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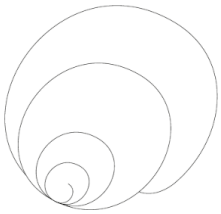

RESEARCH ARTICLE

Curating degrowth engagement through art-science-activism

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Abstract
This paper discusses the value of curated art-science-activism collaborations that explore local to global environmental limits from a social and behaviour change perspective. This socially engaged ethos uses *art as verb* as a practise to generate participatory and collaborative engagement in communities. It seeks to shift social norms by fostering conscious immersion and intimate connection to nature through participatory and collaborative processes delivered in partnership with creative, scientific and ecological organisations. The approach sets the tone for contemplating human impact and promoting desirable pro environmental behaviours through creative perspectives, curative actions, scientific information and decision-making strategies. This connects with the Degrowth agenda that seeks the development of alternative futures that provide for human and non-human wellbeing within planetary boundaries. Although art and creativity can generate empathetic personal connection, a shift in social norms arises from engaging citizens pragmatically through collective processes of deeper reflection and active engagement and a strategy for fundamental change that is multi-disciplinary and towards the collective good.

Our economic system is incompatible with life on this planet. (Hickel, 2020)

Abrupt environmental change (biodiversity loss, climate change, deforestation, ocean acidification) derives from an unjust economic system based on the premise of infinite growth using finite physical resources. These contemporary, catastrophic environmental changes are intimately linked to the huge environmental transformations created globally during modern colonialism (1550-1950), which established unequal power structures between humans that persist to this day (Moore, 2015). In *Working for the few,* OXFAM (2014) reported that the combined wealth of the world's richest 85 people was equivalent to that owned by 3.5 billion of the poorest people. Similarly, OXFAM's latest disparity report, *Inequality Inc.* (2024), presented to the world's heads of state in Davos, Switzerland,

outlined that since 2020 the top five richest people have doubled their wealth while nearly 5 billion have become poorer. This report emphasised that the ability of the world's wealthiest to wield political influence skews policy making around tax rates, financial regulation, public services and so on, undermining the democratic will of the rest of society. As such, corporate power continues to drive climate change by focusing on short-term profits at the expense of progressing just transitions towards renewable energy and supporting more profound societal change (OXFAM, 2024).

These issues are recognised by degrowth which advocates for strategies that bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being ahead of profit (Hickel, 2020). The degrowth agenda seeks to change the assumption that continual growth is a good in itself, aiming instead to promote human and non-human wellbeing within planetary boundaries by reducing consumption and production, addressing colonial power imbalances, and inequality within society (Hickel, 2021; Richardson et al., 2023). As such, scholars and activists explore how we can bring about a radical reshaping of lifestyles, cultivate environmental stewardship, establish non-marketised social bonds, and develop economies based on care and reciprocity (Gibson-Graham, 1996), whilst ensuring the autonomy of local communities and initiatives (Savini, 2023). Here, degrowth points to the importance of integrating a "pluriverse" of perspectives and knowledges into the development of possible futures particularly those oppressed by the Western Modern/Colonial paradigm (Kothari et al., 2014; Kothari et al., 2019). Increasingly literature explores strategies beyond localism and the question of how to "scale up" desirable examples (Kaika et al., 2023).

Degrowth faces the difficult issue of engaging publics in uncertain futures. Whilst a psychological and social revolutionary change is needed, society perceives that a slowed down economy will directly impact people's incomes and security. We are faced with a paradox: people will not vote to make themselves (even) poorer, but continued economic growth makes people neither richer nor societies more equal. How can the benefits of degrowth be presented as the way forward? Whilst society is becoming increasingly concerned about the impacts of climate change in the present, and for future generations, it is also very difficult to contemplate drastic change and how it can be practised.

