WHAT GOES AROUND COMES AROUND

The impact of plastic on the environment, and how artists effectively communicate environmental issues

Hannah Scott

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Hannah Scott - MA Art and Science

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‘What if wanting more is making less?’ (Sissay, 2009)

PREFACE

My awareness of and interest in climate change began two years ago when questions were raised about the environmental impact of my lifestyle that I hadn't previously considered. My response has been to research the broad range of topics that sit under its umbrella and what I have learned has been overwhelming. For me, coming to terms with the implications, coupled with the recent loss of both my parents, has made my journey very much a search to reconcile my simultaneous bereavement of parents, reality, and Self.

I fully accept and support the findings of science but find it difficult to align myself socio-politically with environmental groups / opinion, or as I see it, to concede aspects of my core identity, which although conscientious, are far from being what I would describe as green / environmentalist / activist. In recognition of this my artistic practice is evolving to encompass time for reflection as well as for making and doing, and uses an autoethnographic approach, centring myself within my exploration as the observer and as one of the observed. At its core is an ongoing internal

dialogue, in which I am questioning my desire and ability to redefine my existing values.

During the MA, my practice has switched between creative modes (writing / reading / making / reflecting) interchangeably. This has helped to diversify my creative output, resulting in spontaneous and emotional work such as the paintings *Blue I, II, and III* (2016) as well as more considered and complex projects such as *What Goes Around Comes Around* (2016) - also encompassing this essay, and which I view as clarifying and tying aspects of my practice together, supporting the underlying quest to find my new world view, and helping identify the appropriate pitch and tone with which to communicate this.

Despite its academic nature, I have written this essay using some storytelling - from the point of view of a plastic bottle. This decision is based in part, on the results of a recent study, which found that narrative climate change writing is more likely to be salient and influential, with audiences better able to understand

and remember the content compared to expository writing styles (Hillier *et al.*, 2016, p. 1). The style allows me to present information in a more engaging way by *showing* rather than *telling*, and acting as a creative counterbalance to the scientific data. Within the context of the text (and my art practice) I view myself as both artist / author, and as audience. As such, readers could consider the narrative in part self-critical, but importantly not intended to be critical of others.

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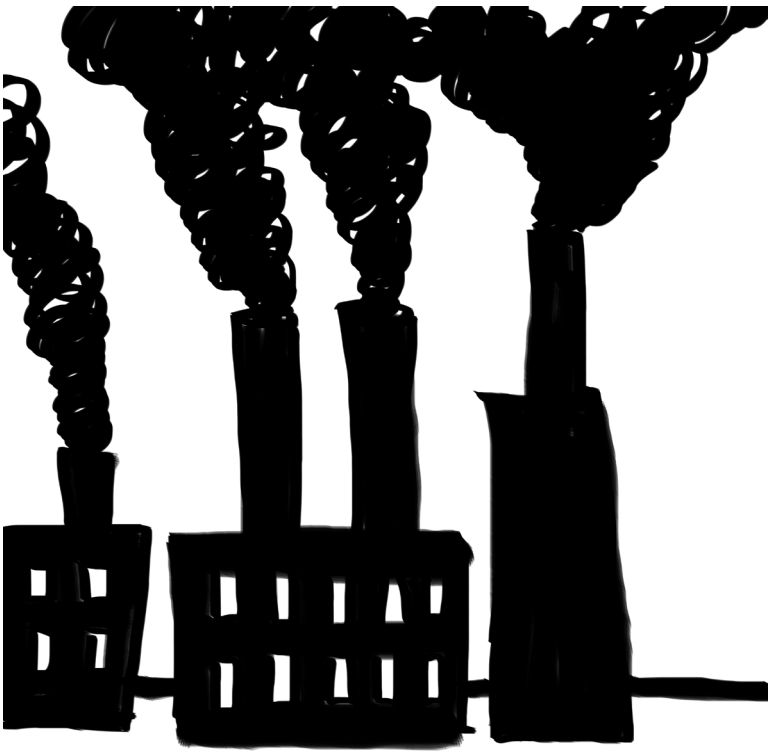
INTRODUCTION

> In 30 years we have actually got to change our lifestyles. I don't know if human beings have the capability for the kind of change that is necessary. Yet, maybe there is a chance. It is down to the messenger, the narrative, the story, to make change possible. (Buckland, 2006, p. 8)

Woven into the fabric of our lives through our science, behaviour, technology, culture, law, economy and democracy (Rowson and Corner, 2015, p. 9), climate change spans a complex network of interrelated stories. This essay concentrates on one example - the impact of plastic on the environment, and its relationship to climate change. Particular focus is given to the effect of plastic waste from Britain. The essay goes on to consider some of the ways in which artists effectively communicate environmental issues without being didactic or overly moralistic, and discusses how the author's artistic practice is evolving in response. To consider these questions, the story of Poly, a plastic bottle, has been used as a creative device to facilitate bringing together some of the issues

in an accessible but informative way.

