

CHAPTER TWENTY

DISSOLVING THE VEIL OF SEPARATION: ART BEYOND A HUMAN VIEWPOINT

KASSANDRA BOSSELL

All things in this creation exist within you and all things in you exist in creation; there is no border between you and the closest things, and all things, from the lowest to the loftiest, from the smallest to the greatest, are within you as equal things. In one atom are found all the elements of the earth; in one motion of the mind are found the motions of all the laws of existence; in one drop of water are found the secrets of all the endless oceans; in one aspect of you are found all the aspects of existence.

Kahlil Gibran, *Iram, City of Lofty Pillars*, 1921

Introduction

In this chapter I describe a collaboration between ecologist, Garry Daly and myself. We worked together to create an exhibition that consisted of a single large art installation. In this exhibition (*Visible / Invisible*) we sought to bring together human and non-human perspectives of ecosystems. The exhibition presented organisms that are ordinarily invisible to the naked eye at a human, ‘huggable’ scale and imagined what their perspectives might be. I cannot claim to access the phenomenological viewpoint of another organism, including humans, but I can use empathy to imagine, to feel, to try to understand what it is like to be them. As co-evolving organisms with humans, they have developed capabilities on which we depend, for example phytoplankton creating oxygen. Through the empathy that I felt for these organisms, I sought to also impart a similar empathy amongst my audience for these organisms and their importance in the ecosystem.

The conversations between myself and Garry explored the complex networks of interdependence and coevolution on earth, the consideration of which has been eclipsed by the economic needs and wants of humans. We both questioned the cognitive dissonance involved with a human

dependency on coevolving life forms in light of society's ongoing conscious endangerment of them. We discussed the responsibilities of human custodianship with regard to conscious collaborative methodologies and the ethics of care. Project discussions would reach this point and return again to what we could personally do within our skill base and lifetime, to aid the remembrance of our interconnectedness with all life forms. As an ecologist, Garry has direct access to do field studies and manage programs around his findings. As an artist, I can collaborate with specialists such as Garry to ground my thinking, methodologies and artworks about our co-existence, our care and responsibility for non-humans.

In a bid to make visible human connections with non-human life forms from each ecosystem which are invisible to the human eye, we used viewpoint to highlight agency and co-agency.

Project background and interaction with the science

In early 2016, I was invited to participate in *Ku-ring-Gai PH: Art + Science = Project*, a twelve-month collaboration project aimed at producing transdisciplinary work about the biome of Ku-ring-gai Chase National Park, just north of Sydney, New South Wales, Australia. Ten artists and ten scientists were selected to form pairs and work towards an exhibition at Manly Art Gallery and Museum in Sydney¹. I teamed up with the highly experienced and charismatic zoologist and ecologist Garry Daly. While on site in the Ku-ring-gai Chase National Park we trapped and recorded animals and studied the vegetation and geological history. Garry spoke widely to me on the connections between life forms and we discussed local ecological connectivity. We concurred that human practices display an anthropocentric perspective that generates a problematic relationship with the natural world, and that it can be restored with a practice of care. Ecofeminist philosopher, Donna Haraway writes about an ethics of care in which all species may be seen as kin or 'oddkin'. She calls for the flattening of interspecies hierarchies along with a recognition of interdependence and co-agency to achieve a

¹ The consequent exhibition of collaborative artworks resulted from twelve months of investigating, experimenting and interrogating ideas and science inspired by Ku-ring-gai Chase National Park; from The Lab residency at Currawong (February 2016), the Site Findings public event at Eramboo Artist Environment, Terrey Hills (April 2016) and numerous site visits to the National Park.

new ethics of care for the non-human as well as the human world (Haraway, 2016).

It was with a focus on the interdependence of living organisms across micro and macro systems that Garry and I began our collaborative research project. Our field studies included observations on goannas with termites, sea grasses with fish, micro bats with river fish, fungi and algae in lichens, antechinus with spiders, frogs with insects, mistletoe with the mistletoe bird, and sand crabs with mangroves. Within our collaborative project, we agreed on divided roles in that Garry would be ecological consultant and be available for conceptual discourse and I would create the artwork. Having witnessed threatened species, altered landscapes and other changes wrought by humans, we decided to use a bricolage technique to contrast human and non-human perspectives of the land.

We decided to use maps to expose the limitations of rational scientific analysis in consideration of the context of complex systems. We selected four classic types of analytical map, all depicting Ku-ring-gai National Park from a human use perspective. The first one showed vegetation types, the second showed topography, the third was a satellite map and the fourth showed changing ocean levels over time. Although each map was fascinating in its own right, and in relation to the other maps, the overly simple analysis of each view disclosed a classic flaw in scientific method: the isolation of the study from its context. In my opinion, life on earth is much more complex than a simple sum of interactions. Complex systems have emergent properties which come from the interactions of the parts of the larger system.

Seeking to display the privilege of human perspective, I nominated one organism invisible to the human eye pertinent to each map analysis to enlarge in three dimensions over the maps. I chose to represent microscopic organisms at a scale commensurate with the human body, to offer them as equals in importance to humans, and to provide imaginative insights into their agency and world. Figures 1 to 4 provide close-up views of different parts of the installation, each focussed around a different map, while Figure 5 provides an overview of the entire installation.

