives which randomly juxtapose the banal, the eclectic, the comic and the sinister: in the front window the caravan plays a ‘selfie’ while the back window view seems to have it careering forwards devoid of a tow vehicle. Together these give the sense of a journey undertaken by an alien subject, one that refuses the tyranny and predictability of daily rituals in a settled bucolic lifestyle. But is the caravan a surveillance machine streaming in data on a world beyond the farm… or simply a restless and curious thing, dreaming endlessly of new adventures? The perverse nature of a panorama that propels its audience around an outside-in viewing trajectory is, in itself, unsettling.
Part 4 Images

4.1-2 Grass, Haybarn, Karoola. [Photo: Jen Brown]

4.1-3 Viewing of work in progress: Grass, Haybarn, Karoola. [Photo: Jen Brown]
4.2-2 *Fleece*, Bunkhouse, Karoola. [Photo: Jen Brown]

4.2-3 *Fleece*, Bunkhouse, Karoola. [Photo: Jen Brown]
PART 4: Dark Matter

4.3-2 Spin, Caravan – housed in workshop, Karoola. [Photo: Jen Brown]

4.3-3 Spin, Caravan – housed in workshop, Karoola. View through the rear window. [Photo: Jen Brown]
PART 5: CLOSING MATTERS

In the opening chapter of this exegesis, I noted that lumentecture is a creative practice that shifts focus away from the historical concept of art as a discrete product and draws attention to situated, relational and activating qualities of art reconceived as an encounter within a field of forces. The act of projecting images onto architectural structures brings ephemeral experiences of vision and sound into dialogue with a host surface or the larger site itself in order to expose audiences to fresh sensations and interpretations. I suggested that lumentecture should properly be understood as both a methodology and a creative orientation to outdoor, site-oriented installations in which creative practitioners seek to harness unique qualities and forces that can emerge in the interplay of architecture’s enduring monumentality and light’s ephemeral momentality.

Three questions were posed and investigated through a site-writing methodology into the nature of lumentecture and its vectors as a contemporary creative practice that transforms site and architecture after dark:

1. How might lumentecture’s recent rise to popularity around the globe be contextualised historically and within a contemporary media landscape?
2. What conceptual framings can be derived from distinctive elements of spectacle manifest in contemporary lumentecture practices in Australia?
3. As an independent artist, how might I work with or against these elements to create installations that respond to place – particularly non-urban, less public sites – with sensitivity and conceptual depth, as well as being conducive to multi-sensorial forms of encounter?

My response to the first of these questions, documented in Part 2: Contextual Matters, is a line of inquiry into key historical moments that, I postulate, have contributed to the formation of lumentecture as a popular contemporary spectacle. These encompass: the allegory of Plato’s cave; a trajectory of phantasmagoria from Robertson’s site-specific installations in late 18th century Paris to the critical tradition of Marxist theory and the phantoms of capitalist consumption; critical interventions of late 20th century avant-garde artists seeking to deconstruct ways in which power is embedded in public space; and the first decade of experimentation with the moving image as a sensational ‘cinema of attractions.’

These various historical pivotal points reveal how a trope of spectacular illusion, shackled to evolving technologies, has surfaced as a recurring theme through the convoluted history of the projected image. As public spectacle, projection practices continue to simultaneously provoke both pleasurable awe at their capacity for conjuring extraordinary visual effects alongside scepticism for their fabrication of illusions, their
potentially dangerous and manipulative social effects when deployed within circuits of powerful influence and political force. Each section of the discussion in Part 2 raised ‘provocations’ that remain pertinent to today’s rapidly changing cultural and technological conditions. These are wide-ranging in scope and draw attention to the complexities and potentials of projection as a creative medium:

How might light and shadow be used to structure/rupture worlds?

What opportunities for resistance to capitalism’s phantasmagoric spectacles might artists discover through strategic deployments of projection as a creative medium?

How might projection artists engender productive encounters between people and place conducive to the forging of new connections and forms of subjectivity?