Synthetic and non-synthetic plastics are ubiquitous in modern life. It is one of the most versatile materials, which has allowed the development of infinite technological, medical, and manufacturing advances. However, it comes at a high price through the continued extraction and burning of fossil fuels, growing consumerism, and trends in convenience and single use items, which all contribute to the pollution of the land, air, and water, harming marine life, birds, humans and other animals. The result is that after a mere two hundred years of industrialisation geologists are heralding the beginning of a new era, the Anthropocene, the dominant, indelible mark of humanity on the Earth's climate and environment. Despite knowing this, we continue to extract Earth's resources and to consume and discard the products we manufacture from them.



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THE IMPACT OF PLASTIC ON THE ENVIRONMENT

A relentless, bracingly cold current swept past. Poly lay deep on the ocean floor wedged against a rocky outcrop. Her neck was ragged after the ship's blade had whirled her around, catching her momentarily in the boat's wake, drawing her under the surface, and ripping her blue cap clean off. A torrent of salt water instantly filled her, sending her into a gentle descent.

(2)

Being in her current state had been short in comparison to the events that formed Poly's constituent parts. More than 150 million years had passed since the dead organisms of the Jurassic period [1] sunk to the ocean floor, and were compressed and heated by the powerful geological processes that formed some of today's fossil fuels. By contrast, it had taken only twelve days since the oil, ethylene and propylene had been extracted from the Earth, to the manufacturing of her polyethylene terephthalate (PET) plastic bottle form, and her high-density polyethylene (HDPE) cap, and only fourteen days until she had been filled with mineral water, labelled, packaged and shipped [2].

(3)

Adam Smith, in 1776, wrote 'nothing is more useful than water; but it will purchase scarce any thing; scarce any thing can be had in exchange for it' (2014, p. 17). Since then, water, in particular the bottled variety, has gained increasingly commercial value. For instance, the UK bottled water market is now worth over £2.1 billion, with over 2,200 million litres produced in 2015 (British Bottled Water, 2016). The annual global production of plastics is reckoned to be about 300 million tonnes and rising each year (Cressey, 2016, p. 264). Packaging tops the market for European plastics demand (Plastics Europe, 2015, p. 15), and in the UK, there was an estimated 3.7 million tonnes arising in 2014, the largest source of which being the grocery retail sector accounting for about 1 million tonnes (WRAP, 2016, p. 6).

Statistics like these are illuminating but they are difficult to remember, difficult to relate to, and easily lost to other priorities. However, behaviour and attitudes to social norms can be changed with positive outcomes. For example, most people are pleased about and conscientious of the ban on smoking in public places

in Britain (HSCIC, 2015, p. 34). Since the 5p charge on plastic bags was introduced in 2014 use dropped massively from 7.64 billion to just 0.6 billion (Defra, 2016), and has led to a substantial increase in people using their own bags (Poortinga *et al.*, 2016, p. 14). In France, the law now forbids supermarket food waste, and from 2020 the use of plastic cups, plates and cutlery will no longer be allowed (Khan, 2016).

A mere two months had passed since Poly's manufacture, when she pulled out of Southampton docks on board the CMA CGM Kerguelen, an explorer class container ship [3]. She had been chilling in a vending machine, when a crewman inserted a one-euro coin and selected row number 14 on the keypad. The metal coil turned pushing her forwards, off the edge, and down into the machine's access area. It was late-September and unusually hot. The crewman stood on the deck of the Kerguelen, opened her and drank her clean, refreshing water in one go, before replacing her cap and pushing her firmly into the adjacent recycling bin. As

he walked away he felt a subconscious contentment through this conscious act of absolution. After all, it was to be a long journey, he worked hard, he deserved the right to drink mineral water on such a fine, hot day, over the alternative ship's free supply that always tasted somehow inferior.

(4)

It is estimated that around 57% of plastic bottles in the UK were collected for recycling in 2014 (WRAP, 2016, p. 7). However, globally only 14% of plastic packaging is collected for recycling, with only 5% of the material value retained for subsequent use. Most of the plastic that is recycled is transformed into lower-value, non-recyclable applications, with packaging designed and manufactured often for single-use. Non-recycled plastic waste goes either to landfill or through accidental release via surface run-off, rivers or sewers, eventually finds its way from land out to sea, with up to 8 million tonnes of plastic items entering the oceans every year (World Economic Forum, Ellen MacArthur Foundation and McKinsey and Company, 2016, p. 7). In addition to packaging, other notable sources of marine plastic pollution include fibres from textiles released when clothes are washed; microbeads found in cosmetics and household products; fishing nets; rope; carpets; paints and varnishes (Wentworth and Stafford, 2016, p. 1). In 2014, studies by the Norwegian Environment Agency found city dust from building materials, the abrasion of car tyres and road markings ranked as one of the highest sources

of microplastic pollution (Sundt *et al.*, 2014, p. 1).