This paper presents one possible pathway for exploring the value of curating engagement with degrowth through art-science-activism collaborations. Can art-science activism advance the degrowth agenda through social and behavioural change projects? This paper explores some possibilities and emphasises how such projects present visualisations of degrowth futures to the public in ways which set the tone for contemplating human impact as well as promoting desirable behaviours.

The socially engaged ethos described above understands *art as verb,* and therefore as a practice which can shift social norms. Here, social norms are understood as the rules that govern behaviour and are shared by a group. These norms are different from individually held beliefs or attitudes and derive from perceptions about what others think and do (Perry et al., 2021). The practice of making art can foster conscious immersion and intimate connection with difficult subjects such as local exemplars of "abrupt global environmental change" (Moore, 2015, p. 1). Here, making art, and therefore "creativity," generates empathetic personal connection between participants and the subject at hand. The process of making and experiencing art, supports a "cognitive transformation" through which we learn to think about, know, and interpret the world and each other in new ways (Eisner, 2002). A shift in social norms arises from engaging citizens pragmatically through *collective processes* of deeper reflection and active engagement. Such collective processes foster trust and cooperation between citizens, enabling them to overcome self-interested and self-defeating outcomes amidst uncertainty (Ostrom, 2000). In such settings multi-disciplinary strategies for fundamental change emerge (Perry et al., 2021), which are oriented towards the collective good (Ostrum, 2000).

Such collective art-based and behavioural change projects can be conducted in partnership with creative, scientific, and ecological organisations. In this paper I discuss how to creatively engage the public with examples of locally experienced environmental change via a public exhibition, events, and workshop programme. I will show how this project raised awareness of regional exposure to climate and ecological crises in ways which align with degrowth agendas.

1. Art as Creative, Eco-Social Engagement

Contemporary art that has an ecological focus raises awareness of the environmental problems caused by human ways of living: “global change now underway […] makes the power of the world precarious” (Serres, 1992/1995, p. 11). Ecological art emphasises the correspondences lying in between society and nature, commodities, and matter by drawing attention to the physical, biological, cultural, political, and historical aspects of ecological systems as well as the potential for reclaiming, restoring, or remediating nature. It seeks to re-envision ecological relationships by presenting new possibilities for co-existence, sustainability, and healing towards what Indy Johar refers to as the creation of a *post ownership society* (Johar, as cited in Castle, 2018) where we will no longer consider that we ‘own’ the environment. According to Singleton (2024, p. 1), natural environments provide an “optimal context for the emotional and sensory-rich needs of learning experiences that transform eco-paradigms and develop land ethics.”

I am an artist, curator, and independent researcher working primarily to engage people with ecology and environmental issues through contemporary artistic practices. I believe that art can significantly affect how we perceive the living environment, and that our perceptions can be changed through social interactions and creative encounters in the places where we live. I create site-based responses by getting to know the people who live and work there, which results in drawings, film poems, digital recordings, and various forms of public intervention.

Art and creativity are a means to develop personal empathetic connection to Nature and to engage people pragmatically with locally experienced climate change and biodiversity loss. Talking about the environmental crisis involves exploring difficult themes with people that may be outside of their knowledge base and are often way beyond their control. This perceived state of ignorance and helplessness can leave people feeling ambivalent or numb to the extractive and destructive practices that lie at the origins of environmental crisis. I aim to show that we can work towards transforming these feelings if we reconnect more intimately to nature and each other by being creative together, using participatory and collaborative methods to collectively alter perceptions of the living environment and

develop co-responsibility for it.

For the last seven years I have been based in Auckland, Aotearoa New Zealand, where I have curated projects that transform the gallery space into a place for knowledge exchange, dialogue, and contemplation of the challenges that we are facing as a society. This approach creates new perspectives for audiences through exposure to the interrelationships of different bodies, disciplines, and world views. Embedding plurality involves collaborating with the distinct and often opposing agencies of artists, activists, scientists, and green businesses using the local environment as the learning context. This approach invites "difference (of agenda, interests, needs, capitals), as well as methodologies and power relations" (Aramburu et al., 2017, p. 5), creating opportunities for antithetical parties to come together in the open space of the gallery to take part in a rich, multifaceted communication that the public can participate in, contemplate, and play with, both physically and psychologically. These participatory and collaborative engagements instil a sense of ownership and capacity that enables us to learn from and with each other in a new field of possibility. Blue Radius is one such project, as I explore below.

