

# **Ecologies of Display: Contemporary Art, Natural History Collections and Environmental Crisis**

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## **Abstract**

This article explores the development and display of contemporary art in natural history collections as a way to engage audiences with environmental concerns at a time of ecological crisis. It contextualises this field of practice within recent art and curatorial history and explores this work in relation to long-term programmes of contemporary art in the context of natural history collections at the Natural History Museum, London, Museum für Naturkunde, Berlin, and the Horniman Museum and Gardens, London. I observe the possibilities this work presents for encouraging engagement with ecological distress through exhibitions and observe the challenges inherent to this curatorial work.

## **Introduction**

This article explores the development and display of contemporary art in the context of natural history collections as a generative way to engage audiences with environmental concerns at a time of ecological crisis. Since 2019, UK museums across the sector have been declaring a climate crisis and ecological emergency (for instance Natural History Museum, 2020 and Horniman Museum and Gardens, 2019). This followed in the wake of the 2018 rise of Extinction Rebellion and the School Strike for Climate along with wider public concern and awareness about climate breakdown (*Engaging the Public on Climate Risks and Adaption*, 2021). There have also been several significant interventions in the cultural sector responding directly to ecological crisis. For instance, Culture Declares Emergency was initiated in 2019 as an international movement of individuals and organisations in the art and museum sector declaring climate and ecological emergency and ICOM's 2019 resolution 'On Sustainability and the Implementation of Agenda 2030' sought to mobilise the UN's 17 Sustainable Development Goals within the museum

sector (see McGhie, 2020: 659-660). The Museums Association recently called for museums to maximise sustainability, raise awareness and champion change about the ecological state of play (Museums Association, 2021) and climate crisis was a significant theme in the organisation's annual conference in 2021. In addition, a body of academic literature has been emerging detailing the challenges and opportunities of engaging visitors with climate change and its effects in museums (for instance, Cameron, 2011; Cameron and Neilson, 2014; Newell, Robin and Wehner, 2016; Lyons and Bosworth, 2019; Serafini and Garrard, 2019; Harrison and Sterling, 2021). This activity provides the backdrop to an increased momentum in museums tackling this pressing issue on gallery.

Natural history collections are well placed to address ecological crisis through displays and exhibitions due to the types of collections in their care and to date, activity in response to this issue has been curatorially wide ranging. Approaches have spanned large scale masterplan redisplays, like the 2017 replacement of Dippy the Diplodocus with Hope the Blue Whale at the Natural History Museum, London, to place an anthropogenic extinction narrative centre stage (Syperek, 2020; Lowe et al., 2020), to more modest but no less effective interventions in existing displays of historical taxidermy such as *Extinction Voices* (2019) at Bristol Museum and Art Gallery, which shrouded extinct and endangered species in mourning veils to raise awareness about the threats facing wildlife today, such as poaching. These different approaches, however, have been united by placing human activities at the heart of environmental breakdown. The Natural History Museum, London, recently framed ecological crisis within the Anthropocene, a term proposed by the Nobel Prize-winning atmospheric chemist Paul Crutzen and the biologist Eugene Stoermer in 2000 as the name for a new epoch to replace the Holocene, in recognition that evidence of human activity is traceable in the geological strata of Earth (Crutzen and Stoermer, 2000). As the feminist philosopher, biologist and science and technology scholar Donna Haraway has poetically stated: 'the effects of our species are literally written into the rocks' (Haraway and Kenney, 2015: 259). But more than this, the

Anthropocene has become somewhat of a 'charismatic mega-concept' (Lorimer, 2017: 118), gesturing to anthropogenic planetary change beyond its geological origins to provide an ecological rallying point for creative practitioners and academics from the arts, humanities and social sciences, where it has gained traction and precipitated extensive activity in these fields. It has been observed that the Anthropocene appears to have 'captured an *intellectual zeitgeist*' that 'is proving extremely generative of conversation and creativity' (Lorimer, 2017: 121-122). It follows that the Anthropocene concept has provided a frame, if not always the name, for a number of recent ecologically orientated exhibitions. The Natural History Museum, London, has recently engaged visitors through 'Anthropocene' titled webpages featuring articles on biodiversity loss, climate change and plastic pollution, as well as the evolving exhibition *Our Broken Planet: How We Got Here and Ways to Fix It* (2021), staged to coincide with COP26 to address the ways humans have impacted the natural world. Such initiatives foreground the various ecologies of humans and other lifeforms inherent to climate crisis, presenting complex entanglements of nature and culture, or naturecultures (Haraway, 2003), and offering a site where museum professionals and the public can consider and reflect on various environmental issues in the past, present and future.