The sea was calm as the Kerguelen picked up speed, heading out of the Solent towards Plymouth and Sole. At Sole the cleaner opened the recycling bin and Poly tumbled onto the deck floor. Empty and light, she was caught by a gust of wind and blown right off the ship into the foamy spray below. A strong current sucked her down into the path of the screws, where she lost her cap. As the ship disappeared over the horizon her small, blue, high-density polyethylene cap floated on the ocean surface, unaware of the strong Atlantic currents pushing it north, and surprisingly quickly, away from the point of separation from her polyethylene terephthalate body.

(5)

Plastics that enter the ocean are moved by currents into the open ocean where they form garbage patches. There are six in total, one of which is located in the Barents Sea in the Arctic (Van Sebille *et al.*, 2016). Most of the plastic litter from Britain ends up in the Arctic, taking less than two years to get there (Van Sebille *et al.*, 2016). Floating anthropogenic litter was observed during ship and helicopter surveys in the Fram Strait and Barents Sea in the Arctic (Bergmann *et al.*, 2015, p. 1) and marine litter on the Arctic seafloor has also been recorded with significantly increased levels from 2002 to 2014 (Tekman, 2016, p. 1).

Ice core samples from the Arctic have been found to contain plastic particulates including polyester, nylon, polypropylene, and polystyrene, acrylic, and polyethylene, with much higher concentrations than waters sampled elsewhere (Obbard *et al.*, 2014). The most prevalent synthetic microparticle found was rayon, commonly used in cigarette filters (Obbard *et al.*, 2014). This indicates that Arctic sea ice could be a major global sink for man-made synthetic and microplastic particles, which have

been accumulating for decades (Obbard *et al*., 2014). It is also predicted that the Arctic Ocean could become ice-free during the summer months this century (IPCC, 2013, p. 25) due to natural and anthropogenic greenhouse gas emissions that are increasing the surface air temperature of the region (Anisimov *et al*. 2007, p. 656). As the polar region warms and annual sea ice declines, large quantities of microplastics will likely be released into the already saturated ocean (Obbard *et al*., 2014).

Now resting 1,500m below sea level on the southwestern Irish shelf at Goban Spur[4], Poly's body was weighed down between a thin layer of sediment that had entered and fallen on to her bottom side as she came to rest on the seafloor, and a raised section of rocky substrate, into which the current was pressing her. Around her lay lumps of clinker, burnt coal discarded by 18th and 19th century steamships[5], and dark rocks deposited by icebergs during the last glacial period, now covered in brachiopods

and bryozoans[6]. Foraminifera, single celled protozoans, lived abundantly in the soft sediment[7].

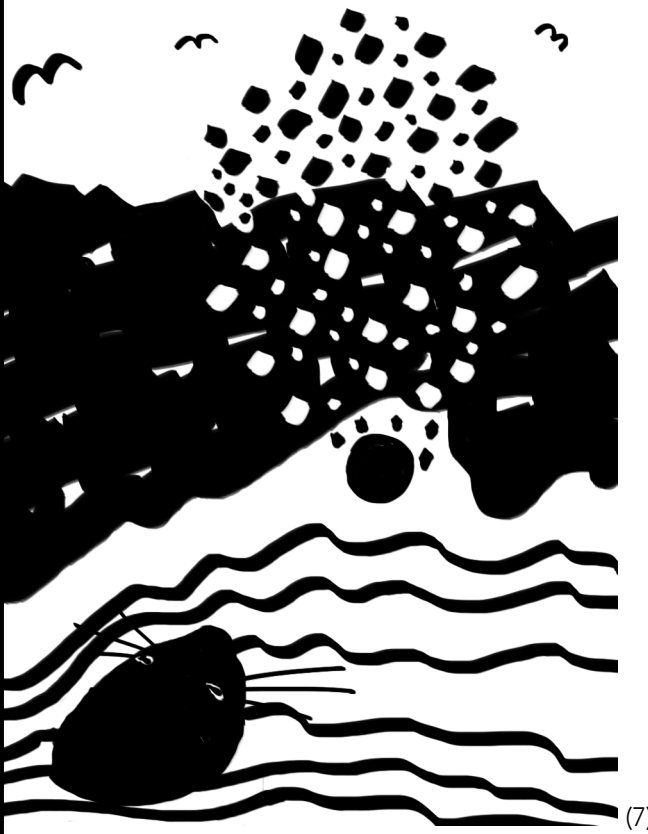
(6)

Between 1,000 and 4,000 meters, in the bathypelagic zone, the water mass was cold at about 4°C with no seasonal temperature changes and consistent salinity[8]. The sunlight no longer

penetrated, there was no possibility of photosynthesis and thus no plant life. The organisms living here relied on marine snow, falling organic matter composed of algal particulates, carcasses, and other forms of biological waste[9]. For Poly, it was the only mark of time, as sediments slowly built layers around her. If she stayed put, she might become a new generation of fossil fuel, compressed and heated, or turned into the newest, man-made, indestructible rock; a sedimentary plastiglomerate[10], a remnant of the Anthropocene.

