Resonate
Resonate

Barbara Bolt
Ryan Jefferies
William Seeley
Ryan van Winkle
Kent Wilson

Edited by Laura Woodward
CONTENTS

INTRODUCTION 1
Laura Woodward

PERTURBATIONS, POSITIONING AND POLITICS IN THE VISUAL FIELD 7
Barb Bolt

THE NOISE WITHIN 19
Ryan Jefferies

ECOLOGICAL OPTICS, ARTWORKS, AND EMBODIED COGNITION 29
William Seeley

SUBLTE MOVES 53
Ryan Van Winkle

RESONANCE IN EXHIBITION MAKING 61
Kent Wilson

CONTRIBUTORS 75
This publication is an experiment in resonance. From the outset, I sought to create a platform to draw together the work of individuals with various expertises across differing fields and from around the world. What connected us, initially, was my own network; each of these contributors are individuals with whom I have worked in various capacities over recent years – or who I have come to know through our similar interests around art, movement, the body, and the audience.

I asked these five contributors - Barb Bolt, Ryan Jefferies, William Seeley, Ryan Van Winkle and Kent Wilson - to respond to an evocation, a single, simple paragraph, in whichever way they felt most appropriate to their own practices. This paragraph was also the basis for those kinetic sculptural and animated works in my solo exhibition “Resonate” which accompanies
this publication, and which, through documentation, becomes the sixth contribution to the publication.

I sought a publication outcome that went beyond the usual catalogue-essay-about-the-artwork-in-the-show. Rather than being the sole focus of the exhibition and the catalogue, the artwork in the show has become, through this publication, but one element in a much larger system that includes the publication and the network that it builds upon. The evocation was thus:

The project focuses upon those subtle, nuanced movements that can be found in organisms, in humans, and in machines, resonating across and between the animate, the inanimate, and the human-made: vibrations, tremors, twitches, pulses, rhythms, and the systems that underlie these movements. Motion, the basis of all life, is present not only in the visible, tangible realm, but right down to the atomic level. It is at the heart of our action and of our inaction, and it is the way in which we understand both time and the world around us. Investigating these movements through the development of new works, this project seeks to draw out the ways in which these various forms – organism, animal, non-animal, human, and machine – both resonate with and differ from each other.

In keeping the conceptual parameters of the contributions relatively loose, and inviting varied approaches to the stimulus, I hoped that unexpected resonances would emerge throughout the project. What has arisen in bringing these contributions together has far exceeded my what I had hoped for in this regard. In compiling the publication and its accompanying images, I was hit by how thoroughly the resonances permeated the project, interlinking across and between the six contributions. Barb Bolt writes about her experiences in creating a series of drawing works drawn from photographic collages, of the perturbations that arose through these particular processes, and the impact that these “folds” of perception have on the experience of the final works of art. This resonates with William Seeley’s descriptions of how art is perceived. It also speaks to Kent Wilson’s discussion of his curatorial (or as he puts it, “exhibition making”) approach to the organisational environment of the curated group exhibition – of the various energies that the curated show draws upon, and the implications of these energies for the viewer’s experience of the exhibition and each of the works within it. Though he does not specifically reference curatorial practice, William Seeley aptly observes: “an agent that can reorganise its environment can change the way the environment directs the behaviours of others.” Seeley discusses these ideas through the behaviour of Braitenberg Vehicles. These robots eschew shadows and seek out pools of light upon the floor – just like the warm orange pool of light cast through stained glass in the final section of Ryan Van Winkle’s poem, where Van Winkle weaves in and
out of various sensory, bodily and embodied moments.

Just as Van Winkle touches upon small tremors, touches and perceptions, Ryan Jefferies writes of the way in which minute components in our inner ears have evolved to avoid hearing, for the most part, the inner workings of the various systems at play in the body. His descriptions of the flow of blood, and the potentially catastrophic impact of a tiny perturbation in a system (such as the thinning of an element in the ear) resonates with those sculptural works that I have created for the exhibition that accompanies this publication. These kinetic sculptural works, visible in the final pages of this book, rely upon water to function. The movement within the sculptures is powered by water moving from one vessel to another. The shift elicited by this moving water then allows for the next action to take place. They are circular systems – and therefore vulnerable to perturbations just as are those bodily systems that Jefferies discusses.

These are but a few of the connections that I discovered resonating through the drawing together of this compilation. These resonances will of course continue to develop well beyond these initial impressions, as different embodied beings (those of you who are this project's readers, its viewers - its audience) bring their own subjective experiences to bear as they engage with the project.

Laura Woodward, _Ongoing/Reverse_ (2016), water, acetal, fasteners, nylon hose, santoprene hose, elastic, plastic bottles, motor, dimensions variable. Part of the exhibition _Resonate_ shown in Airspace Projects, Marrickville, NSW (October 2016) and Stockroom Gallery, Kyneton, Victoria (November 2016).
Two large panoramic drawings face off across the narrow gallery space. Pictured in these drawings appear a colonnade of commuters, backs to us, caught up in their daily acts of commuting. This could be a peak hour scene from anywhere in the contemporary world. Individual figures fiddle with their iPhones or androids, engage briefly in fleeting conversations or stare abstractly into space as time passes. So caught up are they in their own preoccupations, they appear totally indifferent to any other beings or events around them. One lone figure turns towards us in stubborn dissatisfaction. He carries a sign “THIS TALE HAS NO HAPPY EVER AFTER…”

At the level of theme, the images are concerned with our “indifference” for the world around and highlight the social isolation that exists in the company of many. In this, they are reminiscent of Mitra Tabrizian’s
constructed digital photography does.¹ The aim is to somehow bring us into relation with the experience of being part of this throng. How can we do this? Aren’t we looking on rather than being in relation to?

While on first appearance these drawings appear as “realistic” drawings, there is a slight dislocation that creates perturbations—a disturbance to the seemingly unified visual field. I could attribute this to the way the picture works symbolically, materially and compositionally. Despite their origin in photography, the images are unashamedly drawings and their grainy material presence and scale implicates

1 T. J. Demos (2008) ‘Beyond the Limits of Photography’ in Mitra Tabrizian: this is That Place, London: Tate Publishing.
repellent negative spaces—as well as the pathos of the elegy speak to Motherwell’s painting; and yet there is something else that creates the disturbance in the field of vision.

