

CONSTRUCTING SPATIALITY AND DIMENSION

Cyndy McKenzie

Larger issues of space and time increasingly affect people all over the planet, in both built and natural environments. In drawing attention to spaces and places, artists ask people to consider multiple aspects of space. They create both shared and independent experiences of space and time, where the visitor's act of being there consolidates the artwork.

My installation explores illusions of space and dimension. In *Installation Art: A Critical History*, Claire Bishop talks of installation as "the type of art into which the viewer enters and which is often described as 'theatrical,' 'immersive,' or 'experiential.'"¹ My work engages with perceptions of and notions about assembling and constructing spatiality. In the making of my work *Construing Space*, I borrow from Len Lye's analogue film-making processes and discuss this further below. Len Lye (1901-80) was a New Zealand-born modernist and a pioneer in his field whose lifetime endeavour was to make motion tangible.

Construing Space asks the question, "What does looking feel like?" while also exploring how to express invisibility within the visible, volume without mass, and invisibility through presence. Adopting the perspective of active looking, I discuss British artist Bridget Riley's approach in the context of *Construing Space*. In addition, I discuss connections between *Construing Space* and the work of Alison Sholtz, a Brooklyn-based artist whose work investigates modes of perception and experiential boundaries while highlighting the relationship and interactions between art spaces and the viewer. Furthermore, my work considers how an installation can provide a participatory social space through interpersonal active engagement.

SPACE, DIMENSION AND IMMERSION IN *CONSTRUING SPACE*

Construing Space was exhibited in the Dunedin School of Art Gallery. The building has an industrial feel, with a grey polished concrete floor that reflects and catches light. The grey-painted steel structural elements are used to anchor false ceilings of white-textured linear panels. Constructed in lengths that float intermittently in three sections to cover half the architectural space, these panels create a ceiling that lowers the height of the structural ceiling above.

Visitors enter the gallery directly into the installation, where a suggested pathway guides them into a space created specifically to offer viewers time to allow their eyes to adjust to the light and to familiarise themselves with the environment that simultaneously surrounds and immerses them.

Construing Space is a three-dimensional kinetic installation constructed as a labyrinth, with a suspended diaphanous mesh surface. The architectural elements utilised explore the boundaries of fluidity and solidity to create instability and to amplify the effect of movement and displacement. A place where projection, motion and illusory space converge and interact through the material and the immaterial, the virtual and the real. The relationships between the multiple projected image, space and surface establish the illusion of space and dimension, of being in space, of space being palpable, tangible and intangible.

Spatial boundaries and visual effects disrupt space and the visitor's experience of space. Projectors operating both on horizontal and vertical planes and white animated line images engage in reflection and refraction that produces

white light, a vivid green colour and purple at varying viewing points. Navigating the installation activates numerous viewing points, revealing the moving image and colours that catch on surface and space, while others simply disappear:

Interference patterns are produced by fibreglass mesh, which is woven in a grid of grey opaque fibre with transparent gaps. During the installation process, I overlaid these in relationships designed to interact throughout the created space. The installation creates spatial distortion in a similar way to the work of Shotz, whose work generates many interesting dialogues which explore spatial distortion. She does this by creating fluctuating focus, often through captured light and shifting shadows, surface and dimension. Shotz adds volume to surface and surface to three dimensions as she draws on the ways that light affects objects. The capture of reflection, light refraction, changes the immediate physical environment. The ever-changing light, ambience and temporal conditions within a space contribute to the experience and active engagement of the viewer.

Art critic Elisabeth Blennow writes of Shotz's work: "Reflective materials add further dimension, allowing pieces to come to life through what they reflect, and therefore existing in a continuous state of flux. They take on a kaleidoscopic quality in which reality is defragmented and reassembled with every new glance, toying with the eye of the observer. Sculptures often seem static, yet hers endlessly shift."²

Like Shotz's installations, *Construing Space* distorts the visitor's visual and sensory perception of surface and space through illusory movement, light, space and multiplicity in order to create spatial ambiguity through manipulating foreground, background and the in-between space. Perspective and the use of the physical mesh material create illusions of shifting surface and optical effects that mimic Shotz's optical perception of fluctuating focus distorting space.