But out of the darkness, a beam of light cut through the now visible blizzard! Silhouetted by the glare, the dark hull of a Triton submersible[11] hung in the water above her. Perhaps attracted by the last protruding fragment as it glinted in the light, a titanium arm extended straight towards her, opening a wide grip as it neared, and closing firmly around her waist. As she rose above the sea floor she could see the carcasses of other sunken Polymers[12] in the temporary light; whole, fragmented, soft and hard. A lanternfish hovered diagonally, head down, nibbling the corner

of a torn orange polyethylene bag[13] as it waved in the current like a frond of sea kelp[14]. Beyond, a portion of discarded fishing net held captive the remains of an anglerfish, luring scavengers towards their own entanglement[15].



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Thousands of miles north on the shores of eastern Greenland, Poly's floating blue cap smashed against a rock. As the force of the water pulled it violently back and forth, an adolescent harp seal eyed it from below. Drawn by the current towards the calmer waters of the bay made it an easy catch for the hungry seal, who over a period of months, had ingested a number of plastic items until its falsely sated appetite became too chronic for its body to cope with. When the seal had gone Poly's cap persisted. Faded after months at sea, small holes had begun to appear along the edge of the rim where the plastic had disintegrated into smaller particles.

Debris found along shorelines, coastal waters, the deep ocean seabed, and floating on the surface not only poses a conservation threat but is also a threat to the global economy, disrupting navigation, damaging shipping, and affecting fish stocks. Synthetic polymer degradation begins immediately on introduction to the marine environment but is a slow process.

Plastics in the ocean can persist for decades at the very least, if not hundreds of years, depending on their location and the particular variables that affect them over time (Ioakeimidis *et al.*, 2016, p. 1), including: solar UV-induced photo degradation reactions; thermal reactions including thermo-oxidation; hydrolysis of the polymer; and microbial biodegradation (Andrady, 2015, p. 60). Of these only the light-induced degradation is at all effective in the ocean environment and only where plastics are either floating in the water or littering beaches (Andrady, 2015, p. 60).

Degraded plastic objects that break into smaller fragments in turn become microplastics, particles less than five millimetres long (Wentworth and Stafford, 2016, p. 1). Used in industrial processes, and also present in cosmetics and toothpaste (Wentworth and Stafford, 2016, p. 1), microplastics have been reported in the most remote areas of the ocean environment (House of Commons, p. 7). Ingested by marine organisms, they are passed to larger predators up the food chain as they in turn consume their prey (Wright *et al.*, 2013a, p. 488).

In areas of the North Atlantic Ocean there is already a greater weight of plastic than there is life (PlasticAdrift.org, 2016). Plastic buoyancy in seawater varies according to its density ratio, and therefore different plastics impact different marine life. For example, gulls are surface feeders, at risk from low and high-density polyethylene, and polypropylene, whereas giant sea bass are pelagic (open water) and benthic (on or near the sea floor) feeders, at risk from polyethylene terephthalate, and polyvinyl chloride (Monterey Bay Aquarium, 2010). More than 663 different species are reported to have ingested or been entangled in marine plastic debris (UNEP, 2016, p. 85). In the English Channel microplastics have been found in the gastrointestinal tracts of pelagic and demersal fish (Lusher *et al.*, 2013, p. 1). Ingestion can lead to microplastic accumulation and translocation (Browne *et al.*, 2008, p. 5,026), as well as trophic transfer of particles and toxins (Wright *et al.*, 2013a, p. 483).

Plastics contain a variety of additives that are used to change their material properties, for example making them harder, softer or more flexible. Bisphenol A, phthalates and brominated flame-retardants, are hormone disruptors linked to the onset of obesity, cardiovascular disease, some cancers, and behavioural development problems (Wentworth and Stafford, 2016, p. 3). Little is known about how plastics and their additives behave when exposed to the marine environment. However, microplastics are known to attract and accumulate chemicals such as persistent organic pollutants, and ingested chemicals are known to be able to disassociate from the host microplastic (Teuten *et al.*, 2009, p. 2,028). Laboratory studies show that due to the effect of microplastics, oysters produce fewer eggs (Sussarellu *et al.*, 2016, p. 2,430), and marine worms' energy reserves are reduced by up to 50% (Wright *et al.*, 2013b, p. 1,031) - all the more concerning when considering the ability of nanoparticles to cross cell membranes (UNEP, 2016, p. 87).

