You don’t form light with the hands. You don’t carve it away with a knife. It’s not like wax or clay. It’s not like stone or wood. You somehow have to form it this other way, which is a little bit like how we form sound. 

James Turrell

The diverse and complex approaches that contemporary artists are adopting in response to light make it a rich and rewarding subject to explore. The centrality of the medium to sight and perception, and the importance light has held historically, culturally and scientifically, creates dialogues across time that trace multiple points of reference. Recent advances have made light sources such as lasers and light-emitting diodes (LEDs) more affordable and accessible, providing solutions to environmental and humanitarian concerns, and revolutionising display technologies. Wedded as these and related developments are to our experiences of the world, the links between light and art are expanding, generating new forms of expression that connect to the contemporary moment.

The 2015 United Nations International Year of Light and Light-based Technologies aims to highlight the elemental role this natural phenomenon plays in our lives. Light Play: Ideas, Optics, Atmosphere is just one of many exhibitions around the globe conceived in response to this initiative. Drawn mostly from The University of Queensland’s Art Collection, and supplemented by key works borrowed from public and private collections and, in some cases, from the artists themselves, the exhibition is indicative of the range of artworks being created around this theme.

Light has been an enduring subject in art. Historically, artists invoked its mystic and symbolic powers, using it ritually and building structures to harness its force. Much later, European Romantic painters working in the early-nineteenth century, including German Caspar David Friedrich (1774–1840) and Englishman JMW Turner (1775–1851), also focused on the spiritual qualities of light, seeing it as manifesting divinity. Towards the end of that century, Impressionists such as Claude Monet (1840–1926), influenced by Turner’s late paintings, explored light’s transience. Developments in the early decades of the twentieth century increased the efficiency and reach of the electric light bulb, leading artists such as Hungarian László Moholy-Nagy (1895–1946) and his contemporaries to equate artificial light with Modernity. In the 1960s and 1970s, Minimalists and Conceptual artists, including Americans Dan Flavin (1933–1996) and Bruce Nauman (1941–), experimented with fluorescent tubing and neon.

These histories inform Light Play, which features the work of contemporary artists who use light as a medium, as a means to create visual effects, and/or to explore social, personal or political concerns. This interest in narrative, biography and politics is a characteristic that differentiates the work of contemporary light artists from that of previous generations. While the artworks in this exhibition are grouped into the sub-themes ‘Ideas’, ‘Optics’ and ‘Atmosphere’, in several instances they relate to more than one.
The Dr. said it was like being hit by lightning 2013
Neon, edition 1/5
Courtesy of the artist and Roslyn Oxley9 Gallery, Sydney
The artists whose work is shown in this section of the exhibition use light for its ability to communicate ideas and emotions, as well for its aesthetic qualities. In many cases, their artworks relate to the light art of 1960s and 1970s, sharing, as they do, a visual relationship with the fluorescent- and neon-based work of Dan Flavin and Bruce Nauman. A marked point of departure, particularly in respect to Flavin’s practice, is the works’ metaphorical properties – Flavin famously remarked of his fluorescent tubing, “it is what it is, and it ain’t nothin’ else.”

Several artists, including Paula Dawson and Nell, have created light works that deal with life and death. Dawson’s Hyperobject: Homeland (2013) serves as a conduit for mourning and a plea for goodwill. The concepts that permeate her work – memory, space, time, place – inform her digital hologram, which is similar to the holographic maps that the US military produces to aid soldiers in Iraq and Afghanistan with “battle visualisation”. As Dawson describes it, “the existence of these holograms foreshadows the destruction of the places they depict and also the people that they do not [show].” Re-purposing this technology, she created 150 drawings of human “life lines” based on digital models of the palms of people’s hands. These form a kind of “common” or shared landscape – a universal homeland. Dawson has viewers look down on her work from above, and asks that they bring a more holistic perspective to the act of looking. It is her hope that her drawings will “ evoke empathy when experienced though the fluency in scalability, orientation and resolution of digital holographic imagery.”