Creating the art

As any discussion of the environment from within western capitalism is troubled by the perpetuated usage of carbon and oil, I decided to frame some aspects of the installation in terms of this paradox by using a volatile visual language of wood, wax and carbon (Figure 1). I overlaid the vegetation map with a local mutualistic plant combination: the lily flower and angophora gum. By depicting the cross section of a lily stem, the viewer is able to imagine the point of view of the lily looking upwards through its own stem into the sheltering canopy of *Angophora* trees.

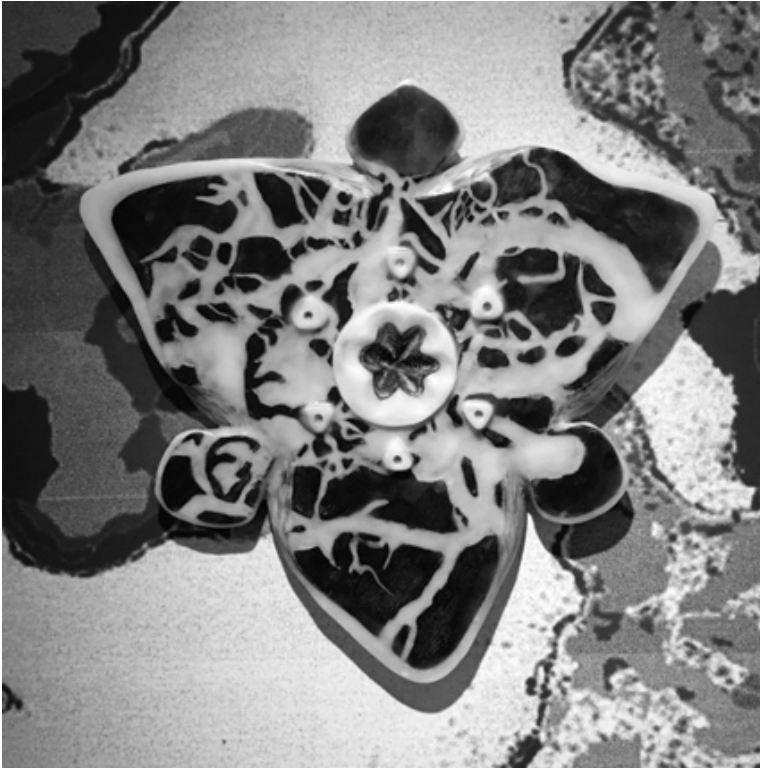


Figure 1: Cassandra Bossell, *Lily-Gum Co-life*, 2016, wood, wax and carbon. 63cm diameter, Ku-ring-gai PH: Art + Science = Project at Manly Art Gallery and Museum.

Over the topographic map, I exhibited an embryonic bat, subtly inscribed with the topographic lines of the Ku-ring-gai homeland into which it is born and over which it echo-locates (Figure 2).



Figure 2: Cassandra Bossell, *Pre-Life: Topography of a Bat*, 2016, wood, wax and carbon, 95 x 45 x 3cm, Ku-ring-Gai PH: Art + Science = Project at Manly Art Gallery and Museum.

For the ocean levels map, I chose a micro-scaled, bioluminescent plankton called a dinoflagellate (Figure 3). I wanted to give the viewer a perspective from inside the organism and so undertook a process to sculpt and mould it large enough to be embraced by a human. I exhibited the mould with the aim of lending the viewer a glimpse from inside the body, encouraging them to imagine the experience of life as a phytoplankton. As many plankton contain calcium carbonate, I created this carapace using calcium in the form of a toughened gypsum. My choice of applying an exterior coating of animal fur sought to invoke a familiar semblance, a connection to a familiar beloved animal from our physical world.