Clearing all the plastic from the oceans is arguably an impossible

(8)

task. Proposed schemes will not only cost a vast amount of money but will also have little impact (Wilson, 2013). The change needed depends on better preventative measures to stop plastics from getting into waterways in the first place, such as: elimination of single-use plastics and unnecessary packaging; elimination of waste; improved recycling and repurposing; use of alternative materials; and importantly, better public awareness (Wentworth and Stafford, 2016, p. 4).

HOW ARTISTS EFFECTIVELY COMMUNICATE ENVIRONMENTAL ISSUES

> It is in art that society finds its long horizons, its sweep of ages. Art dances a waltz with time; the three steps of past, present and future, which can swing tomorrow into the arms of today, showing society where it is going, and can take a turn with yesterday to show society where it has come from. With climate change, the far-seers of art are a requisite.
> (Griffiths, 2010, p. 5).

Aesthetic form, whether decorative, educational, emotional, or political, has always been used by humans to create and communicate meaning and to question our relationship to the world around us. However, communicating a subject like climate change is difficult because it touches aspects of our lives that require moralistic self-examination, collectively and individually.

In his book, *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change* author George Marshall suggests that people reject climate change, not because of the issue itself, but

due to the way the story has been told, and the way it can impact and implicate personal identity: 'It must be something about the way the story of climate change has been constructed, the people who tell it, and how it has attached itself to their values' (Marshall, 2014, p. 21). He goes on to suggest that views on climate change balance 'the uncertain and diffused risk of climate change as opposed to the certain and very personal social risk of opposing the norm' (Marshall, 2014, p. 27). That is to say that cultural identity is a decisive influence on scientific understanding, as opposed to the quality of scientific communication or a person's scientific literacy. As we are a diverse world, diverse forms of engagement are critical. Art can tell a story in a different way and to a different audience, by presenting it more evocatively and imaginatively, and by demanding an emotional response. The challenge therefore is to find an aesthetic dialogue that successfully engages rather than alienates audiences.

Théodore Géricault's painting *The Raft of the Medusa*, completed in 1819, explicitly depicts the aftermath of the shipwrecked French

(9) Théodore Géricault, *The Raft of the Medusa*, 1819

naval frigate. It divided critics, who disagreed about the way in which they thought art should deal with taboo subjects, as in this case, death, corruption, and the blatant criticism of the socio-political regime of the time. Such a candid portrayal of humanity's faults was controversial and in response to the work, Géricault's contemporary, the painter Philippe Coupin de la Couperie, famously denounced the role of art to be vulgar representation: 'The goal of painting is to speak to the soul and the eyes, not to repel' (Louvre, 2016).

While this view might still be held by some people, the contrary is also supported. The photographs of Sebastiao Salgado often depict the brutality of life, and, like Géricault, it is their candour which makes them so shocking but also so powerful. Stark in their use of high contrast black and white, these raw images of real events demand attention and linger in the mind. Salgado says of his work: 'We humans are a terrible animal; we are extremely violent. Our history is a history of war; it's an endless story. We should see these images to see how terrible our species is' (Salgado, 2014). However, Susan Sontag wrote of Salgado's photographs that while the portrayal of suffering might make people feel they ought to care 'it also invites them to feel that the sufferings and misfortunes are too vast, too irrevocable, too epic to be much changed by any local, political intervention' (Sontag, 2003, p. 62).

Recent research on the scientific communication of climate change supports Sontag's perspective, finding that while shocking portrayals of the subject can certainly attract attention,

(10) Sebastiao Salgado, *Migrations: aftermath of a grenade and machete attack on Rwandan refugees, Congo*, 1994

they can also be counterproductive: 'In addition to distancing the viewer from the issue, fear-inducing communication approaches were found to enhance a sense of fatalism and thus act to encourage disengagement with climate change rather than positive engagement' (O'Neill and Nicholson-Cole, 2009, p. 370). Published by the Tyndall Centre for Climate Change Research, this study focused on public engagement strategies in the UK, addressing organisational and behavioural change in industry and by individual citizens, in light of greenhouse gas emissions targets.

Researchers selected images from climate change news stories, (for example: industrial smoke, flooding, refugees, solar-panels, wind turbines, a cyclist), and asked participants to sort them by importance under two categories; salience and self-efficacy. The results showed that while images can encourage attention to an issue or make people feel empowered to act, they rarely do both at the same time (O'Neill and Nicholson-Cole, 2009, p. 373), with some participants admitting that they felt so concerned about climate change that they chose to deny it in order to overcome their associated emotional stress (O'Neill and Nicholson-Cole, 2009, p. 371).