Architect Peter Bickle asks me if I have been looking at the artist, David Hockney. I think immediately of Hockney’s photographic collages, such as My Mother, Bolton Abbey, Yorkshire, Nov. 1982 (1982), The Scrabble game, Jan. 1, 1983 (1983) and The crossword puzzle, Minneapolis, Jan 1983 (1983). Hockney’s photographic collages of mundane every day experiences were constructed from multiple photographs of the “event” taken with a 35 mm Pentax camera. The photographs were commercially processed and then pieced together

us as by-standers in some familiar yet uncanny reality. Reconciliation Elegy draws its name and its composition structure from Robert Motherwell’s Reconciliation Elegy (1978). The title refers to the missed opportunity offered by “The Apology” to the Stolen Generation in Australia, and to the intractable issue of inequality that fails to ever ruffle the surface of our everyday existence as we go about our daily business. The compositional form—the figures appearing as massing black shapes and the alternating rhythms created across the format are amplified by the

2 The drawings are in dialogue with photography without being photographic, creating a very different feel than Robert Longo’s drawings, Men in the Cities (1973/1983).
cross the space they energise; they move within an activity, a pose.\textsuperscript{3}

With their genesis in iPhone snapshots—many photos taken at peak hour around the city circuit, which are then stitched together as an image—\textit{Reconciliation Elegy} and \textit{Flinders Street Station} appear to have a relationship to these earlier photo collages in that multiple viewpoints that are contained within the one image. However, the concern is not with the figures moving within an activity. We are the ones moving and moved. In the drawing each figure has its own

positionality, its own light source and vanishing point. The repetition across the frieze-like format creates a rhythmic dynamic, moving us across the image in fits and starts so that we may encounter and negotiate the different viewpoints that each individual figure offers. The shifting and multiple perspectives produced through these ruptures may remind us of David Hockney’s recent photographic drawings,4 Picasso’s simultaneous perspectives in Analytical Cubism or

Cezanne’s inexplicable still life paintings that hover and quiver under our gaze. Through the depiction of multiple viewpoints, says Hockney, the viewer becomes physically implicated or drawn into and across the picture plane. This, he says, is how we begin to be in the world of the image instead of outside of it looking on.5

With their panoramic format and multiple viewing points, we as viewers, can’t get a “fix” or assume the “proper” distance for a disinterested viewer. As a consequence we are brought up close and personal with the commuters as they wait or are pushed along.
by the throng as each one of us tries to find a space in the crowd in order to position ourselves. Thus, through their operations compositionally, materially and as pictorially, Reconciliation Elegy and Flinders Street Station ask us to consider our own position in relation to the other. It places a responsibility on us as both makers and viewers of images to position ourselves differently and differentially.
From conception to death, the human body is constantly abuzz with energy. An energy that sustains our many trillions of cells\(^2\) and powers our complex systems of tissues and organs. An energy that also generates endless movement within the body – the peristaltic propulsions of the pyloric sphincter, deoxygenated blood blindly navigating its way back to the heart through a maze of veins and valves, or the hair follicles along the nasal septum swaying like trees.

\(^1\) Lyrics from “Bloodflood”, the first single by English indie rock band alt-J released in October 2011 by Loud and Quiet Cassettes.
against the gale-force winds of the breath, to describe just a few. It is not surprising then, given all this activity, that the body is also rather noisy.

A few body movements are readily audible reminders of our internal systems at work. Some are loud, like an occasional burp, a hiccup, a sigh, or a sudden fart, while others are not easily heard. Take a deep breath, and if it is deep enough, you will hear the sound of the air passing through your nose, down your trachea and into your lungs. You take on average twenty thousand of these breaths a day – and yet, how many do you consciously hear? Hold your ear next to someone’s face, or against their chest, and you can hear the gentle vibrations of air passing into the lungs or the rhythmic beating of the muscle fibers of the heart. But what about the movement of cerebral fluid in the brain, the blood pulsing through our veins or the sound of the muscles and ligaments busily abducting and adducting? These are not heard at all.

So just why is it so difficult to hear many of the sounds within your own body? The answer relates to the evolution of our senses – we have simply evolved not to hear every inner body movement, and with good reason. The constant orchestra of internal movements would distract us from the sounds outside the body, and would easily drive us mad.

In a normal functioning ear, the cartilaginous pinna (the outer ear) funnels sound waves into the middle ear and deep within our head. Once in the auditory canal, the sound hits the eardrum ( tympanic membrane) before the vibrations are transferred to the smallest bones within the human body – tiny ossicles called the hammer, anvil and stirrup. These attach to something comparable to a snail-shell within our skull – the cochlea, which is a fluid filled structure that converts the sound vibrations to electrical signals to be processed by the brain. The emphasis of this anatomy is therefore on sensory detection of the outside environment and not of that within.

In rare cases however, individuals can actually hear the sounds emanating from within their own body in excruciating detail. This is a phenomenon called autophony, the hearing of self-generated sound. It is a condition that has many causes. For people suffering from superior canal dehiscence syndrome (SCDS), simple movements of the eyes as they change focus or direction are heard as a grating noise often akin to the sound of sandpaper abrasively scratching away at a piece of wood. Movement of the blood and cerebral spinal fluid within the head can equally be heard – the

---


constant pulsating, whooshing and turbulent sounds. The rotation of bone joints can also be deafening, along with the reverberations of the person’s own voice across the vocal chords of their larynx.

SCDS is caused by the thinning or absence of bone in part of the inner ear, which results in abnormal communication between the middle fossa and superior semicircular canal. The consequence is that the ear canal essentially becomes an amplifier for sounds within the body. Noise-induced dizziness and vertigo are common, with no way for the sufferer to escape or switch off the constant barrage of sound. Surgical correction of the missing bone using bone cement or by grafting soft tissue is the only form of respite.

Other pathologies can also result in acute aural awareness of movement within the head. Increased flow of blood can be caused by a benign tumor known as an acoustic neuroma. The tumor develops in the acoustic nerve sheath in the inner auditory canal, which often results in hearing loss but can also cause an individual to hear their own pulse. This disconcerting awareness of the blood pulsing through the vessels of the head is referred to as pulsatile
Tinnitus. Hearing these repetitive sounds can also be due to changes in blood flow in the arteries and veins in the neck, the base of the skull and ear. Causes can include severe anemia (a deficiency of red blood cells/hemoglobin) or atherosclerosis, whereby a thickening of the artery walls causes them to narrow and transport blood cells with an increased velocity.