2. Blue Radius

Auckland is Aotearoa New Zealand's largest city with a population of nearly 1.5 million. With an extensive 3200 km length of coastline, it is also known as the 'City of Sails' as living with the ocean is part of Auckland life (Figure 1). An estimated 25% of households own at least one boat, and having a beach view is highly sought after. However, recent extreme weather events, most notably Cyclone Gabrielle in 2023, which caused major flooding, extensive landslips, loss of life, and cost the country an estimated $14.5 billion, are causing Aucklanders to contemplate climate change and its effect on their lifestyles. Literally, "River, fire and mud are reminding us of their presence" (Serres, 1992/1995, p. 2). As awareness increases around how human lives are being affected, a refocussing of perspectives becomes more urgent.

Figure 1: *City of Sails, Auckland Waterfront.*
Note. City of Sails, by Ivor Wilkins, 2012, New Zealand Geographic (Kowhai Media). (Copyright 2025. Reprinted with permission.)

The Blue Radius project (2022) was a groundbreaking public exhibition and events programme in Auckland, Aotearoa New Zealand that advocated for a shift in social norms by raising awareness of climate change induced sea level rise in the region. It presented interrelated artworks that visualised how human-driven climate change and biodiversity loss will impact the future, which were juxtaposed with the impact on residents who will lose their favourite beaches, homes and lifestyles as a result of sea level rise. Through a combination of creative perspectives, environmental activism, scientific information and decision-making strategies, Blue Radius presented knowledge exchange across art, sustainability education, ecology, and a range of environmental disciplines (Figure 2). It offered a sensorial, emotional, and scientific engagement in order to imaginatively provoke citizens into thinking about sea level rise as a "collective phenomenon" (Stott, 2018).

Blue Radius engaged the audience with an array of contributors—indigenous and non-indigenous artists, a statutory marine management body, marine and environmental social scientists, indigenous activists, a carbon composting business. As such, the spectacle of sea level rise was presented as a plurality of creative, indigenous, technological, and scientific perspectives. This approach sought to produce a confronting yet holistic manifestation that

would speak to the dynamic, bi-cultural society of contemporary Aotearoa New Zealand.

Although Aotearoa New Zealand is considered to be strongly egalitarian where everyone has equal opportunity to better themselves, compared to the white majority, ethnic disadvantages are visible among Māori society. They earn less, have poorer health, and lower economic standards of living (van Meijl, 2020). In spite of this, Māori actively uphold their culture and language, defining themselves by their *iwi* (tribe), *hapu* (sub-tribe), *manuga* (mountain), and *awa* (river). This reflects their deeply rooted values of balance, continuity, unity, and purpose. Their knowledge base follows traditional, place-based knowledges developed in ongoing processes of observation and interpretation, guided by ancestral practices (Hikuroa, 2017).

Māori have a close relationship with land and sea that is governed by elemental cultural principles actioned through practical values. They uphold ecology as kin, aligning their needs with the plural natures of other beings. Māori also retain a multi-generational perspective of responsibility to ancestors and to future Māori yet to be born. This edified position of 'being a good ancestor', imparts the need for moral responsibility in long term decision making (Krznaric, 2021). Its importance came to light during the curation process and resulted in expanded programme coverage that specifically included and listened to Māori voices. These topics exposed the construction of a new luxury marina in an ecologically sensitive area; oppressive attitudes towards environmental activists; effects of extractivism on biodiversity; and how the impacts of warming oceans on marine life are also diminishing the potential of human lives and the prospects for future generations.