Another approach used in natural history collections to address the anthropogenic threats facing the planet is the development and display of contemporary art. As a discrete field of artistic and curatorial practice, this work has taken form as interventions, commissions, collaborative projects and temporary exhibitions, as well as many instances where artists have worked behind the scenes of the public galleries, engaging with collections, institutional histories and research undertaken on-site by museum scientists. Much of this work has occurred as one-off projects and a host of examples could be cited to demonstrate the proliferation of this field of practice in natural history collections around the UK, Europe and North America. However, it is significant that there have also been some long-term contemporary art programmes running in natural history collections, including at the Natural History Museum, London, where there was a dedicated curator

of contemporary art between 2005-2013, Museum für Naturkunde, Berlin between 2014-2018, and the Horniman Museum and Gardens, London, particularly since 2019 when the museum declared a climate emergency. That these major museums embedded this type of activity into their programmes on a long-term basis testifies to a recognition of the generative role that contemporary art can play in this context. It is examples of work about ecological crisis from these more sustained programmes of activity that form the focus of this article to investigate the opportunities presented through an ongoing commitment to these necessarily collaborative and interdisciplinary curatorial practices.

This text is informed and guided by my disciplinary perspective as an academic art historian, so while museum professionals might anticipate more reliance on visitor evaluation here – an important part of museum work – my analysis is instead visually, theoretically and historically situated. After historicising this field of artistic and curatorial activity and establishing its ecological potential through an engagement with theoretical literature, I examine a series of case studies from the institutions identified above and evaluate the possibilities and limits of this work when it comes to addressing climate crisis. First, *The Ship: The Art of Climate Change* (2006) at the Natural History Museum, London, is considered to explore the possibilities this exhibition offered for raising awareness about ecological crisis and expanding audiences at a poignant moment, when climate change was – as is the case today – prominently in the public eye and under the media spotlight. Next, A.K. Dolven's intervention *echo echo* (2015), commissioned as part of the Art/Nature programme at the Museum für Naturkunde, Berlin, is examined to reveal how this project functioned on multiple levels by creating a new artifact for the collections, fostering collaboration between an artist and a museum scientist, enlivening a permanent collections display and, moreover, rendering the anthropogenic effects impacting wildlife and habitats tangible in the exhibition space. Finally, this article considers the contemporary artist Sonia Levy's work produced behind the scenes at the Horniman Museum and Gardens, London. Levy's *For the Love of Corals* (2018) took the institution's

globally significant coral conservation research outside of the aquaria to engage audiences in ecological issues in other contexts. It also provided a chance to visualise corals in ways that might promote an ethic of care and a sense of responsibility towards the natural world amongst viewers.

### **A recent art and curatorial history: Contemporary art in natural history collections**

The development and display of contemporary art in the context of natural history collections represents a distinct field of artistic and museological activity with a recent art and curatorial history, yet to date there are relatively few texts examining this work exclusively (Arends, 2009a; Arends, 2020; Hermannstädter, 2019; Lange-Berndt, 2014). This practice can be seen to emerge from both the SciArt programmes that gained momentum in the UK in the 1990s with the aim of fostering collaboration between artists and scientists, as well as from the practice of commissioning and displaying contemporary art in non-art museums. While there are examples such as the Imperial War Museum's artist residency programme initiated by then Keeper of Art Angela Weight in the 1980s (Moriarty and Weight, 2008), this work also gained pace in the 1990s, with artworks now having been presented in collections ranging across anthropology, social history, science, medicine, historic houses as well as natural history. In 1994 the Arts Catalyst was established with the express aim of commissioning new works that traversed the arts and sciences and in 1996 Wellcome Trust's sciart programme was established to support partnerships across these two disciplines to result in numerous collaborative projects (see Glinkowski and Bamford, 2009 and Arends and Thackara 2003 for more on Wellcome's sciart programme). Both of these initiatives resulted in collaborations between artists and natural history museums. For instance, Arts Catalyst worked with the artist Jan Fabre who produced *A Consilience* (2000), a film developed and displayed during a residency at the Natural History Museum, London. The film showed the results of a collaboration with museum entomologists, who feature dressed-up as insects and performing their creatures of study. In addition, Wellcome Trust sciart funding supported the British artist Mark Fairington, who carried out a

residency at the Oxford University Museum of Natural History between 1999-2002, culminating in the exhibition *Dead or Alive* (2002) at the same institution. This exhibition presented Fairnington's paintings of preying mantis and treehoppers that were produced during a long-term collaboration between the artist and museum entomologist Dr George McGavin, who studied these species together during fieldwork in Belize (Arends and Thackara, 2003; Ede, 2005: 168-170; Fairnington and Gisbourne, 2002).

