

Uncertain Futures: Coral Bleaching and the Loss of Innocence, Beauty and the Sublime

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The works of art in the exhibition *Exodus: Coral Bleaching and Heat Stress* call attention to habitat degradation due to climate change. Cyclones and bleaching events have resulted in the loss of fifty percent of the coral cover in the Great Barrier Reef over the past three decades. The capacity for art to secure belief through reflective understanding is argued in relation to the moral predicament of anthropogenic climate change. The sublime is recast in the form of the eco-sublime, allowing for new ways of feeling and imaging our place in a world where our innocence in relation to climate change has been lost.

Storm clouds in tropical regions during the wet season, signal approaching rain and menacingly allude to the prospect of an approaching cyclone. Severe cyclones leave in their wake barren landscapes of stripped trees, buildings reduced to rubble and scarred seascapes of broken and dead coral (De'ath et al., 2012). Predictions from climate scientists that cyclones will increase both in frequency and severity in the future may heighten the fear associated with the threat of an impending cyclone. In addition, knowledge of destructive storms such as Hurricane Sandy, which hit the Eastern seaboard of the United States of America in 2012, causing greater damage due to the effects of climate change, such as the rise in the sea level, might exacerbate the alarm associated with a looming cyclone. Looming cyclones along with changes in habitats that have affected peoples' livelihoods might induce reflection regarding the role people have played in creating the current state of climate change. For example, the climate has been affected by overloading the atmosphere with emissions from the past that outstrip the Earth's capacity to reabsorb the excesses (Ortiz et al., 2014). A tension may exist between the appreciation of humankind's progressive influences such as the advances in technology and medicine and yet, at the same time natural habitat destruction is occurring such as the fifty percent of the coral cover that has been lost in the past three decades (De'ath et al., 2012). Climate change has been identified as one of the major threats to coral reefs since the early 1990's (De'ath et al., 2012; Ortiz et al., 2014). The Great Barrier Reef has lost fifty-seven percent of the coral cover in the past three decades with tropical cyclones, coral predation by crown of thorn starfish, and coral bleaching causing the majority of this loss (De'ath et al., 2012). Climate change influences the frequency and severity of cyclones and causes increases in sea temperatures that result in coral bleaching (De'ath et al., 2012). Contemplation of the shadows cast by climate change is central to the works of art presented by the author in the exhibition *Exodus: Coral Bleaching and Heat Stress*. Artists, according to Immanuel Kant, seek to portray ideas that "strive after something that lies beyond the bounds of experience" (quoted in Danto, 2013, p. 124). The works of art exhibited in *Exodus* aim to elicit reflection regarding habitat

destruction that lies beyond the bounds of our former experience and our loss of innocence in contributing to this grave end.



Robyn Glade-Wright *Exodus* 2014, detail, vegetation, beads, acrylic paint 990 x 880 x 20cm.

As members of the industrialized world, our consumption of produce and consumer goods along with the resources used in the supply chain to grow, manufacture, store and transport them means that we actively contribute to climate change (Day et al., 2013). Regardless of whether we attempt to reduce our carbon footprint by making choices such as riding a bike to work rather than driving a car, there will be an environmental impact. The impact can be large or small “but can never be absent” (Scholz, 2014, p. 6). It is possible to feel trapped and powerless to effect change in this situation.

The post-industrial lifestyle can be viewed as a complex and inextricably connected web consisting of housing, transport, energy, food and technologies. Given the interconnections and dependency on consumer goods, it can be difficult to imagine how an individual can make a difference to carbon emissions. Individuals might feel powerless to have an impact on the global problem of climate change or they may question and deny climate change science; however, the “extent of scientific consensus suggests that human-induced warming of the climate system is unequivocal” (Hall et al., 2015). Climate change can be difficult to understand given that causes such as greenhouse gasses are invisible and signs of climate change are diffuse or at times out of our of sight (Wynveen & Sutton, 2014). Denial is becoming a less defensible position as the effects of climate change have impacted on so many circumstances including food security, employment and inundation by seawater or heightened severity and impact of super storms and cyclones. These impacts have had physical and economic consequences. A temperature increase of two degrees Celsius above pre-industrial levels is likely to occur in the next few decades, threatening habitats such as the Amazon rainforest and producing an economic cost at least \$60