Figure 2: *Blue Radius Exhibition.*
Note. Exhibition view identifying key works. Own work.

In shaping the idea for Blue Radius, I imagined a bold representation of the complexity of climate change induced sea level rise. My ambition was to create a powerful decentralised stage that afforded emotional space to facilitate a resonance brought about by listening to other voices and stories. I foresaw the exhibition, programme of talks, workshops, and pop-up exhibition as spaces where open discussion could arise between actors who might otherwise never be sat in the same room, allowing for discomfort, disagreement, and dialogue to supervene. The gallery would become a site of disruption where the audience becomes participant, activist becomes artist, social scientist becomes activist, artist becomes scientist, with the aim of inciting curiosity and interaction to build a sense of anticipation and interest.

I was able to bring people together that I had worked with the previous year when making the collaborative audio/visual piece *Land Radius|2*, produced in 2021 for the *Dear 2050 Oceans on the Rise* exhibition in Zurich, Switzerland. I write in more detail in the next section about *Land Radius|2,* but the relationships that were formed among creative peers, scientists, and organisations whilst making this work were key to the conception and delivery of Blue Radius. It began as a follow-up discussion regarding the potential of a more wide-reaching sea-level rise exhibition. For me, it was the impact of mutual curiosity, interaction, and anticipation generated in the creation of the original work that ignited enthusiasm for Blue Radius. The support of Depot Artspace was vital here in providing

capacity for a large interactive exhibition, which was an unusual undertaking for the team. Their support included umbrellaing our successful funding application to community funders Foundation North which meant that we could pay artist fees, gallery costs, and also deliver a full public engagement programme.

3. Key Exhibited Works

Blue Radius explored the power of individual and collective voices to help illuminate structures of policy and decision-making and give voice to the nonhuman entities that suffer because of destructive human activity. This process presented locally experienced aspects of climate change and ecological emergencies happening along Auckland's shores. This multi-disciplinary approach supported connection-building across human and nonhuman communities to inspire, engage, and inform how we might navigate the future together with care for all lifeforms. I will briefly present the key works, before my discussion.

Figure 3: *Land Radius|2*.
Note. Still from Land Radius|2 by Laura Donkers. Own work.

Land Radius|2, is a 60-minute, meditative film devised and directed by me. It presents an audiovisual exchange between artists, scientists, and *mana whenua* (which refers to the authority and power held by local people over land or territory) who share observations and frustrations about the ecological emergency in the Hauraki Gulf Marine Park. A trail camera

was placed, as a proxy human sentinel, amongst the mangrove trees that grow along the edge of the Hauraki Gulf, aka Tīkapa Moana (the Mournful Sea). The video presents a record of the unceasing tide, natural phenomena (moonlight, gravitational forces, atmospheric conditions, sunlight) and some of the creatures who dwell there. A blue plastic tube shaped into a circle interrupts the ebb and flow to emphasise the multiple and often clashing claims made upon this environment by humans. The recording relies on a combination of favourable atmospheric conditions (wind causing movement and a change in temperature) to activate the motion sensor and trigger the trail camera into action. For the artist, this incapacity to influence when and for how long the camera makes a recording runs counter to usual videography methods, yet it epitomises the powerlessness that society is experiencing with the impact of climate change on the biosphere. As several witnesses acknowledge in their testimonies, we can no longer influence what is unfolding but must find new ways to live with the consequences (Figure 3).

This work was devised in response to a call for artworks on sea level rise by Climanosco, a Swiss art and climate science association, to show how closely human society is connected to the sea and how climate change is already affecting it. To begin the process, I initiated discussions with local organisations to seek guidance and support around engaging a broad group of people in conversation about the impact of sea level rise. It was important to show from the outset that I was looking for contributors rather than interviewees, and to make clear that I did not have an agenda or envisioned outcome, only that I wished to produce an unfolding picture of what climate change induced sea level rise meant to people. With their support I developed links with community-based individuals and professionals including marine/climate scientists. However, due to the ongoing Covid 19 situation and lockdown in the city of Auckland, I was unable to meet people in person and resorted to holding online or mobile phone-based conversations. Whilst the audio recordings I made were compromised in terms of quality, this also lent a sense of immediacy and authenticity that contributed to the inimitability of the testimonies.