It has now been thoroughly examined in the literature that the presentation of contemporary art in non-art museums presents various possibilities for expanding audiences, reinvigorating displays, reinterpreting collections, performing institutional critique, fostering collaboration across disciplines, engaging visitors in multisensory ways and activating the emotions (for instance Arends, 2009a; Arends, 2020; Barrett et al., 2021; Arnold et al., 2020; Bencard, Whiteley and Thon, 2019; Carroll La, 2011; Cass, Park and Powell, 2020; Masset, 2019; Putnam, 2009; Redler Hawes, 2010; Robins, 2013; Rossi-Linnemann and de Martini, 2020; Wade, 2020; and Wade, 2021). The art education scholar Claire Robins has observed that 'there is a growing awareness that visual, affective and intellectually engaging aspects of artists' interventions may encourage new experiences for audiences so as to re-conceive and reconfigure museums' (Robins, 2013: 1), offering transformative possibilities that can contribute to reshaping the museum experience, as well as museum practices, in the face of ecological distress today. In the context of collections and museums with a science focus, Camilla Rossi-Linnemann and Guilia de Martini have suggested that this work can also aid communication and interpretation, educate visitors and prompt discussion (Rossi-Linnemann and de Martini, 2020: 13). The potential engagement opportunities of such work are well established. Nevertheless, the presentation of contemporary art in non-art museums has equally faced criticism for being inaccessible to visitors or even overlooked by those who may not be accustomed to engaging with artworks and who might need further interpretation to make sense of them (Robins, 2013: 9-10; Redler Hawes, 2020: 82 and 87). Such cross disciplinary endeavours present challenges and natural history collections are

far from being immune from this risk. Some of the ways this challenge has been addressed are examined through the case studies that follow.

A curatorial approach that entangles nature and culture is fruitful as a basis for considering ecological crisis through display and exhibitions, presenting the reality that all life on Earth is interconnected. It is important to clarify that the use of the term curatorial here refers to practices of exhibition-making, recognising that natural history curators are frequently collections-focused with separate exhibition departments often tasked with delivering exhibitions in natural history museums (Lowe et al., 2020). The development and display of contemporary art in natural history collections provides a way of bringing nature and culture into relation to provide opportunities for creating what I have referred to elsewhere as ‘ecological exhibitions’, which present ecological content and also work in ecological ways (Wade, 2020). If ecology is understood in the sense coined by Ernst Haeckel in the 1860s (‘oecologie’) as the dynamic relationships between beings, things and their surroundings (Arnold, 1996: 3), when applied to exhibition-making it can bring issues such as climate change, habitat loss and anthropogenic impacts on wildlife to the fore through an approach to display, content and interpretation that brings things, beings and disciplines – including objects, artworks, artefacts, specimens, humans and nonhumans, art and natural history – into relation with one another to perform what the museum studies scholar Fiona Cameron has called ‘ecologizing experimentations’ (Cameron, 2015, see also Wade, 2020 for an analysis into this concept in relation to Mark Dion’s *Oceanomania* cabinet of curiosities at the Musée Océanographique de Monaco). Cameron observed that the dualistic principles that underpin the modern museum as an institution (i.e. one space for natural history collections and another for art) do not acknowledge the inherent entanglements of humans and other lifeforms that are so fundamental to thinking through the current ecological crisis (Cameron, 2015: 18). Cameron proposes ecologizing experimentations as a way to resist binary thinking and produce more equitable, inclusive and interconnected displays for these ecologically troubled times (Cameron, 2015: 29). This approach presents possibilities for decentring the human to bring all earthly life into the sphere of care and consideration, diluting the sense of