While most of us are fortunate enough not to constantly hear our internal movements, there are times when it is imperative that we do eavesdrop on this inner symphony. But to do this we need the help of some rather inventive technologies. One of the best-known examples is the stethoscope, which has early beginnings and was originally derived from something aptly called the ‘ear trumpet’ by René Laënnec (1781–1826) in France in 1816. Stethoscopes have a disc-shaped resonator that allows sounds of the lungs, heart and intestines to be amplified, and easily heard. Abnormalities in heart beat, blood flow or digestive motions are often key indicators of more concerning pathologies. A congestive crackle of lungs could indicate pneumonia, or the arrhythmic murmur of the heart may suggest stenosis of the mitral valves. These sounds are now detected by electronic stethophones and computer-aided auscultation, modern replacements to the traditional stethoscope.

Although hearing our own inner sounds can be both beneficial and annoyingly distracting, the future detection of these noises is increasingly in the form of our multi-talented smartphones. These devices will constantly detect and monitor the sounds of our heartbeat, our every breath, our every meal digested. They will record our every movement and sound, and in doing so, will capture the melodic digital soundtrack to our inner life.

---

5 Medicine in philately: Rene T. H. Laënnec, the father of stethoscope, Anatol J Cardiol. 2016; 16(2): 146-147.


Next page: Phonocardiograms from normal and abnormal heart sounds:  a) normal, b) aortic stenosis, c) mitral regurgitation, d) aortic regurgitation, e) mitral stenosis, f) patent ductus arteriosus.
Pictures are odd, magical artifacts that enable us to see things at a distance, around corners, and across time. We don’t say we see a picture of our grandfather as a young man in his Army Air Corps dress uniform in World War I. We say we see our grandfather. It’s not that we are fooled. We recognize it is a picture. Nonetheless, this sense of alignment between pictures and perception is so strong that psychologists even use pictures as stand-ins for ordinary scenes, object and events in the experiments they design to explore the structure and underlying mechanisms of ordinary vision.

A common belief about the power of pictures is that they produce the illusion of seeing. We really do see our grandfathers in pictures, even if we don’t actually see them in the illusion we perceive. However, the
psychologist J. J. Gibson famously argued that pictures need not be, and in practice are not, illusionistic. We need not, he thought, recreate a three-dimensional image in depth in our mind’s eye in order to recognize what a picture depicts.\footnote{J. J. Gibson. “The Information Available in Pictures,” Leonardo, 4(1), 1971: 27-35.} Rather, pictures present what he called an ‘optic array’. They reproduce a possible pattern of light, an ‘optic topology’, as we might encounter it in our day-to-day interactions with ordinary scenes, objects, and events. We need no more literally perceive the depicted subject of a picture in order to recognize it than we need to recreate the visible world in our mind’s eye in order to perceive it. We need only pick up information carried in the optic topography of a picture – information about the scene, objects, or events that it depicts. The visual system does this automatically for us via dedicated sensory systems that have evolved for the everyday needs of our everyday lives. So this is how pictures work. There is a strong resonance between the information carried in pictures and the everyday activities that their depicted subjects ordinarily afford us. Our understanding of pictures is brokered by their resonance with the information demands of everyday activities.

There are some well rehearsed difficulties for Gibson’s approach to pictures. For instance, caricatures are replete with gross spatial abstractions. Charcoal drawings lack color information. Both types of pictures present only a select set of the spatial contours that are ordinarily available in a perceived scene. These types of pictures, and many others like them, therefore produce optic topologies that differ significantly from their everyday counterparts. Nonetheless, Gibson’s basic intuition is sound and suggestive. Pictures, and artworks more generally, are communicative devices. They are artifacts intentionally designed to trigger a range of affective, perceptual, and cognitive effects that enable consumers to recover their artistically salient formal, aesthetic, expressive, and semantic content. Understanding artworks is a matter of picking up the information carried in their perceptible surfaces, in their perceptible topographies. In the case of visible artworks like paintings, sculptures, installations, performances, and dances, this is a question of how their dynamic optic topographies resonate with the underlying processes of perception. Or put more simply, understanding artworks, and I mean works in the kinds of perceptible media ordinarily associated with art schools and the fine arts, is a matter of how they are tuned to the operations of perceptual systems. The trick is that, as communicative devices, the optic topographies of artworks are intentionally selective. Sometimes, as in the case of charcoal drawings, this is simply an artifact of limitations placed on artistic expression by a medium, genre, or category of art. But more often, as in the case of caricature, it reflects the communicative intentions of the artist – we recognize the communicative intentions of the artist in the selectivity of the optic topography of a drawing, in
what they have chosen to include and how they have chosen to render what they have included. The optic topographies of artworks are not only selective. They are also directed. Our understanding of artworks, then, is brokered by their resonance with the perceptual needs of everyday activities, the artistic practices that define different media, genres, and schools of art, and the communicative intentions of the artist. This is at best schematic. But it’s a start.2

Recent writing in the neuroscience of art reveals a number of ways that artworks resonate with the activities of perceptual systems. Seurat’s use of irradiation and da Vinci’s method of half-shadows resonate with mechanisms of early vision to enhance figure ground segregation and depth perception in realistic pictorial depictions.3 Margaret Livingstone argues that Mona Lisa’s enigmatic expression emerges from the way the painting resonates with the differential acuity of peripheral and foveal vision.4 Livingstone has also suggested that the dynamics of Monet’s depictions of moving water in *The Ice Floes* and *Railroad Bridge at Argenteuil* emerge from a resonance between their optic topography, eye movements, and the basic neurophysiology of motion perception.5 Noël Carroll and I have argued that the oddly disjointed spatio-temporal structure of Hollywood movies appears narratively unified and coherent because, counterintuitively, Hollywood editing techniques resonate with natural patterns of attention that govern everyday activities.6 Jenefer Robinson has argued that the emotionally expressive qualities of instrumental music emerge from embodied patterns of tension and release produced by a resonance between rhythmic and tonal patterns in the composition and autonomic visceromotor processes responsible for the ebb and flow of tension and release in our everyday life.7 The expressive qualities of dance, similarly, emerge from an affective sensorimotor resonance between dancer and audience that is

---

2 The content of a visually perceptible work is not, of course, limited to its optic topography. Many contemporary works cross traditional categories and media boundaries. Dance, performance, and installation works are, by nature, multisensory. In each of these cases a work will define a crossmodally integrated multisensory topography. Dance, for instance, is defined by a crossmodally integrated optic, auditory, affective-sensorimotor, and proprioceptive topography that is mediated by metakinesis, or a sense of kinesthetic empathy with perceived choreographed movements. The narrow focus on optic topographies in drawing, painting, and sculpture is intended to be illustrative of the broader range of variables available to artists productive practices.


mediated by our everyday propensities to mirror the movements and actions of others. This is just a representative sample. The list goes on.