Nell’s The Dr. said it was like being hit by lightning (2013) is a personal meditation on loss that she made following a life-threatening miscarriage. Having previously been inspired to use fluorescent tubes and neon in response to Flavin, and the work of Italian artist and theorist Lucio Fontana (1899–1968), Nell found that the material gave her a channel for her grief. She has explained that “the crack in the egg is symbolic of the entry point of life into a body and the VERY same exit point of life from the body” and that “I was trying to make a symbol of life and lightning out of a material that emits light, and uses electricity.”

Paul Adair
Light bulb 2011
Mixed media: glass, metal, and neon
Collection of The University of Queensland, purchased 2013.
Reproduced courtesy of the artist and Stills Gallery, Sydney.
Brook Andrew and Sam Cranstoun both use light to comment on the politics of race. Andrew uses an eclectic array of media to scrutinise images of, and ideas about, first peoples. His refusal to be restricted to a particular medium signals his resistance to stereotypes surrounding gender and ethnicity. Instead, he avails himself of materials that accommodate Western art history, and his Indigenous heritage alike. Neon is a favoured material, with links to the work of Nauman and Australian Conceptual artist Peter Kennedy (1945 –), among others, as well as to the language of advertising. The title of Andrew’s work, Flow chart (2011), is revealing – a flowchart is a schematic diagram designed to help people navigate complex systems. Here, the neon schema connects a series of rare postcards that date to the late-nineteenth and early-twentieth centuries, a period when European photographers and ethnographers sought to “capture” the likenesses of the Indigenous peoples they encountered. Through such images, the subjects were exoticised and pictured as ‘other’. In Andrew’s hands, these people are represented as interconnected groups and individuals, their images framed as portraits rather than ethnographic curiosities.
The installation also alludes to the rules of physics and, by inference, to assumptions around skin colour. In physics, white light can be considered greater than the colours of the spectrum, being comprised of all of them, while black signifies the absence of all light. Andrew’s matrix makes tangible these concepts and the cultural equivalents that set whiteness above all else, literally bringing prejudice to light.

Through a research-based practice, Sam Cranstoun deploys Minimalist tropes, such as repetition and mass-production, to consider historical narratives and questions of social justice. In *Deconstructed monument (Memphis, TN.)* (2014) he has reproduced elements from the sign outside the Lorraine Motel in Memphis, Tennessee, where American Civil Rights leader Reverend Martin Luther King (1929–1968) was assassinated on 4 April 1968. Following King’s death, the motel was converted into a residence for low-income earners and subsequently, after the eviction of the last tenant, Jacqueline Smith, on 2 March 1988, into a museum that commemorates King, and traces the history of the Civil Rights Movement. Smith has since maintained a protest vigil outside the motel, objecting to the gentrification that has forced underprivileged people like herself out of the community. By highlighting and deconstructing the nostalgic, 1960s aesthetic of the motel sign, Cranstoun seeks to unpick our collective memory, and to shine a light on the complex political issues that continue to surround this piece of architectural history.
Optics

The term ‘optics’, which refers to the study of the physical properties of light, acts as a touchstone for artworks in the second section of the exhibition. Made by artists motivated to explore the experience of looking, the works rely on the viewer’s physical engagement, and the associated interplay of light. Many of the artists reference Kinetic Art and Op Art, connecting with a history that incorporates mechanised sculptures like László Moholy-Nagy’s Light prop for an electric stage (1922–1930), also known as Light-space modulator, the mobiles of American Alexander Calder (1898–1976), and illusory works from the 1950s and 1960s by Hungarian-French artist Victor Vasarely (1906–1997) and British painter Bridget Riley (1931–). Others artworks, like Nigel Lendon’s Untitled wall structure #1 (1970–2012), have a direct relationship with Minimalism, while obfuscating its non-referential premise.

Lendon was one of a number of young Australian artists working in the late 1960s who were influenced by the exhibition Two decades of American painting, which, in 1967, toured to the Art Gallery of New South Wales and the National Gallery of Victoria (NGV) from the Museum of Modern Art (MoMA), New York. This show and the NGV’s response, The field (1968), which featured Lendon’s work, became benchmarks for their time. Speaking in Brisbane in 2013, he explained that the exhibitions ‘represented an ending of sorts’ and that, afterwards, he aimed to put ‘the impetus on the viewer to engage more actively.’ While Lendon’s artworks share the features of industrial fabrication and repetition apparent in objects by American Minimalists such as Donald Judd (1928–1994), its colour-modulated surface destabilises Minimalism’s uninfected aesthetic.