human exceptionalism that was responsible for creating the chaos of climate crisis in the first place. As theorist Eva H. Giraud recognised, 'Narratives of entanglement have [...] proven important in implicating human activities in ecologically damaging situations and calling for more responsible relations to be forged with other species, environments, and communities' (Giraud, 2019: 1). While Giraud rightly observes that simply acknowledging these entanglements is not sufficient to respond to the anthropogenic threats facing the planet (Giraud, 2019: 7), it is an approach that can be used productively by museums to engage visitors with issues pertaining to the current ecological crisis. As a curatorial strategy it also facilitates interdisciplinary modes of exhibition-making in which the arts and natural sciences can be brought into relation with one another in new and imaginative ways. This is particularly important given that it has recently been observed that art 'holds the potential for meaningful interdisciplinary and experimental research [...] which excels in [...] making climate breakdown meaningful, affective, legible, and politically urgent' (Demos, Scott and Banerjee, 2021: 8). When such an approach is realised through the development and display of contemporary art in the context of natural history collections, it presents possibilities for fostering collaboration between museum professionals in different types of institutions, expanding museums' potential visitors by engaging both arts and science audiences, as well as rendering ecological crisis emotive, tangible and, ultimately, actionable.

### **Natural History Museum, London's Contemporary Art Programme: *The Ship: The Art of Climate Change* (2006)**

In the UK, the Natural History Museum, London, can be seen as somewhat of a vanguard in the presentation of contemporary art in natural history collections developing a number of exhibitions over the years. These include the aforementioned *A Consilience* (2000) by Jan Fabre, curated externally by the art organisation Arts Catalyst, Mark Fairnington and Giles Revell's *Fabulous Beasts* (2004), which presented largescale photography and photorealistic paintings of insects and James Mollison's photographic portraits of apes in the exhibition *Face-to-Face* (2005), programmed by the learning department. All of these exhibitions occurred before the appointment of a



dedicated curator of contemporary art, Bergit Arends, at the museum between 2005-2013, which signaled the museum's commitment to incorporating contemporary artistic activity on a long-term basis and facilitated the delivery of a ten-year programme of art and science exhibitions that were at the heart of the funded redevelopment of the Jerwood Gallery. A number of high-profile commissions, collaborations, residencies and exhibitions followed in the wake of Arends' arrival, including Mark Dion's *Systema Metropolis* (2007) (Arends, 2019), Tessa Farmer's *Little Savages* (2007) (Farmer and Kaplan, 2008 and Lange-Berndt, 2014), the group show *After Darwin: Contemporary Expressions* (2009) (Arends, 2009b), Lucy and Jorge Orta's *Amazonia* (2010) and then the International Artist Research Residency Programme (2010-2012) (Arends, 2020).

While the contemporary art programme came to a close in 2013 as a result of cuts to funding, an enduring legacy can be found in the museum's Treasures Gallery where Tania Kovats's *Tree* (2009) is installed in the ceiling (Arends, 2009c). This was the museum's first permanent installation of contemporary art, commissioned to mark the bicentenary of the birth of Charles Darwin and the 150-year anniversary of the publication of *On the Origin of Species by Means of Natural Selection* (1859). In more recent years, contemporary art has featured in some of the museum's temporary exhibitions, for instance Heather Peak and Ivan Morison's sculptural installation *Cetaceans* (2017), which was presented in *Whales: Beneath the Surface* (2017) and there is also an ongoing NHM art-science interest group run by staff at the museum ('Art and Science at the Museum').

While many of the artworks commissioned and displayed in the Natural History Museum, London, have related to ecological concerns, the museum explicitly addressed environmental crisis through the presentation of *The Ship: The Art of Climate Change* (2006). The show was the result of a partnership with Cape Farewell, an arts organisation founded in 2001 by David Buckland as a cultural response to climate change (capefarewell.com). Between 2003 and 2005, Cape Farewell ran three expeditions to Spitsbergen where artists, scientists and educators journeyed to experience climate

change in the arctic first-hand, making work in response to what they found there (Buckland, 2006: 6). *The Ship: The Art of Climate Change* was one of a series of exhibitions presenting the resulting works which took shape in wide-ranging media, including dance, photography, film, sculpture and installation. Iterations of the show subsequently travelled to the Liverpool Biennale of Visual Art and Sage, Gateshead in 2006, with other works presented at the Eden Project, Cornwall in 2007. The partnership between Cape Farewell and the Natural History Museum, London, was therefore unique in the exhibition's run for bringing an art audience into a natural history museum and engaging existing natural history museum visitors with contemporary art, thereby expanding the potential audiences for art and natural science alike. Significantly, the partnership also resulted in new commissions for the exhibition.