trillion (McKinnon, 2014). A further concern is the long-term reach of climate change. An article published in *Nature* reports that even if emissions were reduced to 1980 levels in the next ten years, the amount of carbon stored in the atmosphere would lead to the occurrence of extreme thermal events resulting in coral bleaching every three to four years between 2040 and 2080 (Ortiz et al., 2014). The continuation of damaging coral bleaching events casts an uncomfortable portent for the future.

Tackling climate change requires moral education according to McKinnon in order “either to bring people to see climate changes as a moral problem, or to persuade them that if they already see it that way, they ought to commit to action” (2014, p. 37). McKinnon (2014) makes a case against the belief that personal changes to emissions are inefficacious by citing the following anecdote. If we remove a grain of sand from a heap it will not destroy the heap and therefore removing another grain will also not destroy the heap. However, if we continue to remove one grain of sand at a time we will be left with the last grain of sand and remove it, there will be no heap. Hence, it was an error to consider that removing the first grain of sand did not destroy the heap as the first grain can be seen to be the same as the last grain (McKinnon, 2014). If this logic is applied to the problem of climate change, then the idea that an individual would make no difference if they reduced personal emissions is shown to be erroneous. Small acts such as turning down the thermostat on an air-conditioner in the tropics can coalesce with other seemingly small acts and collectively contribute to a significant reduction in emissions.

Artists are noted for their capacity to challenge our understanding of experience and our ethical being-in-the world (Mathieu, 2014, p. 214). If the problem of climate change can be addressed through moral education as McKinnon (2014) contends, it is possible to view art as a means to contribute to this end. Graham writes that artists seek to educate and “secure belief through reflective understanding” and the value of art lies in the way art enables people to look at circumstances and relationships (2005, p. 60). Works of art might lead people to a greater awareness of a subject than other forms of asserting a view. For example, propaganda asserts a view, however, while both art and propaganda display imagination, the difference resides in the degree to which works of art can provide “information or opinions in a way that advance our understanding by enhancing or enriching it” (Graham, 2005, p. 55). Graham writes: “If the purpose of education is to develop the mind and increase understanding and if art is one form of this understanding then art clearly has a proper place in education” (2005, p. 58). Art, therefore, may be instrumental as a means of addressing the moral education McKinnon prescribes in order for people to see that climate change is a problem, and if they do, to take action to address the situation (2014).

The question of how the artists might tackle climate change is addressed by theorist Daniel Palmer who calls into play the concept of the sublime given its association with “confusion in the face of destruction” (2014, p. 70). Palmer suggests that the sublime should be recalled and updated from its traditional formulations, writing “a more radical eco-sublime is required to imagine new ways of feeling, alternative ways of thinking about our contingent place within ‘nature’ and all forms of collective empathy towards all manner of human and non-human others” (Palmer, 2014, p. 70). Palmer calls to attention the long and complex history of human/nature relationship in the Western world-view.

This world view was founded by the ancient Greek philosophers who tended to see people as being part of the wider world and they believed that self-knowledge could be attained by finding out what our place is in the universe (Carone, 2003, p. 70). During the Middle Ages, the Judeo-Christian view held that while humans had dominion over nature, this domination was contingent on responsible stewardship (Attfield, 2003, p. 107). Stewardship did not preclude the use of animals as a source of food, however, it did involve a “humble recognition of the intrinsic value of fellow-creatures” (Attfield, 2003, p. 107). In the eighteenth century, Immanuel Kant and Jean-Jacques Rousseau were dominant philosophers in the field of nature, capturing the fascination of romanticism (Brennan, 2003). Rousseau espoused respect for the intrinsic nature of other forms of life and emphasized the continuities between humans and animals (Brennan, 2003). Kant identifies the awe-inspiring aspects of nature and in addition the manner in which nature can indicate the limitation of the human imagination to comprehend the absolutely great (Brennan, 2003). Schelling’s view, extended by the philosopher Agassiz, held that nature was a storehouse of divine thoughts, therefore, providing grounds for the protection and preservation of nature (Brennan, 2003). By the mid nineteenth century, the Romantic views of nature were prevalent particularly by those people who had moved into cities to find work. Nature and wilderness areas were viewed as a being restorative and worthy of protection and the source of inspiration for works of art (Brennan, 2003). Karl Marx challenged the Romantic notions of nature, claiming “humans were both the measure and maker of beauty and depicted nature as mechanical and inorganic providing resources that were only given value due to human labor” (quoted in Brennan, 2003, p. 151).