Finding willing contributors felt at times like a treasure hunt where I was following clues and suggestions from people about who to talk to. People are busy, perhaps sceptical or disinterested, or passed on my contact details to others who then failed to respond, but

eventually I found my seven contributors. Open conversations produced a contributor-led approach to defining areas of local concern**.** Each drew from personal experience, presenting important perspectives on issues affecting their environments and communities. As each contributor evidenced their knowledge, new layers of connection between testimonies were exposed building a narrative of human priorities above those of nature, revealing a complex picture of what extraction practices, biodiversity loss, and sea-level rise pose for humans and nonhumans in Aotearoa New Zealand.

Figure 4: *Flaking concrete slurry, Narrowneck.*
Note. Photograph from *Coast Under Threat* by Stephen Perry. (Copyright 2025. Reprinted with permission.)

Coast Under Threat is a photographic essay by fine art photographer and local resident Stephen Perry who has a passion for documenting coastal concrete structures along his local beach introduced by authorities and individuals as hard engineering interventions to stop coastal erosion. Piles of imported stones, concrete, and rusty steel were photographed far from the cliff face, presenting evidence of the temporary and futile nature of human attempts to master nature itself (Figure 4).

Figure 5: *Tuakana Teina.*
Note. Photograph of *Tuakana Teina* by Bianca Ranson & Te Aata Rangimarie Smith. Own work.

Tuakana Teina took centre stage in the exhibition (Figure 5). This towering, tactile, three-dimensional "Carbon Stack," created by Bianca Ranson and Te Aata Rangimarie Smith, presented a confronting 'elephant in the room': an unavoidable reminder that climate change must be mediated by reducing CO_2 emissions (Donkers, 2022). The work adopted the concept of the "stack" developed by Richard Wallis, founder of The Carbon Cycle Company, and inventor of the Carbon Composter who helps individuals, companies, and communities to reduce CO_2 emissions by composting local food waste. Using carbon in the compost heap ensures that food waste gets properly composted down to a beneficial growing medium. Further, the stack represented the local challenges of community-led ecological activists Protect Pūtiki who had been rising in defence of the *Kororā* (Little Blue Penguin) and *mauri* (life force) of Pūtiki Bay to oppose the destruction of Kororā habitats by the proposed development of an 140-berth luxury marina on Waiheke Island in the Bay of Auckland. This marina would involve 300 piles being rammed into the seabed, causing a section of active Kororā habitat to be completely destroyed. The *Tuakana Teina* stack included a shredded 1000-page court injunction against the Protect Putiki protestors and a Pōhutukawa tree that had been ripped from the breakwater by marina contractors (Donkers, 2022).

Figure 6: *Not Quite a Church/Inciting Public Gathering.*
Note. Photograph of Not Quite a Church/Inciting Public Gathering by Nââwié Tutugoro. Own work.

Not Quite a Church | Inciting Public Gathering is the work of artist Nââwié Tutugoro, which takes an activist stance (Figure 6). Her work recalls the raid on Camp Kororā, the Protect Pūtiki activist's camp on Waiheke Island using blue tarpaulins reclaimed from the site. Born to a Kanak (indigenous Melanesian inhabitant of New Caledonia) father and Anglo-Argentinian mother, Nââwié's parents are both activists—political and environmental. Her mother was a founding member of the Rainbow Warrior, working with Nuclear-free Pacific and anti-whaling expeditions, and has more recently joined the Action Station panel. Her father has been a diplomat, fighting for independence in the Pacific. As a family, they have always held strong solidarity with indigenous rights, informing her participation in the Protect Pūtiki protests.