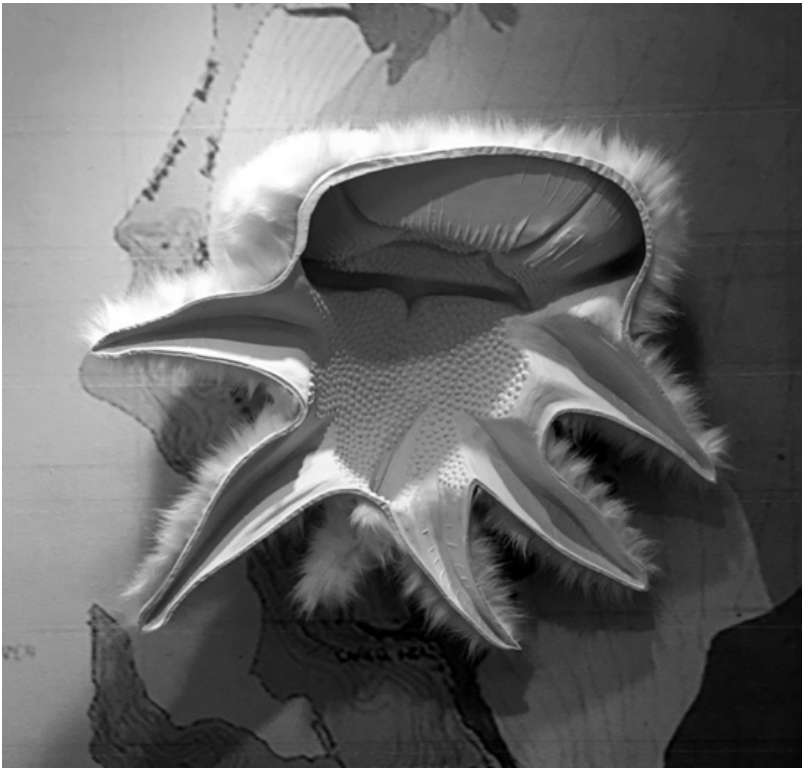


Figure 3: Kassandra Bossell, *Dinoflagellate*, 2016, forton MG and faux fox fur, 110 x 120 x 28cm, Ku-ring-Gai PH: Art + Science = Project at Manly Art Gallery and Museum.

My choice for the satellite map was a microscopic tardigrade as it can survive the vacuum of outer space (Figure 4). Tardigrades are also called water bears or moss piglets; they dwell in watery terrestrial environments and are members of the extremophile family, being resilient to extremes of pressure, radiation, temperatures and lack of food for up to 30 years. This micro-animal was placed within the installation as if it had emerged from the satellite map to wander over to a circle of native she-oak (*Casuarina*) needles and cones in the centre of the room. Heat-formed in thermoplastic, this transparent sculpture mimics its miniature real-life animal in having crystal clear skin, whilst maintaining an ironic comment on plastic pollution.



Figure 4: Kassandra Bossell, *Tardigrade*, 2016, ABS plastic, 125 x 35 x 50cm, Ku-ring-Gai PH: Art + Science = Project at Manly Art Gallery and Museum.

Above the tardigrade, we suspended Garry's bat trap, in which we had caught fishing-bats during our residency (Figure 5). From each corner of the trap, beneath a ceiling spot-light, we hung four hollow moulded thermoplastic human heads. Caught in their own trap, these heads contain elements that poetically interpret human concerns of the Anthropocene. One head hangs half filled with coal, reflecting discourse on the human use of fossil fuels; another is filled with estuarine oysters who battle with pollution of the seas; *Casuarina* tree needles fill another head in a comment on the endangerment of terrestrial habitats and desertification; a set of endangered owl wings protrude from the last head, bringing to the balance human dreams of flight and progress with resultant species extinction and the wisdom of the owl.



Figure 5: Cassandra Bossell, *Visible / Invisible*, installation view, Kuring-Gai PH: Art + Science = Project, 2016, collaboration with ecologist Garry Daly.

Discussion and conclusion

The full weight of realising what the Anthropocene entails for humans and non-humans is an issue that brings with it a great deal of anxiety, guilt, remorse and despair in many of us. Environmental philosopher, Professor Glenn Albrecht has pioneered the research domain of correlating mental health conditions with destruction of local ecosystems. He coined the term, *solastalgia* to refer to the lived experience of negative environmental change (Albrecht, 2010). He proposes action toward a new epoch which he titles *the Symbiocene*, to imply living together for mutual benefit. His vision projects a human pursuit of active relationships and attributes that enhance mutual interdependence with non-humans.

Charles Darwin's theory of natural selection initially proposed that evolution proceeds through both competition and mutual aid (Darwin, 1900). Darwin coined the phrase *mutual aid* for the cooperation and reciprocity within one species; when enacted between different species in the natural world, this has come to be understood as *mutualistic symbiosis*. Evolutionary biologist Lynn Margulis proved that evolving cooperation between individuals of different species can drive evolution. Her theory of symbiogenesis refers to the genetic and metabolic collaborations of the bacterial communities that became the earliest eukaryotes and eventually evolved into plants and animals (Margulis, 2008). This has important implications for our interdependence with coevolving species and how we might work with them.

Our project unveiled invisible beings from the complex networks of ecology to encourage an imagination of their non-human viewpoints. As a part of ten installation works at Manly Art Gallery and Museum, our ideas took their place in a larger discussion held between the artworks and as part of a series of artist talks and forums at the gallery which had some 16,000 visitors over the exhibition period. We had large crowds filling all the programmes, including art activities and open-mike brainstorming sessions about future directions and personal agency within the climate crisis. Garry and I thoroughly enjoyed the collaboration and have continued to consult professionally as well as conduct a nourishing friendship. Our artwork seemed indeed to evoke feelings of wonder and empathy in the viewers, who expressed responsibility and care for local Ku-ring-gai ecology and beyond.

References

- Albrecht, G. 2010. "Solastalgia and the creation of new ways of living." *Nature and culture: Rebuilding lost connections*, 217-234.
- Darwin, C. and Bynum, W.F., 2009. *The origin of species by means of natural selection: or, the preservation of favored races in the struggle for life*. Harmondsworth: Penguin.
- Gibran, K. 2012. *The prophet*. Oneworld Publications.
- Haraway, D.J. 2016. *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Margulis, L. 2008. *Symbiotic planet: a new look at evolution*. Basic Books.