A clear tension existed between the mechanistic utilitarian framework prescribed by Marx that viewed nature as dead matter and a resource on one hand and on the other, the romantic embrace of nature that was seen as sacred-sublime and pristine (Scholz, 2014). While echoes of this tension still reverberate today in the forms of Romantic or environmental discourse on one side and the utilitarian discourse on the other side, the divide is not absolute (Scholz, 2014). For example, corporate environmentalism indicates willingness on the part of some companies to practice stewardship in relation to preserving natural resources in order to ensure long-term availability of the resource (Scholz, 2014).

Views of the nature/human relationship are complex because nature can be viewed as either a physical substance or an abstract essence “that transcends the material realm and even the realm of representation” (Morton, 2007, p. 16). The abstract essence of nature and the feelings of being overwhelmed are noted in descriptions of the sublime. Joseph Addison, writing in the early eighteenth century describes the sublime in terms of an “agreeable horror” (quoted in Mothersill, 1995, p. 408) while Edmund Burke notes that the sublime is in some way “terrible” and, hence, capable of instilling fear (quoted in Gardiner, 1995, p. 56). Kant writes that the sublime resides in mountains, Milton’s Hell, and tall oaks (quoted in Scarry, 1999, p. 84). The sublime according to Kant can move people and “is to be found in a formless object” without boundaries such as a mountain range, a raging storm or the sky (quoted in Gardiner 1995, p. 57). Furthermore, Kant contends that the sublime is apparent in phenomena “that are so vast, so powerful and potentially dangerous as to defeat our attempts to grasp it (quoted in Mothersill, 1995, p. 410). Sublime experiences remind us of our limitations in relation to comprehending as try as we might, we “necessarily

fail to imagine infinity” (quoted in Mothersill, 1995, p. 410). In the twentieth century the concept of the sublime remained a goal for artists such as Mark Rothko who believed that painting “must be like miracles capable of overwhelming the senses” (quoted in Read, 1974, p. 290).

If these views of the sublime are carried forward to Palmer’s suggestion of the eco-sublime, we can see how the ideas of the terrible and the overwhelming can be applied to the current predicament of anthropogenic climate change. Indeed there is a disquieting recognition, by some people, that we cannot rely on Mother Nature to be the great provider who keeps us subject to her power, and in return provides us with an environment that will sustain life. Instead we need to grapple with the terrible and overwhelming knowledge that the world we inhabit is in the process of change. We are left in a finite world reduced to an ecosystem that we have overloaded with waste emissions that cannot be absorbed by the ecosystem and that we cannot manage in a sustainable manner.

In an attempt to address concerns regarding the impacts and causes of climate change, the author/artist presented a solo exhibition *Exodus: Coral Bleaching and Heat Stress* at the Centre for Contemporary Arts in Cairns in June 2014. For the author/artist, the psychic disturbance that underpinned the exhibition was the confusion and despair of being-in a world where the habitat destruction has caused many species to teeter precariously on the edge of survival and where exceptionally high extinctions are running at about one thousand times the rate that is considered to be normal (Pimm et al., 2014). Palmer’s suggestion of the eco-sublime comes into play as the situation is perceived as being both terrible and the overwhelming. While the eco-sublime is associated with a feeling of awe in relation to vast, powerful and potentially dangerous situations (Mothersill, 1995), the works of art in the exhibition *Exodus: Coral Bleaching and Heat Stress* employed beauty as a means of directing attention to the drama of the loss of coral on the reef. Kant writes that while the sublime “must always be great; and the beautiful can also be small” and so the great and overwhelming notion of anthropogenic climate change is addressed in the works of art in exhibition through the vehicle of beauty (quoted in Mothersill, 1995, p. 409).