However, while an image might encourage either salience or self-efficacy, or be deemed aesthetically pleasing or shocking, its interpretation is individual and based on a variety of factors, such as a person's exposure to similar imagery / subject normalisation, image context, and cultural context. For example, considering Gericault's *Raft of the Medusa* from a contemporary perspective, it is possible to appreciate the shocking nature of the image as

it would have been interpreted by the audience at the time of its creation, but it is arguably less shocking now and perhaps more likely to be appreciated for its aesthetic value, and its artistic and historic importance. In the same vein, images taken from news stories but presented out of their original context might also be interpreted in an entirely different way.

The use of aesthetics is key to individual artistic interpretation, and discussed at length by Immanuel Kant, who argued that the role of art was to embody ethical ideas, by which he meant, to depict scenes of good behaviour that might positively influence our own behaviour. Kant proposed that 'aesthetic judgements remind us and instruct us to be more of what we are – finite beings with a sense of greatness, limitations, aspiration, with strengths, weaknesses, and failings.' (The School of Life, 2015a).

Salgado and Gericault's works of art both embody ethical ideas, informing audiences by recounting moments in time by illustrating (painting) or capturing (photography) aspects of an event. An

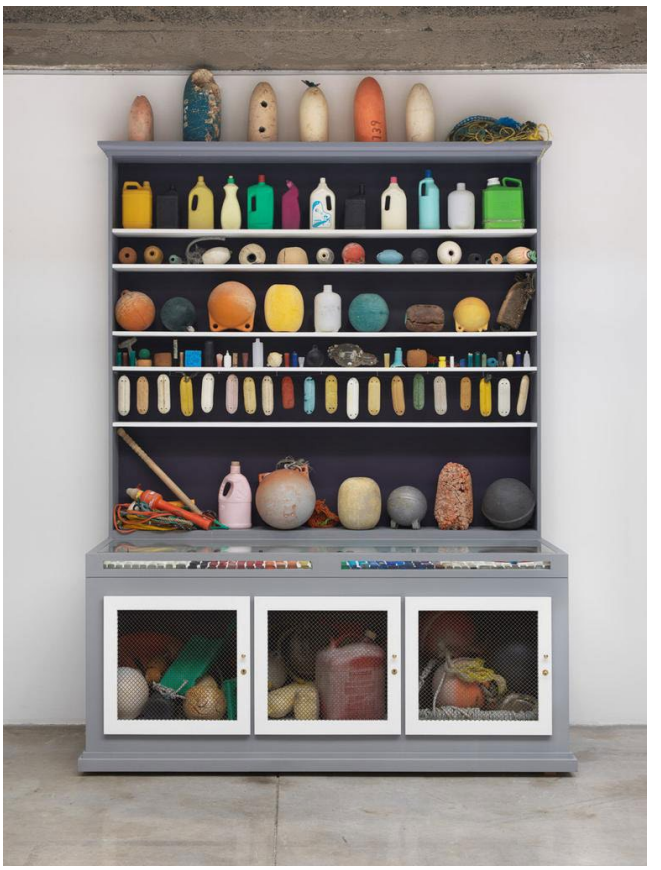
alternative approach is to construct images and embody ideas using objects rather than events. Like Salgado and Gericault, photographer Mandy Barker creates images that hold a strong aesthetic power, while simultaneously depicting an ugly truth, in this case, the environmental disaster of marine plastic litter. Her photographs depict shoals of plastic objects suspended in a dark ocean. Barker's audience is invited to reflect on their experience through a process of self-realisation and awareness of the story, and to formulate new ideas – perhaps to help elicit changes in behaviour. She talks about the aim of her work as being 'to engage with and stimulate an emotional response in the viewer by combining a contradiction between initial aesthetic attraction with the subsequent message of awareness' (Barker, 2016).

Mark Dion, well known for his curiosity cabinets, uses a similar approach to Barker. In *Cabinet of Marine Debris* (2014), instantly recognisable plastic artefacts are neatly organised. All products of consumption and all destined to exist well beyond their consumer's lifespan, this clean and colourful presentation

(11) Mandy Barker, *Shoal*, 2012

challenges the viewer to reconsider these found items, usually thought of as rubbish, but which now seem strangely desirable and aesthetically pleasing. Dion refers to this contradiction as 'a striking juxtaposition of wilderness and cultural detritus (…) These objects (…) are artificial, but they have obtained a kind of

beauty from the action of nature — the colors have softened, or they have barnacles on them' (Dion, 2016).