Given Cape Farewell's aim and the artists' direct engagements with climate breakdown, the exhibition presented content that was explicitly ecological (i.e. focussed on climate change and its effects) but through artistic, rather than scientific means. In the exhibition's press release it was observed how the exhibition sought to 'use the creative vocabulary of art rather than science, to raise an awareness that everyone individually can help alleviate the impacts of climate change', pointing to an explicit environmental objective behind the exhibition (Cape Farewell, 2006). This makes *The Ship: The Art of Climate Change* an early example of the sort of ecological exhibition-making described earlier, in which contemporary art is presented in natural history collections to draw attention to environmental breakdown specifically. In the same way that exhibitions about ecological issues are taking place today in a landscape where there is wide public and media attention around the subject of environmental crisis, this was true in 2006 when *The Ship: The Art of Climate Change* opened its doors. This was the same year that *An Inconvenient Truth* (2006), a documentary film that charted then Vice President Al Gore's efforts to raise awareness about global heating, grossed almost \$50 million at the box office testifying to the mass appeal of this subject. It was also the same year that the renowned *The Stern Review on the Economics of Climate Change* was published, which gained extensive

media coverage in its wake (Hilty, 2006: 11). The exhibition was therefore timely, coinciding with this wider shift in public recognition of climate change and its effects and able to harness this popular interest.

There were ultimately 108,827 visitors to this free entry exhibition (Hilty, 2006: 37), which served as a launchpad for further ecologically themed events at the museum, including a Climate Summit for 16-18 years olds attracting some 800 participants, as well as acting as a testing ground to establish audience interest in art/science projects. Free entry removed any financial barriers to accessing the exhibition, making it more likely that visitors already at the Natural History Museum, London, might attend as part of their visit.

Nevertheless, a small evaluation of the exhibition revealed that half of respondents felt that they did not understand the exhibition and wanted more interpretation to make sense of it (Dawson, 2006: 9), gesturing to one of the potential difficulties in engaging visitors with contemporary art in the context of natural history collections where audiences may be unaccustomed to encountering artworks. The Natural History Museum, London, appeared to have recognised this challenge. It provided further information in the form of an exhibition newspaper that could be purchased for £1 that introduced some of the artists and scientists who had taken part in Cape Farewell's expedition in an accessible way and provided tips about the measures that visitors could take themselves to help reduce their own carbon footprint at home (Paterson 2006).

This evaluation response, however, suggests that visitors had expected factual information to be the key out-take from an exhibition in this context, overlooking the emotional and affective possibilities that encounters with contemporary art can provide here. One of the works in the exhibition was Ackroyd and Harvey's *Stranded* (2006) (figure 1), a minke whale skeleton encrusted with crystals. The artists were drawn to make this work as a 'memento mori for our times' after seeing whale bones littering the arctic landscape during their expedition (Ackroyd and Harvey, 2006: 110). The resultant spot-lit installation appeared both beautiful and poignant, this sparkling cetacean skeleton recalling both the arctic ice and valuable jewels to

become fragile and precious at the same time, evoking both sorrow and wonder through its glittering form. The art curator Greg Hilty observed the power that emotional responses to ecological distress can have when it comes to changing attitudes (Hilty, 2006: 10). In a recent study to analyse the potential of artworks presented as part of ArtCOP21 in Paris to raise awareness about climate change, the authors observed that '[s]ome researchers suggest that a solely fact-based approach to communication will not lead to behavioral change and is therefore not enough to raise public awareness and create engagement' (Sommer and Klöckner, 2021: 60). The works in *The Ship: The Art of Climate Change* provided opportunities for activating visitors' emotions in response to the subject of climate change towards better raising awareness. Speculating on what the arts can do in times of climate breakdown, Demos, Scott and Banerjee suggest that they provide 'a vital site of intervention, complementary and alternative to the earth sciences, engineering, design, and economics, which have popularly defined climate-change discourse and policy' (Demos, Scott and Banerjee 2021: 1). Artworks can provide a different way into thinking through and responding to ecological issues, one that might activate the emotions in enabling ways, generating questions rather than necessarily providing answers and occasioning new lines of inquiry.