Minimalism and Op Art inspire Lincoln Austin and Jacky Redgate, whose artworks explore visual effects and reflection. Redgate’s series ‘Light throw (Mirrors)’ (2011) relates to her own earlier experiments, and to the work of other artists who have employed mirrors, including the late Australian Conceptual artist Ian Burn. Additionally, as academic and curator Ann Stephen has written, Redgate’s photographs invoke, ‘certain momentous events in twentieth-century abstraction, [including the] early Farbenlichtspiele [or Colour-Light Plays] of Ludwig Hirschfeld-Mack (1893–1965).’

previous page
Jacky Redgate 1955–
Light Throw (Mirrors) #4 2010–2011
Type C photograph facemounted to Perspex, artist’s proof
Collection of The University of Queensland, purchased 2012.

Reproduced courtesy of the artist and ARC ONE Gallery, Melbourne.
Light throw (Mirrors) #1 (2009) is, in fact, influenced by the metallic abstract paintings that Australian Modernist Ralph Balson (1890–1964) made in 1941. To create her work, Redgate positioned a light in the corner of a darkened room and shone it at a Balson-inspired mirror prop. She then photographed the reflections that were thrown on to the wall opposite, with the resultant blurring subverting the sharpness of focus usually associated with photography. Stephen has described the efforts the eye makes to resolve this tension as, ‘... a sensation of optical pulsing like that produced by much Op and Kinetic art.’

Lincoln Austin acknowledges a range of artistic influences, stating ‘there are parallels between my work and Judd’s wall-mounted boxes, Vasarely’s patterns, Flavin’s hazy colour, and Agnes Martin’s grids.’ The confluence can be seen in his light box Lady Stardust (2013), titled after a song by David Bowie from the album The rise and fall of Ziggy Stardust and the spiders from Mars (1972). We experience the sculpture as either moving or fixed relative to our physical relationship to it. The illusions it creates recall the moiré effect achieved when two sets of parallel lines are superimposed one over the other, at slightly different angles. Marion Borgelt plays with similar ideas in Liquid light: 35 degrees (2004). As we walk around her cut canvas, our perception changes as it oscillates between an almost flat surface to one of three dimensions, and back again, invoking the undulant black-and-white paintings that Bridget Riley made in the 1960s. The shimmer is also, as the title suggests, reminiscent of heat haze. Borgelt grew up in the wheat belt of Wimmera in rural Victoria; the natural world is never far from her mind. Interestingly, Riley has explained that she works ‘with nature, although in completely new terms. For me nature is not landscape, but the dynamism of visual forces.’

The desire to activate space through movement and light is evident in Arryn Snowball’s Wind sequence (16 seconds) no.1 (2014) and Ross Manning’s Input ruins (2009). Both artists use suspended objects, lights, fans and airflow to activate their work, and owe a debt to Alexander Calder, whose mobiles are synonymous with Kinetic art. Snowball seeks to isolate ‘the moment that representation of an object may undo itself’, an approach exemplified in Wind sequence.
As he explains, "the photos were taken about a second apart as a square of graph paper moved in the breeze … time is pulled this way and that by light, shape and pattern."18

Manning’s previous occupation as a TV repairman and his experimental music practice inform his art, which connects to physics and the everyday. What we observe in Input ruins is a video camera with a cut-glass crystal attached to its lens suspended above seven flat-screen TVs, all displaying the same output. Manning’s arrangement generates a video feedback loop that is modulated by the camera’s movement in space – the cable suspending it incorporates a sail that catches the air current produced by a fan. What we experience, however, is the illusory, transporting effects of these DIY processes: the flickering of light and shade and a meditative, technological hum. As Manning describes:

I am really interested in movement, light and sound. Those things seem to affect you on a primal, instinctual level … people become aware of spatial changes and shadows … I like to expose the workings of things.19

Nicholas Folland | 1967 –
Mar 2012
Crystal decanter, polyester resin, timber, aluminium and light box
Collection of The University of Queensland, purchased 2012.
Reproduced courtesy of the artist and Tolarno Galleries, Melbourne.