The work asks its viewers to reflect while they are within the space and to engage in shadow play. It introduces social and participatory elements, to be experienced either solo or in conjunction with other visitors. Positioned between both the screens and one another; viewers move carefully through the installation; the projected image is caught on their bodies, while their shadows are cast into and onto multiple surfaces. As a participatory, collective space, there is a sense of presence as others experience the same thing somewhere else in the space. There can also be uncertainty about whether the perceived presence is a physical presence or an illusion of others in the space.

Depending on whether the viewer is inside or outside the installation, the work can be experienced as an immersive



Figure 1. Cyndy McKenzie, *Construing Space*, 2018, immersive installation.
Dunedin School of Art Gallery.

three-dimensional experience or as a visual two-dimensional surface, where the viewer watches the artwork and the other visitors' contributions to it as they traverse the installation. There is a symbiotic relationship in Riley's work which explores the pleasures of sight as the work engages the viewer and the viewer engages the illusory aspect imbedded in the work itself, so that these elements come together in unison. The viewer's individual experience of visual perception and the optical effects within the work itself activate each other to encapsulate Riley's intention – the moment when the painting comes to realisation.

Art critic Adrian Searle writes of Bridget Riley: "[O]ne of the things that really happens in her work is that you don't really just look at it, you watch it, and one of the things you're watching is your own perceptions at work ... and you become super aware of the act of looking, and for me that's something completely magical."¹³ The important thing is being there. Through the active engagement of looking with all your senses, you watch your perception and you live the perception. This is what Riley means when she speaks of art as a social act and that "her work is completed by the viewer."¹⁴

People are asked to take time to engage with these aspects of the work; there is no definite time limit involved and viewers may move freely between two very different experiences. Multiple aspects of space are explored through the embodiment involved in immersion and the objectified viewpoint of both watching the installation and what other viewers are doing, while analysing how and what is happening.

CONSTRUCTION, MATERIAL AND SPATIAL DISTORTION

Sixty light-grey fibreglass mesh screens, 90 cm wide and of varying lengths, were suspended from steel wires. Some were hung individually, while others connected physically as t-intersections, right angles, overlaps and other angular relationships, achieved through an interdependent process that engages the projection throughout the installation. Furthermore, because it is material, one can sculpt it; it can be twisted, drawn out and elongated, then anchored to the floor. Some of the screens were suspended to touch the floor, curling at their ends – the material has a memory, as it has come off a roll. Other screens floated suspended above the floor surface of polished concrete as they influenced and affected the projected image they momentarily caught, fractured and multiplied to create an un-grounding of space.

Consideration of distance and span in relation to the required space was essential for the projectors to fill the space with multiple moving images. Both the projection and the distance of the 'throw' introduce scale – the closer the projector is to the mesh screens, the smaller the moving image; conversely, the further away, the larger the moving image. A fine line needed to be trod with regard to the distance of the throw in order to keep a crisp focus and intensity of colour saturation, as the larger the image gets, the more diffused it becomes. The projection placement fills the architectural

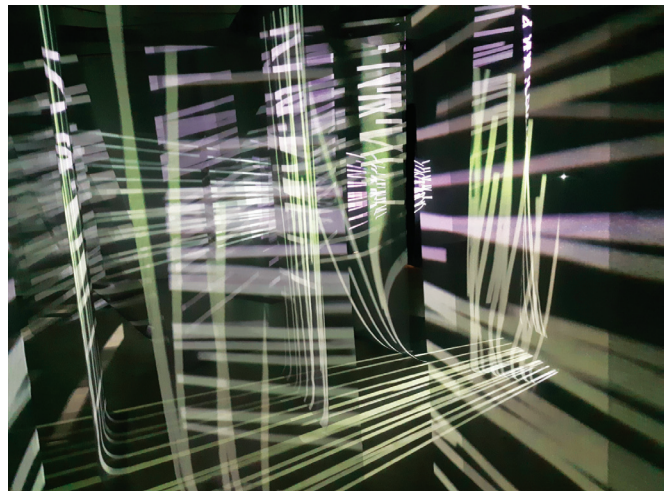


Figure 2. Cyndy McKenzie, *Constructing Space*, 2018, immersive installation. Dunedin School of Art Gallery.