**Art/Nature. Artistic Interventions at the Museum für Naturkunde Berlin, 2014-2018: A.K. Dolven, *echo echo* (2015)**

Between 2014-2018, the Museum für Naturkunde, Berlin, ran the programme Art/Nature: Artistic Interventions at the Museum für Naturkunde Berlin, funded for the period by the German Federal Cultural Foundation. This international project involved a series of invited curators commissioning contemporary visual artists, sound artists and writers to make work in response to the museum, its collections, displays, science and histories. The work was presented amongst the permanent displays in a series of four separate interventions throughout the duration of the project. The programme resulted from the museum's aim to open the institution out to different disciplines, promote transdisciplinary dialogue and attract new visitors to create 'an experimental space for the interaction between art, museum practices and

scientific research to establish new perspectives on nature and museum culture' (Hermannstädter, 2019: 11). The programme was a cross disciplinary and collaborative endeavour from the outset, with natural history museum scientists and curators working alongside art curators and practitioners, learning more about how one another worked along the way. Recognising the diversity of visitors who would encounter this work, an audience evaluation programme accompanied each of the four rounds of interventions so that the museum might implement changes as the project progressed to better support audiences in their engagement with this work. By the last iteration of artist interventions, audience evaluations signaled that 95% of visitors wanted the programme to continue (Hermannstädter, 2019: 15), suggesting it became a well-received and well-established part of the museum's offer.

The interventions tackled a number of topics and took wide ranging forms. Over the project, eleven interventions were commissioned of artists and writers including Sabine Scho & Andreas Töpfer, A.K. Dolven, Saâdane Afif, Serotonin, Fernando Bryce, Monika Rinck, Klara Hobza, Ulrike Haage, Elizabeth Price, Mark Dion and Assaf Gruber. Their interventions spanned the spectacular to the subtle, impacting the surrounding natural history displays in different ways. The Norwegian sound artist A.K. Dolven's intervention *echo echo* comprised the two-part sound work *sound outside outside the window* (2015) which, as well as a sound installation in the Hall of Birds, included a field recording of arctic cod mating that was installed in a large sculptural installation of preserved specimens of fish and other creatures at the museum, known as the Wet Collections. This work functioned on multiple levels and facilitated various levels of engagement with the museum, its staff and its visitors. Significantly, it also prompted the consideration of ecological concerns in the context of this museum.

The work was made through a collaboration between the artist and the museum biologist Karl-Heinz Frommolt who planned and carried out an expedition to capture the audio of a species currently not represented in the museum's Animal Sound Archive. As a result, the artwork produced a new

artifact for the museum's collections in the form of an audio file that became part of the institution's archive. During the resulting exhibition, the sound piece was installed in the Wet Collections, a sculptural glass cube containing the museum's spirit collection (figure 2). Despite its impressive display in a dramatically illuminated modernist glass cube, this collection comprises a repetitive series of fish and other creatures in spirit jars. Fish find it hard to compete with dinosaurs in natural history museum displays. They are often small, harder to preserve and relatively ordinary in comparison to the superlative specimens favoured by many museum audiences. This was amusingly highlighted through the efforts of the curator Mark Carnell in his entertaining blog 'Underwhelming Fossil Fish of the Month', which aimed to increase engagement with these less charismatic, but no less important, museum fish specimens at the Grant Museum of Zoology, London. As Carnell (2018) noted, 'not every museum specimen can be the first, last, oldest, biggest or nicest smelling [...] it's important to take some time and space to think about the mediocre'. While these lifeless, faded spirit jar specimens possess an allure through their cumulative presentation in the spectacular design of the Wet Collections display, individually, they are rather unremarkable, perhaps even ugly, and therefore challenging to engage audiences with. This may have been the reason behind the dramatic, sculptural response taken by the Museum für Naturkunde which made the decision for its research collection of spirit specimens to be shown in-use by scientists through the glass walls of this display. A.K. Dolven's audio intervention added a multisensory and multimedia layer to this display during its installation, providing a further way to enliven this collection, returning the sounds of the sea to the specimens of fish on display to evoke their wider habitat (A.K. Dolven in Hermannstädter, 2019: 71).