How can lumentecture be deployed to reveal invisible or less overt ways in which power is embedded in architecture and communal spaces? How might it bring attention to dispossessed or marginalised communities and render a fuller account of collective memory and history.

In what instances might projected text be a potent tool for activating critique and analysis of surrounding cultural, economic and political conditions.

Why and how should audiences be offered opportunities for significant input into creative works and the kinds of relationships they engender?

How can contemporary projection artists build on the legacy of the past three decades to create powerful works that address sites, issues and audiences pertinent to an Australian context.

What are the implications of ‘painting with light’ with new technologies that allow precise mapping of moving images/sound onto irregular planes and architectural details, making possible the illusory manipulation of static objects?

How might artists exploit, navigate, resist or subvert neo-liberal capitalist agendas of ‘urban branding’ through the arts?

In what sense is lumentecture uniquely able to reveal extraordinary insights into real world – to harness new forms of visibility as in cinema’s first decade of moving image ‘attractions’?

How do specific lumentecture installations position audiences and structure possibilities for participation and interactivity?

Such questions percolated through my response to the second research question and informed my developing practice. They became articulated within a theoretical framework of five key concepts that, I believe, are useful for describing and evaluating distinctive elements of lumentecture practice. The concepts of cartography, surface, milieu, temporality and chorography were elaborated with reference to contemporary Australian examples in Part 3, Luminous Matters.

When I first began researching outdoor projection in 2011, there was relatively little scholarly literature that directly addressed the radical new developments that had begun
to gain momentum in Australia post-millennium. Over the span of the project (from 2011 to 2016), a stronger swell of scholarly discourse began to emerge. Abigail Susik’s article of 2012, for instance, was seminal in identifying key concerns within a North American context.\(^1\) The hybrid nature of lumentecture as a creative medium, and layers of complexity in my practice specifically, led me to read extensively across disciplines pursuing a convoluted trajectory through numerous related topics. I frequently became mired in the sheer volume of obliquely relevant material from the fields of architecture, visual arts and culture, spatial studies, history, cinema and new media and repeatedly needed to rein in the project’s scope and boundaries. This journey of discovery through rapidly evolving and complex cultural fields was fascinating and rewarding, but demonstrated how rigorous research and theorisation may struggle to keep pace with emerging developments in contemporary arts.

My reading was embedded in a process of gradual synthesis undertaken in conjunction with observations from Australian field studies and insights gained as my practice evolved. I travelled from Tasmania to various mainland locations to gain a sense of the scope and tone of lumentecture works emerging in Australian arts and culture over the period of the inquiry. I was able to experience a number of major projection events ‘in the flesh’ and also accessed various examples documented online in video streaming sites – albeit a far less desirable form of engagement than multisensory immersion in the sites themselves.

The third question of this inquiry was directed to the investigation of lumentecture as creative practice available to independent artists. Working outside the constraining and enabling factors pertinent to those working in large commercially-oriented design teams, I was free to choose a site, devise terms of response, and experiment with alternative ideas and treatments. In Part 4: Dark Matter, I document and reflect on this component of the project, realised in an assemblage of three installation works on farm buildings and a caravan at a friend’s property in remote rural Tasmania. In assessing achievements of my practice, I return to the frame of five elements identified as central to lumentecture’s emerging formations in the 21st century.

While Craig Walsh\(^2\) and others have demonstrated that it is possible to work effectively within the new wave of urban night festivals and resist complicity with neo-liberal discourses of the ‘Creative City,’ I sought to enact a détournement against lumentecture’s