Curiously, this view of the resonance between artworks and the neurophysiology of perception traces its routes to Gibson’s foil, E.H. Gombrich. Gombrich noted that realism in painting is an odd bird. The history of realistic landscape painting is marked by a loosely organized set of different styles and strategies. But this history isn’t associated with a march of progress towards more and more photographic styles of depiction – which is what one would expect if progress in realistic depiction involved better and better methods for copying an optic array. Rather, realism has an air of convention to it. There are of course perceptual constraints on these practices. We must somehow see the subject of a picture. So it can’t be the case that just anything goes. But there is broad variance in the styles that have been accepted as realistic, in the obvious abstractions and distortions consumers have intentionally ignored in realistic depictions of familiar landscapes. John Constable’s Wivenhoe Park, Gombrich’s example, juxtaposes competing perspectival information in a way that produces scale discrepancies in the center foreground of the painting. These discrepancies are glaringly odd when we bother to notice them. Likewise, we regularly ignore the impossible scale of Thomas Cole and Albert Bierstadt’s landscapes – their Berkshire, Catskill, and Sierra Nevada mountains rise to sometimes Himalayan heights.

What explains this odd fact about realism in naturalistic landscape painting? Artists’ productive practices include formal studies, color studies, sketches, and maquettes that are used as tools for culling what Phillipe Schyns calls ‘diagnostic features’ from ordinary perceptual experience and experimenting with how to most efficiently render them. Diagnostic features are minimal sets of perceptible features sufficient to enable viewers to match sensory inputs to category information so that they can perceptually recognize what they see (hear, touch, taste, or smell). The trick is that there is no single, ideal, perceptual strategy for depicting a landscape realistically. Any of a nearly infinite range of combinations of diagnostic features will do! What, then, are the perceptual constraints on the success of this project. The structure of different perceptual systems play a large role. They determine the kinds of perceptible features we see, hear, or etc. But so do the communicative intentions of the artist and the

---


relative responsiveness of the members of the artistic community. The communicative dialog between artists and consumers is constrained by the range of conventions governing artistic practice in a place at a time… or the degree to which the diagnostic features embedded in the perceptible topography of the work suffice to enable consumers to recognize a work as a realistic depiction of a subject, rendered in a style indicative of a particular category of art for a community, with a broader, artistically salient meaning, or representational content. All of this information is carried in the optic topography of a work. Artists formal studies are thereby tools for focusing attention on aspects of the perceptual environment sufficient to convey the full range of the content of a work.

A short detour into perceptual psychology is useful at this stage. Schyns’ ‘diagnostic recognition framework’ for object recognition suggests that Gibson was right – we don’t need to see a landscape into a picture to see that landscape in the picture. We need only see a sufficient set of diagnostic cues or features that enable us to perceptually recover the content of a work. Think, for instance, of caricatures, Julio Gonzalez and Pablo Picasso’s welded steel sculptures, or the suggestive three dimensional shapes of Brancusi’s abstract works. We need only recover enough of the appearance of a scene, object, or event from a representational artwork to recognize its subject. In this way pictures and other visible artworks recapitulate ordinary perception. Ordinary perception in everyday contexts is sparse, driven by perceptual routines that direct attention to just the information we need, just in time to perform the actions that support our current goals and interests.11 This makes sense. Encoding and maintaining a replete visual representation of all of the perceptible details in the visual field would be cognitively, and metabolically, costly. This observation about the strategic quality of perception is reflected in the physiological fact that visual acuity falls off quickly outside a small area in the center of the visual field, approximately the size of your thumbnail seen at arm’s length, called the fovea. You can test this right now. Fixate on a letter on the page in front of you and, without moving your eyes, try to read a letter 3 lines up, five lines up, now seven lines up. Perception therefore requires attention. Once we recognize this fact, we recognize that perception need never be replete. We need only a capacity to orient to the information we need as we need it on the fly.

Mary Hayhoe and her colleagues have shown that eye gaze precedes hand movements in lockstep with the online demands of everyday tasks, e.g. making sandwiches and tea, with little to no intermediate

scanning of the environment. Likewise cricket batsmen pick up the ball coming out of the bowler's hand and immediately shift their gaze to the projected bounce point. How do we accomplish these feats? Quick categorization, on a time scale of a hundred or so milliseconds, suffices to harness our knowledge of the structure, function, and behaviors of object types in order to direct attention to diagnostic features sufficient to accomplish our current task. This is true whether that task is recognizing the identity of an object, tracking change or movement in the environment, or reaching out to fill a tea kettle.\textsuperscript{12} Interestingly, harnessing category knowledge in this way enhances the firing rates of neurons that encode task salient information and suppresses the firing rates of neurons that encode task irrelevant features in the environment.\textsuperscript{13} Placing an object, scene, or event in a category tunes perception to our current behavior, or enhances the resonance between perception, behavior, and the environment. Perception is, therefore, as mentioned above, both selective and directed, guided by attentional routines that resonate with the requirements of our everyday activities.

We are now in a position to reconfigure Gibson. Pictures don't present optic topographies per se. Rather, they guide patterns of attention. Pictures and other artworks are not perceptually unique in this regard. They are ‘attentional engines’, artifacts intentionally designed to draw attention to their artistically salient perceptual features. For instance, the rough, unfinished surface features of Degas’s Impressionist sculptures are a diagnostic cue to focus attention on the gesture of the figure rather than the verisimilitude of the work. The hard edged precision of the hand-painted corporate logos on Ashley Bickerton’s constructions are a nod to Pop Art and Assemblage, a diagnostic cue to categorize the work as Postmodernist and indicate that we should read it as a cultural critique of 1980s consumer culture. The elements of still-life compositions embedded in Judy Pfaff’s installations are a cue to focus on their painterly qualities and evidence that they should be read in part as a post-modernist critique of the medium specificity of different categories of art.

Perception can be piecemeal because the environment already contains all of the information we need to accomplish our tasks. We don’t need to construct and maintain complex representations of a dynamic environment in our mind’s eye, regularly updating them in real time. The information we need is there


in front of us. “The world”, to borrow a phrase from Rodney Brooks, “is its own best representation.”

What we need is a set of procedures for orienting attention to information sufficient for our current goals and interests, for enhancing the resonance between our behaviors and the environment they are embedded within. This is the case whether that environment is a workshop, supermarket, wild natural woodland, painting, sculpture, or performance. Viewers need not, therefore, reconstruct the full perceptual geometry of pictures to recognize their subjects and understand what they represent or mean.