Arryn Snowball | 1977 –
Wind sequence (16 seconds) no.1
2014
Inkjet print on cotton rag paper, edition 1/5
Collection of The University of Queensland, purchased 2014.
Reproduced courtesy of the artist and Heiser Gallery, Brisbane.
In this third section of the exhibition, artists explore light’s potential to create ambience. Many look to the nineteenth-century, creating landscapes imbued with metaphor. Others make work that suggests the influence of earlier artists such as Italian Baroque painter Michelangelo Merisi da Caravaggio (1571–1610), and seventeenth-century Flemish artist Jan Vermeer (1632–1675). There is a special focus on photography, a medium reliant on light. These images draw on the histories of photography and painting alike, revealing the ways that they intersect in contemporary art.

In the nineteenth-century Romantic tradition, light was primary, providing artists with an opportunity to demonstrate technical prowess, and a means to express God’s presence in the natural world. At the Dresden Academy of Fine Arts in Germany, Caspar David Friedrich and Norwegian Johan Christian Dahl (1788–1857) revolutionised landscape painting through their atmospheric scenes, privileging nature as their source and elevating the status of their genre. In different ways, Katarina Vesterberg and Alexander McKenzie both borrow from their approach.

Vesterberg was born in Karlstad, Sweden, but grew up in Brisbane, spending her weekends sailing on Moreton Bay. She draws on this environment and her European heritage in making her work.20 The influence of Romanticism can be seen in Twilight (2008–2009) in her bravura rendering of light and atmosphere, and her use of Moreton Bay Pines as a framing device. Unlike Dahl and Friedrich, however, she does not use the trees to focus our attention on an extraordinary natural wonder. Rather, she emphasises each element of her scene, and asks us to lose ourselves in the surface through which the sky and land are realised.

McKenzie’s Self portrait looking for ships (2006) invokes Friedrich’s seminal painting Wanderer over the sea of fog (1818), which features Friedrich’s characteristic Rückenfigur, or ‘figure seen from behind’, who leads the viewer into the painting. McKenzie pays respect to this tradition, and adds an element of contemporary humour. Turned towards us rather than away, he uses ambient and artificial light to foreground his form. His kilt signifi es his Scottish heritage, while his thongs acknowledge his Australian upbringing.
Arryn Snowball and Carl Warner also reference Romanticism, acknowledging the light-filled landscapes of English painter JMW Turner. Turner was a master of the Sublime, a virtuosic style popularised during the Romantic era, which saw artists champion the moody and awe-inspiring elements of nature. To make *Steam #8* and *Steam #9* (both 2003), Snowball painted from photographs, necessary given his transient subject. In this sense, the camera becomes an instrument through which he approaches what academic Rosemary Hawker describes as ‘a broader and more ambitious exploration of the possibility of experience and sensation through painting.’

Snowball’s works capture the intangible qualities of light diffused by water vapour, invoking Turner’s *Rain, steam and speed – The Great Western Railway* (1844) and glorious experiments like *Falls of Schaffhausen (Val d’Aosta)* (c. 1845). Warner’s photograph *Darkness visible* (2015) is directly inspired by a Turner painting, *Snow storm – Steamboat off a harbour’s mouth making signals in shallow water, and going by the lead*. The author was in this storm on the night the Ariel left Harwich (1842). Despite there being no evidence to support the claim made in the title, Turner’s scene is inseparable from the famed account that he had himself lashed to the mast of a ship during a storm, so that he could experience and, later, capture its force. Warner writes:

> It is a story that sticks … to any attempting to work with the landscape, even photographers … I went on my own journey through turbid weather and heaving seas to make this series … Instead of a masted ship I was on a tourist ferry in Milford Sound … When we look at a photograph we never really see what we are looking at … but rather what we think was before the lens. Time is upset as the past happens in a contemporary field.

Like Warner, photographers Marian Drew and Bill Henson use their practice to unravel time and dismantle distinctions between painting and photography. Drew’s performative images have been described by academic Geoffrey Batchen as having been ‘overtly created rather than simply taken.’