(12) Mark Dion, *Cabinet of Marine Debris*, 2014

It is easy to avoid visualising the volume or impact of domestic and industrial waste, arguably reinforcing the idea that society encourages narcissistic expectation by giving and rewarding the sense of entitlement ingrained within consumer culture. In

her book *Engaging with Climate Change - Psychoanalytic and Interdisciplinary Perspectives,* psychologist Sally Weintrobe asserts that cultural and individual identity is so bound to this idea that it is threatened by the thought of giving up consumer lifestyle, for fear of losing the sense of self (2013, p. 43). Dion and Barker both confront this idea by showing us the cause and effect of human consumption, as well as highlighting the paradox of the debris' value, acquired by virtue of the aesthetic.

Both Dion and Barker's artworks are constructed using found waste objects collected from a place. By contrast, in Tim Noble and Sue Webster's *Dirty White Trash* (1998), the artists' own litter, collected over a period of time, is arranged and lit to depict a shadow portrait of their profiles, sitting back-to-back, drinking and smoking. It is shocking but delicate at the same time, and could be viewed as an implied acceptance of their joint responsibility with society for the detritus of consumption. Similar to environmental activist Rob Greenfield's waste project, *Trash Me* (2016), in which he wore all the trash he generated over the course of thirty days,

(13) Noble and Webster, *Dirty White Trash*, 1998

Noble and Webster self-deprecatingly reassure the viewer that they too are a part of the problem.

To view the aforementioned artworks, it is reasonable to assert that the viewer needs to visit an art gallery or exhibition, and has therefore made a conscious decision to engage with the art / subject, rather than discovering it by chance. This arguably

(14) Rob Greenfield, *Trash Me*, 2016

limits the scope of communication to a predetermined, already interested audience, and potentially highlights a need for environmental art to be installed in public spaces. Michael Pinsky's *Plunge* (2015) demonstrates an elegant solution. A neon blue line attached to monuments around London shows the predicted sea level by the year 3012. Another notable example includes Olafur Eliasson's *Ice Watch* (2014), in which twelve blocks of ice taken from a Greenland ice sheet were arranged into a clock formation within a public space, first in Copenhagen's City Hall Square and then at the Place du Panthéon in Paris. By installing art in a public space both artists have created an unexpected interruption within

(15) Michael Pinsky, *Plunge*, 2015

that space, potentially encouraging new ways of seeing what may have previously been ignored or gone unnoticed. Importantly however, they allow anyone to contemplate their meaning as they pass by each day, and in the case of Eliasson's ice blocks, to physically interact with the work and to observe change as the ice blocks melt.

Considering these approaches my practice is developing in a way that aims to engage audiences without being didactic, by

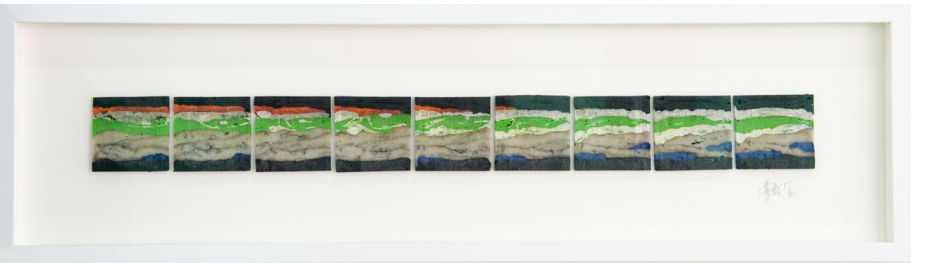
(16) Olafur Eliasson, *Ice Watch*, 2014

reflecting my own journey of discovery, using self-generated, waste materials, and trying to encourage interaction and reflection.

What Goes Around Comes Around (2016-) is an on-going body of work resulting from the collaboration between MA Art and Science and the Government Office for Science. The project is a response to the GO Science annual report on waste, which led me to focus on plastic and marine plastic debris, and the relationship between Britain and the Arctic, in terms of the environmental impact of our

(17) Hannah Scott, *What Goes Around Comes Around*, 2016, Installed that the Crypt gallery, Euston

(18) Hannah Scott, Still from the film *What Goes Around Comes Around*, 2016



(19) Hannah Scott, Sliced plastic cast from *What Goes Around Comes Around*, 2016

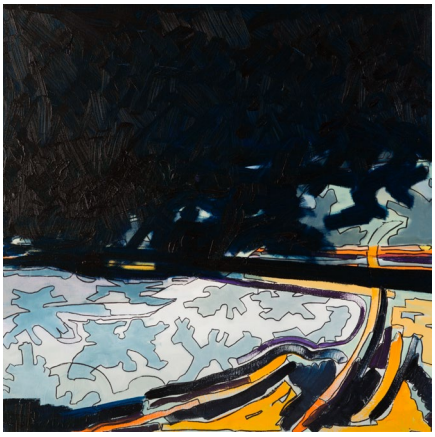
consumer lifestyle within the broader story of climate change. It comprises an archival photographic record of plastics found on walks along some of the waterways in Britain, influenced by my desire to connect with / travel through the landscape, and is developing into an interest in mapping, geography and geology. Alongside this, the project evolved to focus on experiments in ice casting and plastic casting using self-generated and collected waste packaging.