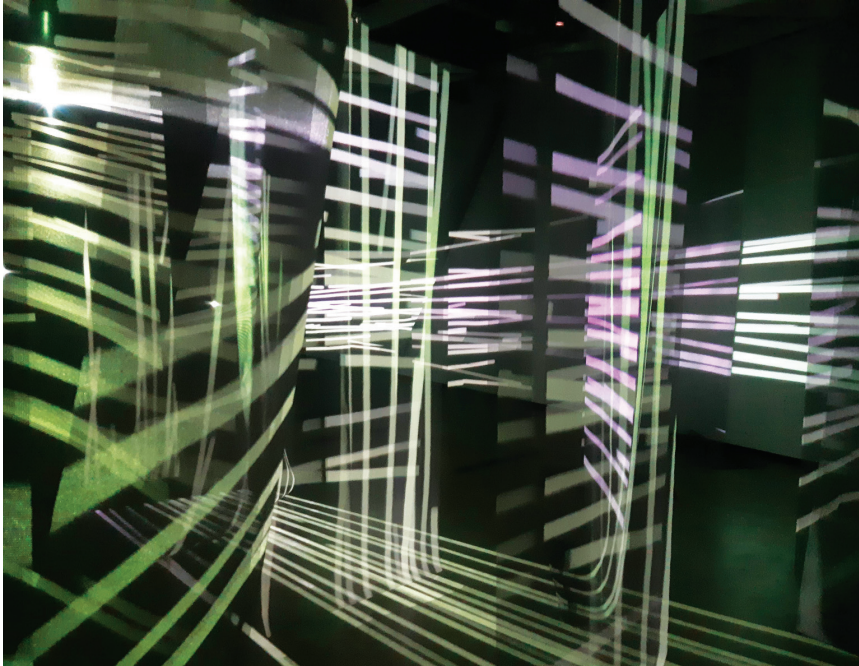


Figure 3. Cyndy McKenzie, *Construing Space*, 2018, immersive installation. Dunedin School of Art Gallery.

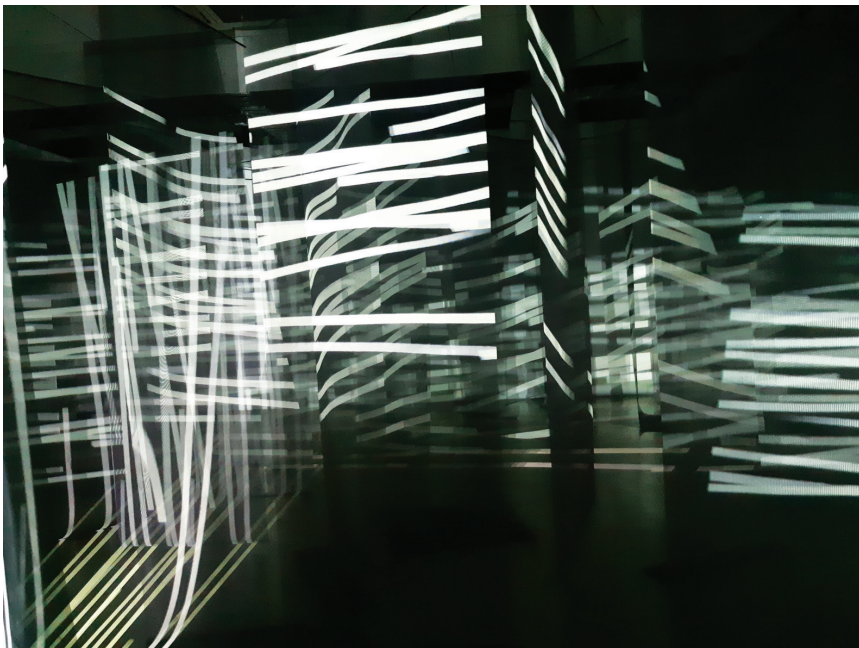


Figure 4. Cyndy McKenzie, *Construing Space*, 2018, immersive installation. Dunedin School of Art Gallery.

space and the visitor's visual field. The depth of the throw reaches through the spatial field to include the back wall, while partially expanding onto the side walls from within the space.