Bill Henson 1995–
Untitled sequence, image no. 5 1977–1978
chlorobromide gelatin silver photograph on fibre-based paper, edition 8/15
Collection of The University of Queensland, purchased 1990.
Reproduced courtesy of the artist and Roslyn Oxley9 Gallery, Sydney.
Bill Henson also uses long exposure times, and exerts tight control over his printing processes to create images that reveal his mastery over darkness and light. His photographs ‘painterly’ qualities, and their dramatic lighting effects, have seen them compared to paintings by Vermeer, and to works by Caravaggio, a master of chiaroscuro, or the application of contrasting passages of light and shade. Henson uses the resulting ambiguity to ‘make what is depicted less certain’. By details disappearing into shadows, forms dissolving into darkness, you open up the space in a picture for the imagination.\(^\text{23}\)

Henson has long been fascinated with the human form, and has frequently photographed adolescents, seeing their transitory condition as a metaphor for his pictorial concerns.\(^\text{24}\)


2. In proclaiming 2015 the International Year of Light and Light-based Technologies, the UN aims to raise ‘global awareness about how light-based technologies promote sustainable development and provide solutions to global challenges in energy, education, agriculture and health,’ http://www.light2015.org/Home/About.html.


7. Sue Cramer has described Peter Kennedy’s early experiments with neon in Less is more: Minimal + Post-Minimal art in Australia: ‘Kennedy’s Neon Light Installations in 1970 … sought to encompass space by using linear strips of neon light to articulate Gallery A’s internal architecture, particularly the junctures where wall met wall, ceiling or floor.’ Refer to Sue Cramer, ‘Part II: The sixties generation,’ Less is more: Minimal + Post-Minimal art in Australia (Bulleen, Vic: Heide Museum of Modern Art, 2012), 45.

8. In 1950, Moholy-Nagy used the artwork as the basis for his experimental film Lightplay: Black White Grey.

9. The original version of this artwork was destroyed in 1972, but was remade for the exhibition Less is more: Minimal + Post-Minimal art in Australia, shown at Heide Museum of Modern Art, Melbourne, in 2012.

10. Seven years later, in 1974, MoMA’s exhibition Some recent American art proved equally influential. The show, which included examples of Minimalism, Conceptual Art and Process Art by artists such as Judd, Flavin, Carl Andre (1935–), Robert Morris (1931–), Richard Serra (1939–), Eva Hesse (1936–1970), and Sol Le Witt (1928–2007), travelled to the Art Gallery of New South Wales, National Gallery of Victoria and Art Gallery of South Australia.


12. Ann Stephen has recounted Burn’s epiphany, in 1967, that he was one of numerous artists using the mirror to reflect on art: ‘I recall my surprise when I realised how many other artists were using materials like mirrors, glass and clear plastic ([Robert] Morris, Robert Smithson, Michael Baldwin, Keith Sonnier, Joseph Kosuth).’ Refer to Ian Burn in Ann Stephen, Mirror, mirror: Then and now, http://sydney.edu.au/museums/images/content/exhibitions-events/mirror-mirror/mirror-mirror-catalogue.pdf, 5.


20. Dahl was appointed to the Dresden Academy in 1818 at a time when Norway was under Swedish rule. He formed a close personal and professional bond with Friedrich, with the two encouraging each other’s artistic endeavours. Their contribution to the development of Romanticism was explored through the recent exhibition, *Dahl and Friedrich. Romantic landscapes*, Nationalmuseum for Kunst, Arkitektur og Design, Nasjonalgalleriet, Oslo, 10 October 2014–4 January 2015, and *Staatliche Kunstsammlungen Dresden*. Dresden Castle, 6 February–3 May 2015.


24. Stephen Jones has recounted one of these performances in his brief history of Inhibodress, which includes the contemporary commentary of Australian artist and critic James Gleeson (1915–2008): “During this show [Johnson] presented a series of high risk light spectacles, his Flying Lights Exhibition of “coloured, switched on light bulbs flung and exploded in the gallery’s space.” Refer to James Gleeson in Stephen Jones, “Inhibodress artist collective,” *Scanlines: Media art in Australia since the 1980s*, http://scanlines.net/group/inhibodress.