As well as fostering collaboration between an artist and a scientist and adding a multisensory layer to existing displays to enhance visitors' engagement with the collection, this work also drew attention to ecological issues. The curator of this intervention, Gaby Hartel, recognised that during their field work the artist and scientist captured the sound of the cod, but also caught some 'acoustic "bycatch"' (Hermannstädter, 2019: 70). In addition to the sound of

the fish mating, the recording documented the sound of the vulnerable cods' habitat. This included the ambient sounds of the surrounding sea and also the impact of human activity on the oceans' audio ecosystem, with motors of boats being audible on the sound file. The audio drew attention to one way that human activity is impacting habitats to affect the lives of marine species, thereby making manifest the inherent entanglements of humans and other species in the ecologies of the Anthropocene. Dolven and Frommolt may not have set out to make work about the impacts humans are having on wildlife and ecosystems, but their work drew attention to the ecological reality that everything is interconnected, recalling the eco-theorist Timothy Morton's stance that being ecological does not necessarily require any special effort, because humans are always already inherently enmeshed with other lifeforms (Morton, 2018).

One of the challenges of communicating ecological issues is finding effective ways to represent them. The long-term effects of climate change unfold over time, making it hard to grasp their urgent reality. Contemporary art can help to render ecological issues tangible, visible and, in this case, audible by situating them in space and time. Indeed, it was the creatures out of sight beneath the surface of the sea that A.K. Dolven was able to bring into the very human sphere of the museum space through this sound installation.

### **Horniman Museum and Gardens, London: Sonia Levy, *For the Love of Corals* (2018)**

In recent years, the Horniman Museum and Gardens has presented a number of contemporary art exhibitions. This activity has increased momentum and taken a more explicitly ecological turn following the museum's declaration of a climate and ecological emergency in 2019 and the announcement of its Climate and Ecology Manifesto in January 2020. Recent exhibitions have included *Meltdown: Visualising Climate Change* (2019-2020) a touring photographic exhibition initiated by the climate change charity Project Pressure to document changing glaciers, Claire Morgan's *As I Live and Breathe* (2019-2020), which drew attention to plastic pollution in urban environments, Helena Hunter's *Falling Birds* (2020-2021), the result of the

artist's Artquest Research Residency at the museum, which explored avian extinctions, and the commissioning of Jasmine Pradissitto's *Bee Girl* (2020), a sculpture which aims to absorb car pollution from nearby busy roads so that bees might more readily locate the flowers in the gardens. Whilst there is no such explicitly formalised programme with a fixed timeframe such as Berlin's Art/Nature programme, this expansive activity expresses a commitment to this field of practice in ongoing ways and the Horniman Museum and Gardens' naturalcultural constitution, with natural history and anthropological collections, as well as live specimens on display, makes it ideally placed to marry art and the natural sciences in ecological ways.

In addition to making work in response to the collections, artists have also made work about the research taking place behind the scenes of the public displays. The Horniman Museum is home to an aquarium where a pioneering research programme, Project Coral, has developed methods to predictably spawn coral in captivity. Coral reefs are at risk from rising sea temperatures, ocean acidification and pollution with widespread bleaching events threatening these significant biodiverse ecosystems. The research underway at the Horniman Museum aquarium works towards conserving corals and coral reefs in the wild through work with corals in captivity, presenting possibilities for breeding programmes that might help repopulate reef habitats. In a move predating the artistic activity at this institution outlined above, the French artist Sonia Levy made a film about Project Coral as part of a residency with the arts organisation Obsidian Coast. *For the Love of Corals* (2018) documents the coral aquariums in the back of house laboratories of the Horniman Museum (figure 3). The film shows the scientists at work and captures footage of the corals at various stages of development, rendering the developing embryos visible to the human eye through the inclusion of magnified footage, which is both beautiful and otherworldly, prompting both wonder and affection towards these lifeforms. The accompanying soundtrack was developed from recordings taken on-site at the Horniman and includes the sound of a coral skeleton disintegrating in reference to the fatal bleaching events threatening coral reef ecosystems ('About the Art: Sonia Levy', 2018).