The mesh has an inanimate and yet diaphanous aspect that combines transparency and opacity. It catches and holds light with an illuminous quality; it both reflects and refracts light and throws textual shadows. When layered, it has an optical effect of moiré. Depending on the angles and directions layered, it offers numerous moiré effects – otherwise known as the interference factor, which amplify the effects of movement and displacement. The appearance of the fibreglass mesh is deceptive, as it looks soft but is quite hard to the touch. Furthermore, the mesh is a woven material and has a warp and a weft; fibreglass offers longevity, is non-static and so does not hold dust. As with paper, you can cut it while it holds its form and structure.

IMAGE, MOTION AND ILLUSION

The moving line image was conceived initially through a direct analogue process – three varying lengths of white electrical tape were applied to a black wall in a darkened space and captured by a hand-held video device. The hand action, moving from left to right, embedded kinetic movement. There is a sense of spatial ambiguity generated through blending foreground and background, rhythm and movement to suggest that the tape was floating. I link my practice of capturing images with Lye's direct film process in what I call a direct-analogue method. Editing the captured images allowed me to explore spatial perspective through scale and multiplicity, positive and negative space and the mirror image. I recall Lye's fascination with working with something magical – what he calls "the felt experience of zizz."⁵ When I work, I intuitively seek to embody an immersive, constant and mesmerising felt experience. Lye's work captures motion so intensely that it is palpable and seems almost tangible.

Comparably, the shifting illusory surface and spatial aspect of my work becomes palpable through intense sensory engagement. Movement through multiple projections captures the visitor's and viewer's sensorium, both through the mesmerising effects of the immersive installation and through their active engagement in watching it.



Figure 5. Cyndy McKenzie, *Constructing Space*, 2018, immersive installation. Dunedin School of Art Gallery.

The animated linear image travels vertically and horizontally over and through the mesh screens, layering textural shadows and reflections upon the architectural margins of floor and walls. The image moves through the fabric's weave of warp and weft, undulating through layered silhouettes. They criss-cross in linear overlays and superimpose themselves on each other; in dialogue with surface and space. The grid-like structures and the fractured projected moving image create an illusion of depth. While the mesh screens can be transparent or opaque, the viewer perceives a diaphanous quality that simultaneously defines, dissolves and shifts their interaction with space, creating an uncertain traverse for those moving across the installation. Hidden spaces generate encounters between people where others merge or emerge. Visitors traverse the unknown, questioning what is in front or behind them within this labyrinthine space.

Optical and physical illusion is a paramount element in British artist Bridget Riley's work. In the 1960s, Riley was a leader of the Op Art movement, which produced optical paintings of disturbing geometric abstractions in black and white. Riley's work continues to explore surface and space distortion. She creates surface illusion using geometric form, line and colour. Her works simulate movement, producing optical undulations of surface and space that materialise and dematerialise.

When Riley first moved into colour, she used a soft pointillist technique, resembling that of Seurat, to capture the energy of light, haze and a shimmer that generated its own movement.

Riley creates unstable colour rhythms through her use of stripes. Her shifting surfaces express movement, and she creates areas that challenge the viewer's visual perception through embedded tremors or vaporising. Her large painted canvas surfaces vibrate, pulsate and oscillate energetically through juxtapositions of colour and the use of line. For instance, she places both wavy and straight lines next to one another so that they seem to move with and through each other across the surface. As Riley explains:

Sight is the activity of looking; the eye feels movement and senses energy, while focus experiences the sense of space. Rhythm and repetition are at the root of movement; repetition acts as an amplifier; which rhythm must live through – it must expand and contract, go faster, go slower; it needs to breathe. The eye looks for rhythm and repetition in its search for pattern to gain perspective of what it sees and feels. ... Paintings generate their own space, their own light, emitting the sensation of atmosphere, of invented space, an illusory space.⁶