Figure 7: *Nga Aua Rere Kaharunga*.
Note. Photograph of Nga Aua Rere Kaharunga by Atareta Rerekohu Black. Own work.

Ngā Aua Rere Kaharunga is a woven fishing net sculpture by Atareta Rerekohu Black (Figure 7). Black weaves traditional Māori knowledge, genealogy, and traditional stories to convey relationships to the sea, land, and environment emphasising ethical relations with water and other nonhuman entities. From a *whānau* (family) of weavers and fishermen, Black's practice draws on *Mātauranga Māori* (Māori knowledge) and *Taonga tuku iho* (heritage*)* to create works that are influenced by her *whakapapa* (genealogy) and the creative practices of her *tīpuna* (ancestors). In 2020, under the guidance of her mentor Dante Bonica, Black started exploring traditional Māori fishing nets as an art form, with a specific focus on the construction techniques of *kupenga* (fishing net) made from *harakeke* (Phormium Tenax).

Figure 8: *Family playing My Coastal Futures online game in Depot Artspace.*
Note. Photograph from Depot Artspace. Copyright 2025. Reprinted with permission.

My Coastal Future, a new "serious game," was created for the exhibition by NIWA (Aotearoa New Zealand's National Institute of Water and Atmospheric Research) (Figure 8). In the game, players have to make decisions about their coastal property as sea level rise becomes an increasingly prevalent issue. Over the course of several decades, players choose whether to build a sea wall, move their house, or relocate elsewhere. The game introduces several models including costings and worst case/least case scenarios to make it more of an experience for the player in the hope that key information will stick in their minds. The game can be played online at My Coastal Future online game.

4. Blue Radius Events Programme

Blue Radius hosted a series of events that gave a platform for innovative and experimental exchanges where dialogue exploring culture, community, and science could take place in a non-hierarchical way. The aim was to improve understanding, increase levels of engagement, and share experiences of sea level rise and issues affecting marine ecology. Blue Radius Events delivered panel talks, pop-up exhibitions and workshops with the aim of facilitating discussion at both the gallery and other coastal sites. This work was supported

by environmental, political, and community organisations. The programme aspired to bridge scientific knowledge with the lived experience of communities and people who work in marine coastal environments.

To facilitate this, workshops introduced arts-based outdoor learning strategies and creative workshops that encourage participants to creatively engage with ecology. This approach focussed upon the many ways in which individuals and communities experience climate change and ecological crises in their everyday lives. This aimed to build unlikely partnerships towards a social and cultural shift in how humans relate to the natural world and the potential for community-led climate and environmental action. They were delivered in the following forms:

Public Talks: These included several motivational talks by activists and experts in the field about the connections between human activities and their impacts on the ocean and marine ecology and included adaptation options for local residents. A rousing and impassioned speech about the work of Protect Pūtiki was delivered by Bianca Ranson at the opening event (link to recording). A Sustainable Coasts Panel talk was held between three expert panellists who discussed how science, politics, and carbon emissions relate to the threat of sea level rise in the Auckland region. Professor Giovanni Coco (University of Auckland) and Alex Rogers (Executive Officer Hauraki Gulf Forum) shared data about the impacts of warming and the acidification of the ocean and presented computer modelling of projected sea level rise on the local region of Devonport where the exhibition was being staged. Richard Wallis (The Carbon Cycle Co) expressed the positive impact to be made on the climate through carbon composting and regenerative farming practices. (link to each speaker's presentation and the concluding audience discussion Sustainable Coasts Panel Talk).

Blue Lantern-making Workshops: The potential for creative engagement as a way to provoke street-level public discussion around the implications of sea level rise were also explored through a series of Blue Lantern-making workshops, which took place across various venues.

Pop-Up exhibition – Tara Iti SOS: The impact of sandmining on marine ecology and, in particular, the plight of endangered Fairy Terns (Tara Iti) was presented at a pop-up exhibition in the small coastal township of Pakiri to coincide with an Auckland School's Art Project *Journey of Sand from Seabed to City* (link to event and artworks Tara Iti SOS).