Art and Science: Playing with Light

Dr Margaret Wegener

As a physicist, I find it satisfying that Light Play: Ideas, Optics, Atmosphere functions as a kind of survey of what light does. In the range of artworks displayed here, light is emitted, refracted, reflected, transmitted, scattered, and absorbed. Paul Adair’s solid aluminium sculpture Light bulb (2011) plays with such physical phenomena; it does not glow with its own light, but reflects the light around it, and can cast a shadow. It is neat that a representation of a light bulb – the embodiment of an idea – can make us think.

For me, Paula Dawson’s Hyperobject: Homeland (2013) resonates particularly. Her art introduced me to holography, and shaped the course of my scientific career. Holography was unknown to me when, as a school student deeply interested in science and art, I saw a sign at the Queensland Museum announcing an exhibition of holograms. I went in, and saw artworks unlike any I had seen before – eerily lit, ghostly, haunting, suburban scenes that were somehow existing there, in 3D, beyond a pane of glass. I wanted to do that! The opportunity arose during my Bachelor of Science degree in Physics at The University of Queensland (UQ). Later, in postgraduate research, I used computer-generated holograms to investigate unique ‘doughnut’ beams of light, and holographic interferometry to probe supersonic gas flows around models of spacecraft. My personal interest in science and art, and their interface, now manifests in creating jewellery (including ‘Labpunk’ made from physics artefacts). I am fascinated by the optical properties of gemstones, and the way that light interacts with the shapes and surface finishes of metal. In 2015, UNESCO (the United Nations Educational, Scientific and Cultural Organisation) is keen to ensure that its International Year of Light and Light-based Technologies broadens awareness of why light matters. This essay illuminates its relevance to me as an artist and scientist.

Art can play ‘smoke and mirrors’ tricks that rely on the connection between what we see and what we think we see. In this respect, Paula Dawson’s hologram Hyperobject: Homeland (2013) is significant for this exhibition. Viewing a hologram can feel surreal. It looks like there is something there, but it is only light. However, light, and our sense of sight, are important means by which we do know that things exist. Holograms play on this. They have become familiar
to us through the mass-produced foil that creates rainbow-hued reflections, but foil holograms use only a fraction of the capability that holography has to reconstruct a complete 3D scene. In principle, holography captures the interaction of a light wave (with well-defined properties, such as laser light) that has illuminated a subject, and another related light wave. This ‘interference’ pattern, indecipherable to the eye, encodes information about these waves. It means that information about a recorded scene is spread across a holographic plate, with each point storing a different view. For this reason, holograms are often described as ‘windows with a memory’. Dawson, a renowned holographic artist, is celebrated for her use of large window-sized plates that record human living spaces. This format heightens the sense of looking through a window, though what is seen is no longer there. A significant aspect of these holographic scenes is the absence of people – a consequence of the technical difficulties associated with including humans in holographic recordings. In *Hyperobject: Homeland*, memory and human presence (important considerations in the process of making holograms) are highlighted. For this digital hologram, Dawson made silicon casts of people’s palms, and used specialised hardware and software to draw over the ‘life lines’ on those casts, thus creating a 3D ‘data object’ for each person. She then manipulated this data, making multiple and rotated versions, and used a proprietary process to produce a hologram that generates a multi-coloured image when viewed in white light.

Such art exists only because of recent research developments – digital holography is dependent on previous advances in computational power and understanding of optics. It does not need a laser, and thus extends beyond the theoretical and technological advances of the 1960s that made holography practicable. Historically, waves of technological progress in light science have opened new avenues for visual artists, enabling different kinds of art to be created. For example, neon lights existed by 1910, were incorporated in advertising in the 1930s, and were employed as significant components of artworks by 1950. In this exhibition, we experience light emitters ranging from the neon tubes in Nell’s *The Dr. said it was like being hit by lightning* (2013), to the ubiquitous iPad.
Several artworks in the exhibition exploit scientific theories relating to light and vision. For example, Nathan Gray’s *Moiré 1* and *Moiré 3* (both 2010) rely on a phenomenon that is used as a teaching aid to visualise the theory of how light waves interact. The moiré effect occurs when two recurring patterns are overlaid on top of each other; together, they produce a larger-scale pattern that alters as their relative positions change. Other artworks in the exhibition that include graphic, striped patterns, such as Marion Borgelt’s *Liquid light: 35 degrees* (2004) and Lincoln Austin’s *Lady Stardust* (2013), similarly play with what we know about how the eye and brain together ‘see’. Links between visual perception and movement were extensively explored in the 1960s and 1970s by Op (optical) and Kinetic artists, particularly via art that changes appearance as the viewer and/or parts of the artwork move.