Robyn Glade-Wright *Exodus* 2014, detail, vegetation, beads, acrylic paint 990 x 880 x 20cm.

The immense size of the Great Barrier Reef creates an impression of permanence and stability, yet recent surveys indicate that around half the coral in the Great Barrier Reef is bleached and silently dissolving (De'ath et al., 2012). The once majestic Great Barrier Reef is diminished with a largely unseen loss of marine life, natural beauty, and vibrant colour. The title *Exodus* refers to the loss of millions of tiny algae that once lived in a symbiotic relationship with the coral supplying it with nutrients to grow, reproduce and produce much of the vivid colour of the coral reef (Douglas, 2003). Increases in sea temperatures of just one degree can cause heat stress and can kill the algae (Douglas, 2003). With the death and exodus of millions of live algae, the coral is starved and the reef, devoid of life, bleaches.

Exodus, the major piece in the exhibition, represents a bleached coral reef in the form of a long boat or canoe that spans eight metres in length from bow to stern. The scale of the piece suggests the magnitude of kilometres of bleached coral dissolving below the waterline. *Exodus* was created from materials collected from the shoreline and the garden. Round seedpods from trees growing along the sea edge were strung together on nylon line to create coral-looking forms. Plant materials from palms which once supported seeds, were trimmed and twisted onto circular forms to emulate the appearance of coral. Beads were glued to trimmed palm stems to suggest the rippled surface of some corals. The components used in *Exodus* were all white-washed with several coats of white paint to create a representation of a bleached coral. The white-washed material was hung from the ceiling with nylon line in the form of a boat.

Exodus swayed gently in the gallery as if the ocean current was carrying its cargo of bleached coral to an unmarked grave. The boat form in *Exodus* recall Arnold Böcklin's painting *Isle of the Dead*, 1880, in which a shrouded white form ferries a recently deceased soul, a human cargo, to its resting place. The work was hung ten centimetres from the gallery wall enabling the white components to cast a swath of

blue-gray shadows. Shadows have associations of gloom and treachery and the shadows on the gallery wall, devoid of life, created a further reminder of the lost reef.

The art theorist Arthur C. Danto views art as a “*wakeful dream*” in which an artist’s ideas, rendered in a sensuous form, are made incarnate (2013, 124). The sensuous form apparent in *Exodus* included tactile elements and beauty. Beauty was used strategically in *Exodus* to highlight the loss of beauty when habitats are compromised. People value beauty and tend to be beauty seeking and this explains why people want to live in beautiful places, find beautiful partners and visit beautiful sights (Armstrong, 2004). The American philosopher Elaine Scarry writes that people are upset when they hear of the loss of beauty, even when their own purposes are not served by other people having access to beauty (1991). Furthermore, people recognise that other people’s lives are enhanced if they have access to beauty (Scarry, 1991). For example, people can be upset to hear about the loss of a giant kelp forest when, in all likelihood, they would never have experienced the natural beauty of a kelp forest or even known of its beauty until the moment they heard about its loss (Scarry, 1991). Similarly, the loss of the beauty of the coral reef reduces the opportunity for people to experience and value instances of beauty.

Scarry argues that beautiful objects elicit a form of stewardship (1991). This stewardship is a reciprocal welcoming or salute to the dignity of the other. Moreover, Scarry writes that the stewardship elicits a desire to protect and nurture existing beauty and also to bring new beauty into the world (1991). The desire to nurture and to replicate beauty is evident when, for example, people see a beautiful ceramic vessel or a painting in a gallery and feel moved to create or acquire an item to replicate the beauty of the original (Scarry, 1991). The desire for stewardship and for the protection of the beauty of the world is a part of the motivation for the artwork *Exodus*. The beautiful form of *Exodus* attempts to elicit the welcoming admiration described by Scarry. And yet, there is an awareness that this fragile beauty, suffering from heat stress in a warming global climate, will soon dissolve and be lost forever.