By bringing these elements together as an installation to question their inter-relationships, (through metaphor, tangible / tactile objects, photography and film), the work aims to explore questions around: fossil fuels; consumption and packaging; the

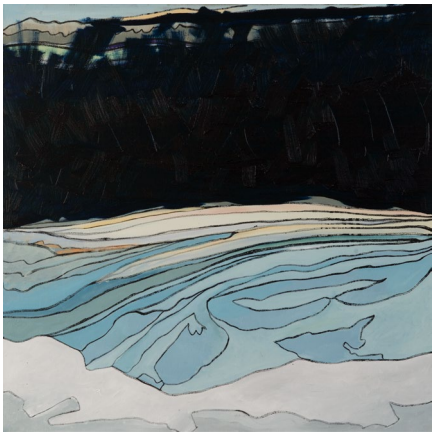
properties and behaviour of plastics; the impact of plastics on the environment; our anthropogenic footprint; past and future geology; ocean currents; sea ice decline; sea-level rise; and global warming. The story is complex but tries to engage the audience by making it easy to interact with the materials. For me, *What Goes Around Comes Around* is about offering the viewer as much information as they want to take, and for the curious, the work has successfully acted as a device leading to deeper conversations about the research and science behind it.

I have also continued to explore the use of painting as a more emotional and responsive medium, for example, the paintings *Blue I, II, and III* (2016). Each previously existed as oil on canvas representations of landscapes that I have visited. They have accumulated new layers over the last 18 months but their present form was made whilst writing this essay as an emotional response to thinking about climate change so intensely. Each is inverted from its original orientation with a significant area scrubbed out in Prussian blue. For me, these references are associated with the

(20) Hannah Scott, *Blue I*, 2016



(21) Hannah Scott, *Blue II*, 2016



(22) Hannah Scott, *Blue III*, 2016

dark beauty of oil, and my overwhelming sense of loss. While the landscape underneath still exists, I will never be able to look at it in the same way that I used to, free from the burden of this knowledge, regardless of whether I choose to ignore or deny scientific evidence.

CONCLUSION

Climate change is not only about extreme weather events. It encompasses everything from economics, politics, fashion, psychology and day-to-day lifestyle choices. It has widespread contributing factors such as globalisation and population growth, combined with the desire for higher living standards, and the ever increasing expectations embodied by the current, dominant, socio-political idea of *progress*.

Plastic has brought huge possibilities and benefits to the world. Paradoxically however, it is an unsustainable material with a significant and persistent environmental footprint. It is related to the story of climate change by its constituent parts, which are extracted from the earth and manufactured into innumerable objects with different properties, all intended for human consumption. Each step of this process contributes to land, water, and air pollution, which in turn can lead to a variety of climate-related problems, such as atmospheric and ocean warming, polar sea ice decline, and the consequential potential release of microplastics into the ocean. In Britain, the established culture of

convenience encourages the production of single-use plastic and consumer demand for products like bottled water is driven by deep-rooted cultural values. Plastic can be used as a metaphor for the relationship between humans and the environment, and can be considered an empowering icon with local and global relevance, reminding people that change is needed.

Art is a means of raising awareness, and visual representations of climate change have been shown to successfully attract attention. However, they can also distance the viewer depending on the nature of the image, leading one to conclude that subtle messages might be more engaging. With this in mind artists have been shown to draw on ideas of the aesthetic using interruption, self-deprecation, contradiction, and juxtaposition to lure the viewer in, before reminding them of inconvenient truths. The creative repurposing of waste materials, whether collected or self-generated, essentially means less new *stuff* is made, and in the case of work created using naturally occurring materials, there is no obsolete *thing* that persists. In addition, bringing forgotten or

extraordinary objects to the forefront of the mind can, arguably, connect people to things they might otherwise feel disconnected from, attributing value and perhaps therefore encouraging a duty of care.

My practice is closely tied to these ideas and tries to embody some of the approaches discussed, like the considered use of materials and their presentation, as well as reflecting on my own journey as a British consumer, and contributor to global climate change. The combination of different mediums through the use of installation has been central to my artistic practice and, while I find painting cathartic, I feel it is less easy to understand. I therefore find it increasingly important to work with authentic materials like plastic and ice. Exploring installation is a purposeful step towards placing art in the public domain, as one way of reaching wider audiences. For me, communicating climate change is about encouraging discourse and self-realisation without being didactic, but at the same time with enough authenticity and credibility to empower people to want to take responsibility, individually and collectively.

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