5. Discussion

Blue Radius sought to change perceptions of sea-level rise for gallery visitors using a range of interventions to illuminate structures of human policy and decision-making. The exhibition extended the reach of artistic production in order to build awareness and connect with a broad cross-section of citizens who were encouraged to learn about, contemplate, and respond to the contributing factors and local realities of coastal-based emergencies facing them as individuals, communities, and a society.

In creating *Land Radius|2,* I decided that the opportunity to hear spoken reflections as a live process of exploration of ideas would deliver a more personal form of messaging for the listener. Whilst editing the recordings of our conversations, I noticed that most contributors appeared to form ideas whilst speaking. Rather than a monologue, they began, paused, considered, and rephrased as they found a clearer way to express their thoughts. It occurred to me that this happens when someone is invited to share their personal thoughts on climate change as perhaps it is a new phenomenon for them to consider. This was true even of the climate/marine scientists I spoke to, as the enquiry I raised drew on their personal feelings and experiences rather than their fields of expertise alone. My Māori contributors however, had little issue expressing themselves. Their clarity showed what 'being kin' means as they were used to speaking out on climate justice, impacts of extraction, pollution, and governance as they consider themselves intricately connected, through common decent, to the suffering they are witnessing in nature.

> *"Climate justice starts with those most vulnerable in our community including our taonga (treasured) species. Extraction, pollution, and governance have left our moana (ocean) in a biodiversity crisis, facing ecological collapse. The mauri (life force) of our moana is under threat."* – Bianca Ranson, Protect Pūtiki (September 2022)

At two-meters high, *Tuakana Teina* disrupted views across the gallery. Activist Bianca Ranson adopted the format of a Carbon Stack as a sculptural metaphor for healing environmental and societal ills. It conveyed the Māori worldview of reverence for the natural world and responsibility to protect species like the Kororā that have been in existence for millennia. Ranson is part of activist group, Protect Pūtiki, who protested at the marina construction site in Pūtiki Bay, Kennedy Point on Waiheke Island to protect this endangered species by disrupting construction in the acts of swimming and kayaking in the bay. However, the protest resulted in their group being criminalised and sanctioned with a trespassing injunction and a $750,000 fine. The Carbon Stack stood in defiance of this injustice. It was decorated with the shredded 1000-page court injunction and a Pohutukawa tree that was ripped out by the private developers. The injunction was transformed into a traditional weaving design on the north and south face of the stack. It represented *mangōpare* (the Hammerhead Shark); Māori believe that the rare appearance of this creature in their waters shows that the gods are watching over their families and that the oceans are clean and balanced. Thus, its placement on the stack is a sign of hope.

I remember sitting in the community garden at the marae on Waiheke Island with Bianca discussing her ideas for the sculpture and was surprised at her enthusiastic response on learning that the exhibition would be held at a gallery in Devonport. She explained that the kind of people who live in Devonport are the ones who desire the contested marina so they can sail their yachts directly into Waiheke Island. The suburb of Devonport is one of the most expensive places to live in New Zealand, boasting highly sought after heritage homes and stunning views of the harbour, city, and surrounding landscape. Thus, the exhibition would be staged at a site of huge inequalities and therefore highly significant in terms of its social reach. The stack took ownership of this narrative and transformed it as a monumental act of defiance. It filled and disrupted the gallery. The materials were messy and organic and

the opposite of the fine art painting, ceramics, and jewellery that would usually be shown in this space. Whilst this huge unwanted guest was a metaphor for climate change, the presence of the injunction that had been torn up to become compost also posed as an affront to the host community. Power dynamics were at play here. This elephant sized object was a powerful symbol of hope for the Māori community it represented, yet it perplexed many of the visitors and gallery staff.