Armstrong writes “awareness of beauty makes the ugliness of existence all the harder to bear” (2004, p. 84). It is hard to fathom how the beauty of the reef might be replaced by an unbearable ugliness. The beauty of the piece suggests the beauty of a reef but one soon realises that bleached reefs are collapsing in an underwater wasteland. Therefore, *Exodus* engages with beauty in a subversive manner. The application of beauty in *Exodus* aims to remind us of the transient, fleeting and vulnerable beauty of the coral reef and the beauty we have lost. Armstrong, contends that “the experience of beauty consists in finding spiritual value (truth, happiness, moral ideals) at home in a material setting (rhythm, line, shape, structure) and in a way that, while we contemplate the object, the two seem inseparable” (2004, p. 163). An experience of beauty involves a sense of kinship between an object and one’s soul (Armstrong, 2004, p. 72). The loss of beauty apparent in a bleached coral reef can sever this kinship of which Armstrong writes and moreover, the opportunity for meaningful relationships with other living entities is diminished.



Robyn Glade-Wright *A Hand in Coral Bleaching* 2014, digital image, 20 x 25 cm.

In addition to the work of art *Exodus*, six digital images were exhibited to suggest further aspects of the situation and the possible outcome if the whole reef is lost to coral bleaching. One digital image titled *In Plane View*, depicts an aeroplane flying into a tropical sky that is composed of bleached coral. The Great Barrier Reef attracts many tourists and the suggestion, in the piece is that if bleached coral were in plain view, the region would lose revenue from tourism. In a similar vein, another digital image, *Coral Coloured Glasses* depicts an attractive woman apparently viewing the reef; however the vision portrayed in her large sunglasses is one of a sick and decaying reef. The title *Coral Coloured Glasses*, also alludes to the idea of 'rose coloured glasses' suggesting that our view of the reef is informed by a picture perfect post card view that is romanticized and optimistic, however, this is not an accurate reflection of the reef. The idea that time is of the essence in relation to addressing the loss of coral on the reef is suggested in the image *Watch Out*. In this image the face of a wristwatch on a person's forearm depicts a dying reef, drawing together the idea time and coral bleaching. The time factor implies both the coral that has been lost to date and it suggests that time is of the essence to reduce emissions and prevent further coral loss. The impact of colonization is referenced in the digital image *Cook's Gaze*. This image is based on a sculpture of Captain Cook that stands in Cairns to advertise a hotel. The image depicts the statue of Captain Cook set within a landscape encrusted with bleached coral. Captain Cook has an arm raised to suggest dominion over the kingdom, however, the scene is now one of devastation as the land has been overtaken by bleached coral.



Robyn Glade-Wright *Body Coral* 2014, digital image, 20 x 25 cm
Body Coral photograph: Camille Lemmens

The digital image, *A Hand in Coral Bleaching* presents a pair of human hands in the form of bleached coral apparently in a seabed of dying coral. The image highlights the need to take responsibility for our hand in climate change. We can no longer claim to be innocent in relation to anthropogenic climate change. Our hands are tied and innocence is lost. *Body Coral* is a digital image which suggests that our veins and heart have ossified and turned to bleached coral. The idea that our bodies might be invaded by bleached coral draws the drama of what is happening largely out of sight on the reef, into our personal sphere. It aims to illicit questions about how we might react if our bodies cannot cope with climate change and this pressing question remains unanswered.

According to Palmer “a world that is not in a fit state for most animal or human habitation could give rise to a paralyzing sublime” (2014, p. 70). The moral call of both beauty and the eco-sublime apparent in works of art such as those exhibited in *Exodus: Coral Bleaching and Heat Stress*, may probe our consciousness and trigger a recognition of our loss of innocence in relation to climate change. If works of art can function as a form of moral education, individuals may be moved to act and alter the current course that is set in the direction of a very uncertain future.

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