Let’s consider a simple, light seeking Braitenberg Vehicle as an illustration. The Braitenberg vehicle I am thinking of is constructed of two motors/wheels, one on either side of a rectangular body, and two light sensors at the front end of the robot, set to the outside of the motors/wheels, pointed towards the floor. This vehicle lives in a grey-carpeted environment populated by lamps that cast sharply bounded pools of light and deep shadows. The light sensors are inversely coupled to the motors so that the brighter the light they record the slower the wheel on their side will turn. There is nothing more to their simple cognitive architecture than the direct, inverse connections between their light sensors.

---

sensors and their motors (although we might add a sonar sensor to help the vehicle turn away from walls and a sound sensor to detect abrupt loud noises).

This vehicle is situated in its environment in the sense that its actions are transparently directed by the sensory signals it encounters – in this case the relative brightness of light reflected from the carpeted floor. The environment is its control system – it stands in for a central executive. The vehicle will naturally orient away from shadows and orient towards pools of light. It’s easy to see how. At a shadow boundary the wheel on the bright side will turn more slowly than the wheel on the shadow side, orienting the vehicle away from the shadow. Likewise, at the boundary of a pool of light the wheel on the light side will turn more slowly, causing the vehicle to orient towards, and fall into the pool of light. We might even say, in a flight of fancy, that the behavior of the vehicle encodes a set of preferences and values. It abhors shadows and values bright patches of light.

The vehicle is also embodied. Its behavior depends on the orientation of its light sensors towards the floor, their distance from one another, and their placement relative to the wheels. For instance, when the separation between the light sensors is increased the difference between the two motor speeds at shadow/light boundaries is enhanced. The vehicles will more efficiently orient towards pools of light and away from shadows. The optimal spread of the light sensors is determined by the relative size of the pools of light cast by the lamps, the distance between the light sensors and the motors, the distance between the two motors themselves, and the scaling of motor speeds relative to the brightness of the light in the environment. Embodiment, therefore, mediates the resonance between the behaviors of an organism and the structure of its environment – or, perhaps better, the behavior of a Braitenberg vehicle emerges from the relationship between its morphology, the structure of its body, and the structure of the sensory environment. We are embodied too. The distance between our eyes, for instance, creates the binocular disparity we use in depth perception.

Situated and embodied minds are also extended. Recall that the world is its own best representation and that the world acts as a controller, or the central executive, governing the behaviors of the Braitenberg vehicle. As the Braitenberg vehicle moves it changes its environment by changing the signal properties its sensors are sampling. This, in turn, changes its behavior, which again alters the sensory signals available to its sensors. For instance, as the vehicle falls into a pool of light it naturally orients to the light source. The intensity of light striking each sensor will eventually balance, driving the vehicle towards the bright center of the light pool, slowing it down as it passes through it. In more complex cases, embodied and situated agents that can reorganize their
environment can change the way the environment controls their behaviors. Similarly, an agent that can reorganize its environment can change the way the environment directs the behaviors of others. For instance, ants leave a chemical trace as they explore the environment. If they find food they follow that trace back to the nest. The doubled strength of this signal can now direct others to the food source, further strengthening the signal.

We are situated, embodied, and extended systems too. We structure and organize our environments around the behaviors they support. Think of the shapes of doors, staircases, workshops, tools, kitchens, bathrooms, baseball stadiums, libraries, college campuses and other organized public spaces. We scaffold our shared behaviors by organizing our environments around what we need to accomplish them. Artworks are fit to this mold. They scaffold the shared artistic practices from which they emerge. Take for instance a painting or a dynamic sculptural construction. Paintings are flat patterns of pigment in some sort of suspension. There is no landscape on a canvas. Likewise, the apparent dynamics of a sculpture need not track its actual potential energy. A carefully secured cantilever can cause dense, static material to float in equipoise. A bent piece of metal strap, carefully balanced to not collapse on itself, can enliven a dynamic construction with the energy of a coiled spring. Why does this work? In part because artworks resonate with the basic operations of perception. The cantilever and the bent metal strap are configured to carry cues diagnostic for an asymmetrical balance and a spring respectively. Likewise, a realistic landscape painting or portrait carries diagnostic cues to the subject it pictures. Artworks emerge in the perceptual resonance that defines dynamic interactions between consumers and the artifacts artists construct.

There is one final step to this story, a question about the location of art. Artworks aren't about what we perceive in them per se, but rather about what is shown in having rendered what we perceive in a particular way. Pictures, for instance, show us more than what they depict. Recall the abstractions of caricature. The spatial distortions in the optic topographies of these works carry information. The optic topographies of caricatures are selective, directed, and inflected. Caricature is a limit case. It illustrates the fact that choices about how to render diagnostic features embedded in a work carry critical information about the communicative intentions of the artist. This is just as true of representational works like Constable’s Wivenhoe Park or Picasso’s Guernica as it is of abstract works like Calder’s mobiles or Ad Reinhardt’s black paintings. The worry is that the perceptual resonance between a work and a consumer reveals only what is seen in it, not what is shown in seeing it that way. The worry is that thinking of art in this way misses what is artistic about artworks, and thereby amounts
to looking for art in the wrong place. Of course, this is less of a worry in cases where the perceived dynamics of a work are among its artistically salient features. Still, it’s a worry.

The resolution to this difficulty lies in the role categories of art play in our interactions with artworks. Artists’ productive and communicative practices emerge from within, and exert a constructive force on, the normative conventions governing our engagement with artworks. These variables, in turn, define categories of art. Categories of art, therefore, function as recipes for how to attend to a work, what to look for and how to evaluate if what we find has been done well or poorly. The concepts that encode this knowledge of categories of art scaffold our engagement with artworks. These concepts, like any of the concepts and categories that direct ordinary perception, serve as filters to direct attention, enhance the encoding of artistically salient features, and suppress the perception of irrelevant local features. This entails that categories and concepts are part of the machinery we use to direct attention, modify the perceptual environment, and direct the behaviors of others. For instance, if Picasso’s Guernica belonged to a category of monochromatically painted bas reliefs we might find it

Bill Seeley, *Untitled (Industrial Tool #3)* (1991), steel, fabricated rake, 42” x 100” x 14”
strikingly odd. The key formal features of the work, the low relief that defined its dynamic spatial structure would be missing. The categorically expected resonance between the work and the consumer would thereby be thwarted. Of course, we might find this distracting, disturbing, highly expressive, or all three. Artists regularly modulate the resonance between consumers and a work by mixing, matching, integrating, and otherwise manipulating categorial expectations. This is how artists shape the attentional routines that drive our engagement with works. So where do we locate art? We locate it in a perceptually mediated resonance between a work and the range of shared cultural practices constitutive of categories of art. Artworks are, then, defined by inflected optic topographies that are shaped by the potential perceptual resonance between different media, perceptual systems, and a consumer’s understanding of artistic practice.