Levy shows corals to be surreal and marvelous in footage that recalls the balletic underwater scenes of sea creatures in the films of Jean Painlevé and Geneviève Hamon, which were similarly filmed through the glass walls of aquaria. While Painlevé and Hamon's films are known for combining the alien and the anthropomorphic, Levy languishes in coral's far from human qualities alone. Coral and other lifeforms that inhabit the sea can present challenges for wildlife conservation campaigns because they are out of sight, hard to comprehend and are often perceived to lack the 'cuddly' charisma that more typically induces a desire to care. Yet as the art historian Marion Endt-Jones has observed, coral has recently proliferated in exhibitions as a 'harbinger of climate change' (Endt-Jones, 2020: 183). Levy's film starkly visualises the damaged ecologies of the Anthropocene, which are made tangible through the entanglements of humans and corals fundamental to the delivery of Project Coral. Yet, the project has an optimistic spin. Levy's website states that Project Coral represents 'a case study of new paradigms for multispecies living, environmental conservation and natural history that are emerging in the wake of the Anthropocene' (sonialevy.net). Indeed, in *For the Love of Corals* scientists are shown intervening in the reproductive lives of these captive corals in a dimly lit basement laboratory to repair the effects of anthropogenic activities that render these creatures and their habitats vulnerable in the wild. The scientists are captured expressing curiosity towards corals, manifesting their care and concern for these species and reef habitats in ecologically troubled times through their delicate and methodical work. Despite uncertain ecological futures, in pursuit of their research these scientists manifest their hope, performing what the anthropologist Anna Lowenhaupt Tsing (2015) has called *living in the ruins*, where possibilities for flourishing might emerge from crisis when practices of care and responsibility are cultivated. Such concerns are at the heart of Levy's film. Not only this, but the captivating footage of vulnerable, developing coral embryos can raise awareness about these creatures' plight and also induce a desire to care as their lives slowly and seductively take shape before viewers' eyes.

Levy's project was not commissioned by the Horniman Museum and Gardens and was not developed to be specifically displayed in the museum itself. It has

been presented in various contexts outside the museum and also has an online presence through an iteration of the project subtitled *An Ecology of Perhaps* on the Critical Zones website (<https://critical-zones.zkm.de/#/detail:for-the-love-of-corals>). Viewers are likely to be principally from a predominantly art-focused audience, presenting possibilities for taking Project Coral beyond the museum's walls to engage individuals who may not ordinarily visit a natural history museum with the concerns at the centre of this project. This work underlines that as much as contemporary art can provide new ways into thinking through and engaging with ecological issues in natural history collections, natural history collections also provide the material, impetus or catalyst for artists to develop work on these topics, making the ongoing dialogue across these disciplines central to the development of this work. The result for museums is the genuine possibility of offering new forms of encounter to visitors of arts and science institutions alike.

## **Conclusion**

Natural history collections have been taking various approaches to exhibiting environmental crisis with the commissioning and display of contemporary art being just one of the many methods at work. The case studies discussed have been shown to present opportunities for raising awareness about ecological issues and engaging visitors in multisensory and emotive ways, providing another route into the issues at stake in this work. These projects have all fostered an interdisciplinary approach, bringing art and the natural sciences into relation with one another in ecological ways to create experimental and generative methods with which to think through environmental issues and provide space to imagine and enact more positive ecological futures.

Collaboration has been an essential part of these programmes and their long-term durations allowed time and space for trust and relationships to develop between participants as they gained insight into the different ways each other work, as well as for audiences to become accustomed to encountering these projects in the museum space. Developing new programmes for existing and

new audiences sits at the riskier end of audience development activities for institutions and is something that needs dedicated time and resources to deliver (Audience Agency 2020). This was clearly recognised through the projects discussed, two of which had dedicated funding to develop this stream of work and all of which committed to this activity on a long-term basis. In each instance, bringing art and natural history museum professionals together to deliver the projects was central to successful delivery. *The Ship: The Art of Climate Change* was an exhibition resulting from a partnership between an arts organisation and a natural history museum at a time when the museum had just appointed its first dedicated curator of contemporary art. The Museum für Naturkunde, Berlin, appointed art curators on a freelance basis to work alongside museum colleagues to facilitate the delivery of a series of interventions. Finally, the Horniman Museum and Gardens has hosted touring exhibitions (*Meltdown: Visualising Climate Change*) as well as exhibitions resulting from residencies supported by arts organisations and facilitated dialogue between museum professionals and the artists themselves. It becomes clear then, to extend the analogy, that as well as ecologies of display, this field of practice results in ecologies of researchers and practitioners, where the interrelationships between a variety of professionals, their specific expertise and interests and the ways they respond to the museum environment from different disciplinary perspectives becomes crucial to this lively field of exhibition-making. Not only do such projects present possibilities for novel outcomes by bringing diverse perspectives and ways of working together, but through their collaborative and interdisciplinary character they provide a blueprint for the sort of collective and multidisciplinary approach that urgent global issues such as environmental breakdown demand.

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