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2 See, for instance, discussion of Craig Walsh’s work for White Night Melbourne on pp.55-57.
Accordingly, my practice moved both to a different kind of terrain in the ‘outer space’ of remote rural Tasmania and, concomitantly, to an alternative cartographic ethos. The site offered a milieu with a measure of darkness not normally available in the city. My explorations and discoveries became as strongly focussed on the experience of being immersed in the dark as on illuminating the site with projected light images and sounds. I came to see my projection works as opportunities for articulating experience of place and darkness using light as punctuation, rather than the means for transforming or dominating a whole milieu. I eschewed many of the lumentectural tropes prominent in the new breed of urban spectacles with their large-scale animated mappings of iconic architecture using saturated colour and fast-paced tempo. Each of the three Karoola installations was of a modest scale and slow pace, designed to facilitate more intimate and meditative forms of audience address. In this dislocation of projection’s spectacle from urban centres of power and resources, my mapping process was not simply a matter of careful grafting of images onto buildings. It demanded strategic questioning and careful structuring of light and dark to create new connections between different modes of experience in an open and rhizomatic fashion, of unfolding layers of history, memory and imagining.

Visitors encountering this transformed rural space at night were invited to experience the world in a different way, to undergo a reterritorialisation into a realm of fresh possibilities, of alternative ways of inhabiting landscape. The nature of this immersion was topological, focussed on understanding qualities, processes and spaces as fluid, contested and performative social constructs. A vital aspect of developing the works on this particular site was honouring traditions of care and protection of the environment. Another was drawing attention to premises underpinning current practices of land ownership and management and, by implication, their incompatibility with the deep history of Aboriginal presence in this Karoola river-valley. The European notion of ‘privately-owned property’ had, after all, only relatively recently supplanted millennia of communal belonging to this stretch of country. All three works, in different ways, challenge key assumptions of colonial history and disrupt popular perceptions of rural landscape as ‘natural’ – possessing inherently peaceful, attractive and charming characteristics lacking in urban environments.

The farm offered a variety of surfaces for experimenting with ideas and approaches: concrete, plaster board, timber planks, corrugated iron, windows, and old metal drums flattened out and recycled as tiles. Unlike the bland screens of movie theatres, these surfaces were already richly inscribed with layers of history and culture. Mindful of Wodiczko’s skilful use of projected imagery to interrogate architectural surfaces as
mediators of memory, history, and subjectivity. I sought to emulate his respectful treatment of the material presence of the building beneath – for instance, by ensuring that the tangible qualities of structures were revealed through the shifting beams of light, rather than rendered invisible under a blanket of projected and colour-saturated imagery. Colour palettes were muted or black-and-white, a tactic that readily revealed the façade beneath as images moved across them. I also used lighting strategically to further reveal structural characteristics. In the hay-barn, for instance, the end-bay housing an old tractor and farm implements was lit to establish the building’s volume within the dark surrounds and draw attention to its function. Façade projections penetrated inside the barn through its big slatted doors, casting shifting shafts of light across the stacks of hay. Periodic bursts of fire projected on the hay also drew audiences to peer inside through the slats. The use of such strategies to create a mutual partnership between material surface and ephemeral play of light is vital to positioning lumentecture as a critical practice within contemporary arts.

As in urban projection events, my cluster of installations in Karoola’s ‘outer space’ juxtaposed multiple temporal layers and tempos within a single environs. Images that focus awareness on the passing of time itself are central within an oeuvre built on loops, cycles, rhythms, and repeating patterns rather than progressing a narrative. The wind-blown pasture images in Grass, the repetitive sweeping movements of the shearers and slow gaze of the animals in Fleece, and the random journey of the caravan around a city in Spin were all time-images of pure change. They offered a meditative encounter through the slowing down of real time to half or quarter speed within a milieu that was already slowed by urban standards, relatively free of busy distractions. Through multisensory immersion in this liminal space between light and deep dark, participants could access a sense of time as a dense vortex of relational forces rather than as a flow of mundane sequential events.

After Dark drew participants into a multi-sensory night walk within an environs to explore three lumentectural installations and, equally, the dark spaces between them. They became caught within a play of material relations, moving through and interacting with sculpted fields of projected light and shadow, but also reliving the ancient practice of chorography. Walking a landscape at night activates kinaesthetic, haptic, sonic and olfactory modes of encounter as well as visual and aural, leading to slower and richer sensory understandings of place. Like Robertson’s phantasmagoria in late 17th century Paris, the farm offered the experience of an environment carefully structured by light,

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dark and sound to create particular sensory effects. Audiences navigated a force-field of events designed to attract, unsettle or startle in various ways, to ‘deterritorialise’ from habitual or stereotypical modes of perception.