18 Think of how Ad Reinhardt’s all black paintings snap into focus once we learn that they are intended as completely abstract constructions, five feet wide and five feet high, as far, on average, as a person can reach, trisected vertically and horizontally so they have no compositional structure, vertical columns negated by horizontal rows, horizontal rows negated by vertical columns, matte, flat, hand painted brushwork painted out by hand.
Subtle Moves

Ryan van Winkle

Plant

there are shy plants
which demure
when we touch

their fronds. I think he looks
like he is hugging your finger
and you think she looks
like she is protecting

her soft stem,
her tender core.

San Francisco

she is moving plates
when one slips out
of her hand, a second
is enough time

to see it coming
to understand

that a whole thing
is about to break

**Dolphins**

it matters that I can’t hear you
when you hum, can hear you
only when you scream

**Seconds**

What time is to me now – what time
was was to me then – in geometry class
I watched the long arm huff past
every second – 1 – 2 – 3 – 4 – my hair
getting longer. And 25 years later
still growing – each second new and renewed
yet our bodies – growing – my uncle said
I would one day touch the moon. And I believed.
Because time – to me – meant progress
so it would take years
but one day I would
put a finger there.

**Pen**

To write you a letter I must start
one million things.
I must damp grounds with hot water.
I must spark match
for a fire. I must boil a kettle. Ensure
there is ice.
I’ll need a neat drink
and then one straight up
before I place one word down. I must be careful
to make the bed,
to get my house in order. I must shower and
comb my hair.
I must pluck an eyebrow, the cruel follicles slithering from my nose.
I must survive the day. And it must be a good day.
A day with no crying
on a bench. A day with a thousand distractions,
victories and losses. And if there is more
win than loss
and if I feel good about my bald spot,
if nobody spits
at my feet. Then maybe I will
squeeze the spring,
set black onto white.

Of course the mountains don't move. The rivers won't dry. Of course your blood will keep moving, even
when you think you're laying down, going slow, fading into the grass like any another rock.

Computer

There is a humming deep inside your box
and I cannot decipher
if this is good or bad
often, there is a new click
an almost human groan
as you push yourself
off the sofa, as you
sit down once again.
Grandpa, there is so much
moving it is hard to tell,
they say, where it goes wrong
when the zeros and ones
misfire, when the good cells

Rotation of the earth

it is September and the air smells, again,
like the first day of school, and naturally,

I want to plant my feet somewhere
and stay still. I want to grind my heels in
to the grass and not be dragged any longer.

Near me, a cricket is moving small grains
around the hillside and the stream is smoothing
all the rocks on its way down to meet the sea.
The earth is slowly turning in two ways.

And of course you want to think
you're standing still.
turn bad right in the mirror
glowing in the monitor

you type without asking
how the letters arrive

you say, time for a new box
too late for the box you have.

_Crickets_

The nights when they are loud
are the nights I remember best.
How often I might turn to someone
and say, boy, there must be thousands
of strings out in the darkness

which we cannot see
can only hear when they rise
up and make enough noise.

The grubs are chewing the earth
and the ants are marching to heavy feet.
Up here we think we know quiet,
think we know still from sparkles.

_Light_

When sunlight stretches
through stained glass
it drops a warm orange
pool on the cement
floor. Something permanent
a sign, perhaps, of something
above and covering us
like a blanket, peace.
I had often wondered how competing philosophies could seem to be true, or even just more true, at particular points in time. One day we all comfortably accept one proposition as truth, or as close to it as we can be for now, and then later we realise that was way off the mark and our brand new proposition is way better. Which goes along fine until the next one comes along and makes the preceding proposition seem even further off the mark than the one previous to that. Like personality traits that skip a generation. Not for an individual, but for a culture.

Then I realised you could hold any of the propositions in your head at any given time and simply surrender to their premises for a moment of contemplation. To conjure the circumstance and context from whence they were born and live in the moment of their truth. Just momentarily. In the cold light of day those propositions sink back into the cultural archive of
historical developments that have since been improved on. Or revisited. And we go about our business buying the groceries, doing the dishes, playing ball with our children, drinking spirits and carving human faces out of solid stone.

In my work as an exhibition maker I like to hold a particular ontological proposition in mind while I contemplate the way in which artworks will share a space for the purposes of a public presentation. It goes like this: what if objects only come into existence as a consequence of the relationships between them? This would then mean that the invisible connection between things is the true reality and the things we can see and touch, those things are the result of the force or energy between things. In which case, the pencil on my desk and the door to this room only come into being because of the relationship between them. And things that regularly exist together or seem to sit well together, must have particularly strong sets of relations between them.

With this in mind, I put my thoughts to how best to position a sliced bluestone boulder in relation to an oil painting of an imagined landscape. For me, this is one of the greatest pleasures of exhibition making. And the extent to which a curator attends to this aspect will reveal the character of their particular curatorial method. In exhibitions like *The Agency of Things* (Anna Pappas Gallery, Prahran, Melbourne, 2016) my focus on the relationships between the artworks drove decision-making about placement in space. One painting facing off against another painting across the room. A sculpture placed just slightly off-centre in the room so that a sight-line can be created with the gallery entrance outside of that room. A plinth angled at 60 degrees to close a triangulation of sculptures that runs across three gallery spaces.

All the while, looking for frisson. All the while, waiting for vibration. Working like a web-weaver, running connection lines and hoping to find the strongest threads. Placing two artworks together in an empty room is one thing. They can dance like boxers around the ring, they can size each other up like courting lovers in a field. And in various configurations they will find choreographies of connection. Like a highlights package of memorable moments. But add a third and a fourth artwork into the space and the whole arrangement becomes renegotiable. And this is the joy. For this is where we find resonance. This is where we find a truth – that objects are the manifestation of the relationships that exist between them.