The intent of some artists in the exhibition is to capture light. They observe and illustrate the effects of light and shadow playing across a form. Photography is well-suited to this aim. A camera is identical to a human eye in that they both consist of an aperture, lens system and sensor array. Photographers such as Bill Henson, who records a range of shades of grey that we interpret as a human body or face, can make us conscious of the workings of light, and the amazing mental processing involved in seeing. Other photographers, including Jacky Redgate and Marian Drew, explore what happens when they distort the conventions of focus or exposure times in imaging systems. Ross Manning’s experiment with video feedback disrupts our usual expectations of video display. In *Input ruins* (2009) a video camera points at, and feeds into, an arrangement of flat-screen TV monitors. The phantasmagorical effects created by such a feedback loop are further affected by a piece of glass, faceted like a gem, attached to the camera lens. The light that is refracted by this prism (splitting light into its constituent colours) mediates the light pattern that the viewer sees.

*Light Play* celebrates artworks that examine the interplay between light and substance. Katarina Vasterberg’s...
Twilight (2008–2009), Arryn Snowball’s Steam #8 and Steam #9 (both 2003) and Carl Warner’s Darkness visible #1 (2015) continue a long history of artists’ fascination with the way that light interacts with atmosphere and water. Paintings from the early- to mid-nineteenth century of sunrises, sunsets, and other atmospheric phenomena by artists such as German Caspar David Friedrich (1774–1840) and Englishman JMW Turner (1775–1851) pre-date scientific inquiries into these subjects. John Tyndall (1820–1893) and Alfred Clebsch (1833–1872) in the 1860s, and Gustav Mie (1869–1957) in the 1890s, pioneered the physics of the scattering of light by particles, answering questions such as why the sky is blue, clouds are white, and sunsets and sunrises tend to red.3 Light-scattering research continues today in Physics at UQ. Other colleagues are involved in light-related research on astronomy, solar radiation for power generation, applied laser physics, and theoretical and experimental quantum optics. Perhaps such light science will inspire or enable future artists.

While art and science are sometimes thought of as being at opposite ends of a spectrum, there are deep connections between them. Both scientists and artists observe nature, and endeavour to say something about the world around us. In this respect, visual artists and optical scientists share the impulse to play with light.

List of works

Paul Adair 1982 –
Light bulb 2011
 machinist; Graeme Adair
hand-machined aluminium
12.0 x 6.0 x 6.0 cm
Collection of The University of Queensland, purchased 2013.

Trish Adams 1992 –
Honeysuckle box 2015
timber and single-channel video
Original honeysuckle image data courtesy of Chris Hall and the Australian Synchrotron, Melbourne;
Honeysuckles provided by Melbourne Rooftop Honey; cabinet fabricated by Erik North.
27.0 x 52.0 x 37.0 cm
Courtesy of the artist

Brook Andrew 1970 –
Flow chart 2011
rare postcards, sapphire timber and neon
283.0 x 449.5 x 8.5 cm
Collection of The University of Queensland.

Lincoln Austin 1974 –
Lady Stardust 2013
Light box, synthetic polymer paint, aluminium and light emitting diodes
101.0 x 121.0 x 13.0 cm
Collection of The University of Queensland, purchased 2014.

Marion Borgelt 1954 –
Liquid light 35 degrees 2004
synthetic polymer paint and pins on canvas
140.0 x 210.0 x 4.0 cm

Ray Cook 1962 –
Look 2009
from the series ‘Money Up Front and No Kissing’
injet print on photo rag paper, edition 1/10
image 90.0 x 90.0 cm
Collection of The University of Queensland, purchased 2010.

Sam Cranstoun 1987 –
Deconstructed monument (Memphis, TN) 2014
acrylic, light emitting diodes and neon
four parts, dimensions variable
Private collection, Brisbane

Paula Dawson 1954 –
Hyperobject: Homeland 2013
deep hologram
120.0 x 120.0 cm
Collection: University of New South Wales

Marian Drew 1980 –
Three light forms 1999
type C photograph
image 58.6 x 73.6 cm

Nicholas Folland 1967 –
Mars 2012
crystal decanter, polyester resin, timber, aluminium and light box
overall 37.0 x 90.0 x 35.0 cm
Collection of The University of Queensland, purchased 2012.