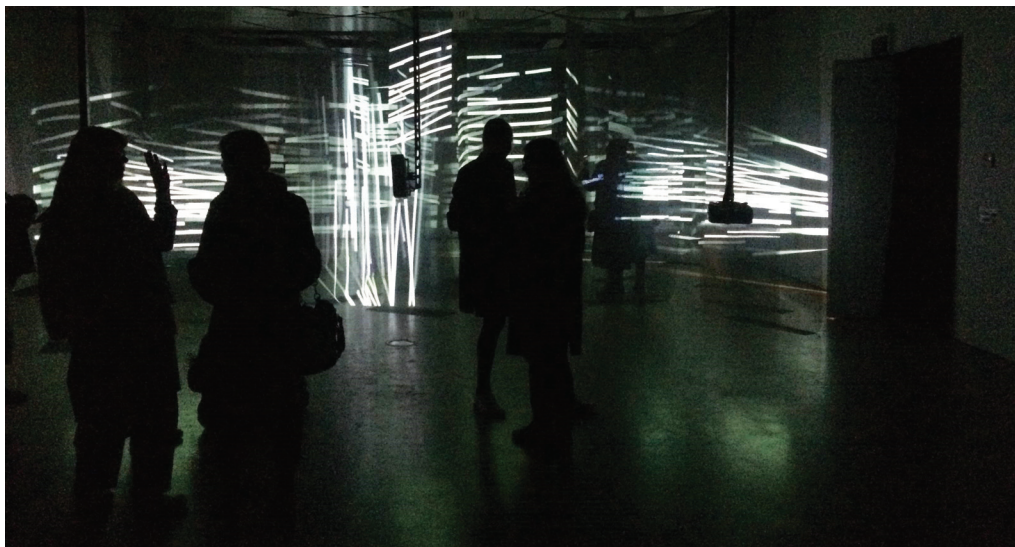


Figure 6. Cyndy McKenzie, *Construing Space*, 2018, immersive installation. Dunedin School of Art Gallery.

The sheer scale of *Construing Space* engages the peripheral vision, creating the sensation of physical presence. This “illusory space”⁷ suggests numerous pathways guiding the visitor through a labyrinth of surface and space and then into the space outside the installation, where they can continue their progress as a more passive viewer.

CONCLUSION

Through *Construing Space*, I have built understandings around the question, “What does looking feel like?” and also explored notions of how can we express volume without mass and presence through absence. The work emerges as an indeterminate, fluctuating space that solidifies, liquefies and de-emphasises boundaries, while simultaneously dislocating both body and space. Experiential art asks people to take time to explore space and surface as a sensory experience. The work highlights the relationships and interactions between art spaces and the viewer by investigating modes of perception.



Figure 7. Cyndy McKenzie, *Construing Space*, 2018, immersive installation. Dunedin School of Art Gallery. Photograph: John Kidson.

Cyndy McKenzie is a fashion academic with a strong focus on textile art and design, the possibilities inherent in materials and critical inquiry. She is a long-term lecturer in the fashion programme at the School of Design in the College of Art, Design and Architecture at Otago Polytechnic. Cyndy completed a Master of Visual Arts in 2018, where her practice evolved and became defined as immersive installation artworks designed to challenge and explore space and the body, experience and perception.

- 1 Claire Bishop, *Installation Art: A Critical History* (London: Tate Publishing, 2011), 6.
- 2 Alyson Shotz, “Fundamental Forces,” Stockholm, August 25 - October 2, 2011, <https://www.gsa.se/artists/alyson-shotz/exhibition-2011-sthlm/>.
- 3 Bridget Riley’s *Circles Run Rings around us at the National Gallery*, 2013, <https://www.youtube.com/watch?v=3oWkuVDyKMg>; The Guardian, 28 June 2013.
- 4 Bridget Riley, <https://www.theartstory.org/artist-riley-bridget.htm>.
- 5 Len Lye, *Zizz! The Life and Art of Len Lye in his own Words*, ed. Roger Horrocks (Wellington: Awa Press, 2015), 132.
- 6 *OP ART: Bridget Riley*, 2016, <https://www.youtube.com/watch?v=vg4GE-7QoV8>.
- 7 Ibid.