In order to better articulate this concept I will take *The Agency of Things* (2016) as an example and discuss some of the decision-making that went into navigating the resonance between the artworks. Nine artists contributed their artwork to the exhibition and Anna Pappas contributed her gallery space and staff. The
artists were Sam Leach, Mark Whalen, Sarah Contos, Chris Dolman, Michaela Gleave, Zoe Kirkwood, Justin Hinder, Melanie Upton and Betra Fraval.¹

In most exhibition situations there are particular works that will require particular locations. Lighting conditions, access to power, the safe passage of an audience through space, sound bleeding and other factors will dictate that some pieces of art can, and must, only go right there, next to that column, 50cm from the wall. Or that a flatscreen can only be attached to a bracket on this section of the wall, on this side of the room. These artworks act as anchor-points that set certain conditions about the eventual ensemble of all works. They also establish a critical first engagement between the exhibition and the architecture within which it is housed. This relationship between exhibition and gallery is a principal concern and

¹ One of the first decisions of the show was to establish a relationship between gender – a balance. Even this was an outcome of attending to the frisson between objects. In this case, the equal representation of male and female (myself as the tenth participant with the nine artists) provided a certain stability of context for the exhibition, separate from the artworks and connected to gender politics in the contemporary art industry and broader economy. The frequency running between the two ideas of male and female was tuned to a particular balance of tone to allow the artworks to stand without a particular interference that comes with poorly attended gender representation. So, to the artworks we can now more fully attend, able to open our receptors to the frequencies running between them and coordinating their engagements in a particular space, or set of spaces.

influencing factor on the complete experience of the show. So these first few anchored artworks are key to the nature of that relationship and the consequent resonance it achieves.

For The Agency of Things Melanie Upton made artworks that contained materials derived from interactions with the architecture of the gallery. As a result, her two pieces were positioned first as they had particular locations they needed to be placed in order to play off their explicit connection to the building. One work was in an outdoor forecourt, which provided a relationship to the outside world and allowed for the exhibition to conceptually leap from the confines of the contemplative white cube space into the reality of the urban air, the sky and the weather outside. Another work by Upton acted like a fulcrum in the centre of the downstairs gallery, appearing to assist in holding the ceiling up. Both works were weighted by their materiality – they referenced stone and rock and steel and aluminium.

Sam Leach brought in a large basalt boulder that had been sliced horizontally and the incisions painted in gradated blues. It sat on its own artist-designed plinth, a robust pyramid of hardwood with a felt top surface upon which the boulder sat. Betra Fraval brought in a stone suspended from thread above a curved veneer of blonde wood. Upton’s fulcrum, Leach’s sliced boulder and Fraval’s floating stone were related by materials and ideas of force, weight and gravity. Sitting together
on the same floor of the gallery they immediately generated a field of energy. By leveraging off the locked position of Upton’s central fulcrum, I aligned Leach’s work on one side and Fraval’s work on the exact opposite side so that all three works formed a straight line across the gallery. With fulcrum, in the centre and two opposing ends you create a form of magnetic compass needle. The visual sight line created across the
gallery played on the energy of each work and freed their force to vibrate at its optimal level.

Establishing a mini-network of relations in this way sets up the first molecular structure from which more complex organisms of relation can be articulated. Exhibitions can sometimes be made up of several choreographed groups, with a cohesive umbrella network presiding over a subset of networks bound together into a cohesive whole. It is also worth noting, from a curatorial practice perspective, that the characteristics of the artworks and the architecture are the primary influences over these decisions. The curator is subservient to the flavours and needs of the artwork with this approach, and thus avoids proscribing authorship (and auteurship) over the work.

In the upstairs gallery space Zoe Kirkwood’s ropes, pulleys, mirrors and shadow forms bound themselves to the wall and ceiling at the position in the room at which there was the best long-range view to that location. Sarah Contos’ framed wall sculpture/printing combines, containing a chain draped across the surface, was an ideal adjacent partner for Kirkwood’s threaded ropery. A simple echo of form and force that
produced a frisson not unlike a harmonic register of two partnered frequencies.

At this point in the essay it would be reasonable to pull back for a moment and ask, ‘how is it possible to talk of tangible relationships between objects in this way?’ Measuring or demonstrating so-called frequencies, or magnetism, or even ‘frisson’ would be beyond any device or instrument’s capabilities. Well, I say the instrument is the curator. The central nervous system of the bodily mammalian-being for whom these decisions are entrusted. It is no accident I use terms like organism, molecule and courting lovers when I describe exhibition design. I am looking to find the very signs of life we find within our own bodies, that intangible feeling of existence and energy that is somehow both inside our blood and cells and bones and guts, but is also separate from these materially obvious things, existing as it does in between and through the elements that make us up. It is the human body that can identify the fingerprint of this life force through a recognition of resonance. The rhythmic, throbbing, synapse-firing, stomach swirling, breathy contortions of our bodies pick up those very patterns that exist in other things. And we do this through a process of reflection and recognition.

In *The Agency of Things* Mark Whalen sent two artworks from LA that ultimately provided parentheses for the exhibition and generated a cut-through force that bound the upper and lower gallery spaces together into a singular spatial conceit. One painting was faced to the front door so that it was the very first artwork you saw when you entered the exhibition. Wanting to again work with Whalen’s artwork was the catalyst for this particular theme to coalesce and so it was a nice connection (or relation) back to the very beginning of the project. Here is an example of replicating a pattern in order to amplify a characteristic. In this case, the position of this artwork at the entrance echoed the beginning of the exhibition’s conception.

At the very furthest point from this painting - upstairs and on the other side of the building – a relief painting by Whalen was positioned. In this way, a strong connective relationship of the two works drew an invisible line from the front door street entrance to the uppermost reaches of the gallery on the level above. The invisible force was first evident by the time the viewer had come to the last visible artwork, completing the full view of the exhibition’s total suite of artworks. The effect of tying all the works together in this way was again reiterated and reinforced as the viewer passed the first Whalen painting as they stepped back out of the space and onto the street.

There were many more decisions taken in this fashion that provided a working method for designing the composition of the exhibition. Justin Hinder’s series of paintings of domestic interiors sang in a particular
harmony when placed on the periphery of the white cube architecture of the major spaces and next to the antique hardwood staircase that led audiences upstairs. In that upper gallery space Sam Leach’s other artwork was a meteor launching pad and was most actively agitating when placed as the close to a visible window, its aching desire to escape charging it with a pregnant urgency. Chris Dolman’s fallen plinth-man moaned his most grotesque vulnerability when his body pointed toward the painting of Mark Whalen’s struggling and entangled subject, and perpendicular to the gravitational play and teetering balance of Zoe Kirkwood’s installation.

It must be reiterated, in a closing reflection, that the artworks themselves lead exhibition making. They are the first complex organisms of connective relationships. It is from their energy that the fuel exists at all to build exhibitions of their collation and presentation – in a given space, at a given time. Armed with these resources a curator is charged with the responsibility to assist in the artworks’ most resonant functioning – to ensure its most vibratory intensity, in the frequency within which it most optimally registers.