Nathan Gray 1974 –
Möbius 2010
mixed media, edition 2/30
39.0 x 52.0 cm
Collection of The University of Queensland, purchased 2011.

Nathan Gray 1974 –
Möbius 2010
mixed media, edition 2/30
52.0 x 38.0 cm
Collection of The University of Queensland, purchased 2011.

Bill Henson 1955 –
Untitled sequence, image no. 7 1977–1978
chromogenic gelatin silver photograph on fibre-based paper, edition 9/16
image 26.5 x 30.2 cm
Collection of The University of Queensland, purchased 1990.

Bill Henson 1955 –
Untitled sequence, image no. 11 1977–1978
chromogenic gelatin silver photograph on fibre-based paper, edition 9/15
image 30.0 x 27.5 cm
Collection of The University of Queensland, purchased 1990.

Nigel Lendon 1944 –
Untitled wall structure #1 1970/2012
auto-enamelled steel
17 parts, overall 213.5 x 262.0 x 5.0 cm
Collection of The University of Queensland, purchased 2013.

Tim Maguire 1958 –
Redleaf #10 2010
Dustfilm in lightbox, edition 1/2
image 220.0 x 120.0 cm
Collection of The University of Queensland, purchased 2011.

Ross Manning 1978 –
Input ruins 2009
television monitors, fan, colour video camera and cut-glass crystal
dimensions variable
Collection of The University of Queensland, purchased 2009.

Alexander McKenzie 1971 –
Self portrait looking for ships 2000
oil on linen
156.0 x 198.5 cm

Neil 1975 –
The Dr. said it was like being hit by lightning 2013
neon, edition 1/2
156.0 x 112.0 cm
Courtesy of the artist and Roslyn Oxley9 Gallery, Sydney

Jacky Redgate 1955 –
Light Throw (Mirrors) #1 2009
type C photograph facemounted to Perspex, artist’s proof
image 126.0 x 156.0 cm
Collection of The University of Queensland, purchased 2012.

Arryn Snowball 1977 –
Steam #10 2003
oil on canvas
103.5 x 79.5 cm

Arryn Snowball 1977 –
Steam #9 2003
oil on canvas
103.0 x 79.5 cm

Arryn Snowball 1977 –
Wind sequence (18 seconds) no. 1 2014
injet print on cotton rag paper, edition 1/5
image 65.0 x 120.0 cm
Collection of The University of Queensland, purchased 2014.

Katarina Vesterberg 1962 –
Twilight 2008–2009
oil on linen
176.0 x 200.0 cm

Carl Warner 1965 –
Darkest visible #1 2015
Lambda print on archival paper, edition 2/5
image 119.5 x 67.5 cm
Collection of The University of Queensland, purchased 2015.
Liquid light: 35 degrees 2004
synthetic polymer paint and pins on canvas
Collection of The University of Queensland, Gift of Marion Borgelt through the
Reproduced courtesy of the artist and Jan Manton Art, Brisbane.
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Samantha Littley
Samantha Littley is Curator, UQ Art Museum, where her most recent exhibition was Peter Hennessy: Making it real (2015). Samantha has enjoyed a varied career as a curator, writer and educator at institutions including the Australian War Memorial, National Gallery of Australia, Australian National University and Newcastle Art Gallery. Prior to her current role, she was Curator of Australian Art to 1970 at the Queensland Art Gallery | Gallery of Modern Art, where she curated the major retrospective Making it Modern: The watercolours of Kenneth Macqueen (2007–2008).

Dr Margaret Wegener
Dr Margaret Wegener is a lecturer in Physics at The University of Queensland involved in physics education via teaching, professional service, and research. Her work focusses on the development of technology-enhanced and enquiry-based learning activities. Margaret’s PhD centred on the recording and analysis of holograms, and was indicative of her abiding interest in the interrelationships between science and art. She has practised as a jeweller for over a decade, and exhibits regularly with the Jewellers and Metalsmiths Group of Australia.