My practice demonstrates ways in which lumentecture presents an open field for independent artists interested in developing small-scale events and installations that abandon the urban mega-spectacle in favour of darker, more viscous forms of encounter within all manner of marginal spaces and moments. Clearly, it is still feasible to leverage the sensory impacts of phantasmagoric spectacle in ways that disrupt, not reinforce, oppressive hegemonies that bind communal space and time.

Lumentecture’s future potential as a vibrant and critically nuanced form of ephemeral public art is likely to progress, on one hand, through a revitalisation of its rich heritage of experimental practices and, on the other, through seizing unique opportunities that arise within the commercially driven contingencies of our times. The model of festival-sponsored collaborations between independent artists and expert, well-resourced design companies is promising in this regard and there are numerous instances of its success in Australian contexts. To take best advantage of these opportunities, artists will need to be astute in negotiating the terms of their contributions and attentive to ways of expanding their skills. Traditional creative arts practices founded on ocularcentricity are being eclipsed in the digital era by hybrid practices that invite immersive and multisensory modes of engagement. Projection artists-to-come will need to be familiar with working in the realms of sonic, haptic, olfactory and kinaesthetic modes of communication and creative encounter as well as the visual.

There is immense scope and need for introducing a greater level of critical response and artistic accountability into the ‘big end’ of lumentecture’s current appropriations as spectacular urban branding. Arts commentators and academics have a vital role to play as the uniquely 21st century characteristics of projection continue evolving and generate a substantial new field of inter-disciplinary practice, research and discourse. Audiences, too, can refuse to pass through events as passive consumers of spectacle and act as discriminating agents who are willing to actively engage and use social media as a platform for strategic feedback and critical exchange.

The disparate modes of my site-writing inquiry have thus explored and inscribed afresh many different kinds of sites and surfaces to articulate a cluster of interrelated practices, concepts and ‘moments’ pertinent to lumentecture’s contemporary expressions. These endeavours will, I hope, contribute to advancing a nuanced understanding of the emergence of projection as a creative medium through a rich history of bold experimental practices and critical discourse which continue to unfold into a vibrant future.
References


http://creativetime.org/programs/archive/2005/holzer/pastprojects.html#international

http://www.huffingtonpost.com/2012/02/06/highly-strung-puppets_n_1257313.html


http://sitem.herts.ac.uk/artdes_research/papers/wpades/vol4/bbfull.html


Van Schaik, Leon (2009). ‘The Lightness in Architecture’ in Scott McQuire, Meredith Martin & Sabine Niederer, (eds.) Urban Screens Reader, No. 5. Institute of


**Australian projection artists**

Nick Azidis (Melbourne). http://projectionteknik.com/nick-azidis


Ian Corcoran (Melbourne). http://iancorcoran.com/wp/


Craig Walsh (Tweed Heads). http://www.craigwalsh.net/

Yandell Walton (Melbourne) - http://yandellw.tumblr.com/

Kit Webster (Melbourne). http://kitwebster.com/

Jamil Yamani (Sydney). http://jamilyamani.com/

**Australian-based design companies**

Artists in Motion (Sydney). http://artistsinmotion.co/

Spinifex Group (Sydney, Hong Kong, Los Angeles, NY). http://spinifexgroup.com/

International design companies commissioned in Australia
59 Production (UK). http://www.59productions.co.uk
Danny Rose (France). http://www.dannyrose.fr/
Superbien (France). http://www.superbien.fr/
Universal Everything (Britain). http://universaleverything.com/
Urbanscreen (Germany). http://www.urbanscreen.com/

Other international artists and designers referenced
Krzysztof Wodiczko (Cambridge, USA). http://www.gsd.harvard.edu/person/krzysztof-wodiczko/

Australian light art festivals
U.R{BNE} Collective (Brisbane). http://www.urbne.com/
Lumentecture installations