Contributors

Barb Bolt

practices: painting and the logic of sensation’ (1997) have emerged from this dialogue. In 2008/9 she was part of a BBC World Service/Slade School of Art project A View from Here, which led to the production of the DVD production Neon Blue. She was a board member on the executive of the Society for Artistic Research (SAR), which produces the Journal of Artistic Research (JAR) from 2011 - 2013, is an inaugural board member of the Studio Research Journal and is a member of the International Reference Group GEXcel International Collegium for Transdisciplinary Gender Studies.

www.barbbolt.com

Ryan Jefferies

Dr. Ryan Jefferies is curator of the Harry Brookes Allen Museum of Anatomy and Pathology at the University of Melbourne.

William Seeley

As a Philosophy lecturer and sculptor, Bill Seeley works at the intersection of Cognitive Science, Philosophy of Art, and Philosophy of Mind. He is interested in a range of topics that bind these fields together, including debates about the explanatory scope of embodied cognition, questions about high-level perceptual content and affective perception, questions about crossmodal and multisensory perception, questions about the nature of intentionality, questions about the role played by simulation theory in explanations of interpretation and empathy in narrative fiction, picture perception and ordinary contexts, and questions about what accounts for the artistic value we ascribe to artworks.

Bill is interested in understanding how knowledge, motor skill, emotions, and affective states more generally influence the content of perception and perceptual experience. He has chosen to employ artworks as the vehicle for this exploration. Artworks can be treated as attentional engines, as abstract stimuli designed to harness the influence of a broad range of ordinary affective, perceptual, and cognitive processes in order to convey their content. This means that one can employ artworks as tools to illustrate and explore the range of psychological and neurophysiological processes that underwrite our ordinary affective, perceptual, and cognitive engagement with others and the environment we inhabit. This strategy has been most explicitly developed by neuroscientists using expert dancers and novice viewers to study motor expertise effects in perception. We also find it in discussions of attention and event perception in neuroscience of film, as well
as in discussions of painting, expressive music, and narrative understanding in literature.

**Ryan Van Winkle**


His second collection is due out in 2015 from Penned in the Margins. He was awarded a Robert Louis Stevenson fellowship in 2012 and was listed as one of Canongate’s ‘Future Forty’ in 2013. His poetry / theatre experiment ‘Red, Like Our Room Used to Feel’ was one of the top ten best-rated shows at the Edinburgh Fringe Festival in 2012. He is the host and co-producer of the arts podcast “The Multi-Coloured Culture Laser” and the poetry podcast for the Scottish Poetry Library. He also hosts Book Talk for the Scottish Book Trust. He has interviewed hundreds of poets, authors, and artists.

In 2014 Van Winkle toured Scotland as part of the Auld Enemies poetry project, was part of the Poetry International Festival in London and the Made in Scotland programme at the Edinburgh Fringe Festival with the “magical, lo-fi” (Guardian) ViewMaster show with collaborator Dan Gorman, created a poetry map of Northampton with Jonathan Prior & Katherine Leyton, released the ViewMaster chapbook and album with Stewed Rhubarb & Invisible Agent and brought ‘Red, Like Our Room Used to Feel’ to the Woodford Folk Festival in Australia. He also organised a series of translation workshops in Iraq as part of the Niniti Literature Festival in Erbil and in Lahore, Pakistan with Highlight Arts and the British Council. Previously, Van Winkle has been Poet in Residence at Edinburgh City Libraries following a successful run as the Scottish Poetry Library’s first-ever Reader in Residence.

Van Winkle has been invited to read internationally including at The Wordstorm Festival in Darwin, The Edinburgh International Book Festival, The London Literature Festival and Shakespeare & Co. in Paris and the Poesie Festival in Berlin. As Literature Coordinator for Highlight Arts he has performed and hosted events at the Erbil Literature Festival in Iraq, and brought Syrian and Iraqi poets together with their UK contemporaries for translation workshops and performances throughout the UK and abroad.

His critically praised first collection, Tomorrow, We Will Live Here, was published by Salt in 2010 and won the Crashaw Prize. His poems have appeared in The American Poetry Review, AGNI, Poetry New Zealand, Gutter, Poetry Scotland, New Writing Scotland, Scotland on Sunday, Northwords Now, and
a feature in Carcanet’s 2010 Oxford Anthology of New Poets. Eyewearmagazine wrote ‘Van Winkle’s poems are not static portraits of men and women framed in windows or doorways, but poems with characters that move within their environments and which, with their histories, move the reader.’

www.ryanvanwinkle.com

Kent Wilson

Kent Wilson is an artist, curator and writer working in Melbourne, Australia. His artwork traverses a variety of media from painting to sculpture, installation to drawing, sound to animation. Kent also collaborates with his wife Lucy James to produce exhibitions under the moniker Bonus Card. He is the Assistant Curator at Town Hall Gallery, a public gallery in the City of Boroondara, where he also manages the Community Project Wall space. He is a writer published in Artist Profile magazine, Das Platforms and artinfo.com.au; maintains an arts blog with reviews, articles and interviews called the subMachine; and writes exhibition essays for group shows and artists.

www.kentwilson.net/

Laura Woodward

Laura Woodward is an artist based in Melbourne. Woodward has been exhibiting sculptural, kinetic installations for over ten years. Her current artistic research involves the creation of looped systems embodied in these sculptural installations. The system’s inherent logic drives its formal and systematic emergences, opening up the opportunity for bodily resonances and experiences forged between artwork and viewer.

Woodward’s work has been nationally recognised through prizes, grants, public commissions, solo exhibitions and significant group exhibitions. She received Australia Council New Work Grants in 2010, 2013 and 2014; won the Agendo Prize for Emerging Artists in 2009; and was awarded the Vulcan Steel Postgraduate Tutorship Award and a Freedman Foundation Travelling Scholarship Award in 2007. In 2015 Woodward received a ‘Highly Commended’ award for the Art Gallery of NSW Studios in Paris Scholarship. Solo exhibitions include Ararat Regional Gallery, 2015; Margaret Lawrence Gallery, Southbank, 2013; and Linden Centre for Contemporary Arts, St Kilda, 2010. Woodward’s practice increasingly involves the creation of large-scale sculptural works
for the public realm, including the major upcoming commission *Murmur* for Marina Tower, Docklands.


Woodward is a lecturer in the School of Art at the Victorian College of the Arts.

www.laurawoodward.com.au