In contrast, NIWA's *My Coastal Future Game* afforded a very different experience to visitors, due to its familiar gaming format for all ages. NIWA (National Institute of Water and Atmospheric Research), is Aotearoa New Zealand's Crown Research Institute for climate, freshwater, and marine science. They provide government decision makers with the science-based evidence they need to make informed choices and also advise at community level. The game was created especially for the exhibition as a way to bring the implications of sea level rise into a 'playful' form of decision-making about a fictional coastal property.

The game exposed the player to the realities of sea level rise impacts and storm surges, highlighting the important role of decision-making and the challenge of engaging with uncertain futures. It provided options around building seawalls, physically moving the property to higher ground, or moving away completely. The introduction of worsening conditions and financial considerations further complicated the player's choices. These variables provided obvious appeal for young people, but also introduced a note of realism for players to mull over. When the game was played by a family (Figure 8), the discussion of options that ensued about whether to move their property or leave the area altogether suddenly made a strong impression on its young players. Their imaginations were triggered into considering how they would feel if they could no longer stay in their lovely heritage house beside the beach, thereby fostering action, albeit fictional, amongst a new generation, and raising the challenges of climate change as a talking point in the home.

> *"The exhibition allowed us to reach a different group of people in a location potentially affected by sea level rise and secondly test the online game concept as a new way to engage with a broader more diverse audience."* – Dr. Paula Blackett, NIWA (November 2022)

In addition to *Tuakana Teina*, other sculptural works exhibited by the indigenous artists Atareta Rerekohu Black and Nââwié Tutugoro, represented both traditional and activist perspectives. In her review of the exhibition for The Art Paper, Tutugoro (2022) described the exhibition as presenting the challenges of ecological destruction through a "microcosm of oppressive forces," but added that creativity helps people to cope through a process of "slower modes of engagement." She clearly rejected the NIWA game, arguing that it was an example of how holistic indigenous practices have been disregarded "under the grip of colonial capitalism." Tutugoro called instead for the return of an anti-anthropocentric and ethical relationship with the ocean through "seemingly obsolete technologies and rituals." Here, Black provides a modern *iwi* voice through her piece *Ngā Aua Rere Kaharunga* that connects us to her ancestors, materialising rituals and still relevant technologies that evoke a sense of coming home, re-grounding, and reconnecting. This route, of course, is only really available to those with an indigenous heritage, while the rest of us without genealogical connection must hope to develop more connected forms of decision-making that draw from our own heritage that, for better or worse, is bound up in a continuing faith in modern technologies, industry, and capitalism as conveyed through the NIWA game.

Meanwhile, as Tutugoro concedes, the placement of these perspectives side by side within an art context compels negotiation and dialogue in the face of climatic and ecological emergencies. This reflection shows how the gallery invites "difference (of agenda, interests, needs, capitals), as well as […] power relations" (Aramburu et al., 2014, p. 4), creating opportunities for antithetical perspectives to co-exist and be debated and, in so doing, throwing into relief both their differences and complementarities. Through such exposure to difference, diverse actors can engage with and learn from one another. In such a way, the gallery offers a space for co-existence, which is essential for a sense of ownership and agency in shared, collective problems because it allows voices to be heard and people to take up space and share ideas, exposing what sits in between established positions, increasing multivocality, and fostering pluralism through an ongoing 'listening-observing-not-knowing' process that evolves in the spaces of conversation and mutual connection.

> *"Blue Radius is an exhibition I'm so proud to have been involved in, your curation was pretty ground-breaking, museum-level stuff for little old Devonport!"* – Nina Dyer, Exhibition Curator & Artspace Manager (2023)

The Sustainable Coasts Panel talks introduced Devonport residents to a range of relevant research, scientific data, and the concept of carbon farming to instil an understanding of how practical protection and regenerative food growing initiatives could support them. Coastal oceanographer, Professor Giovanni Coco, presented visualisations of the suburb, showing how increasingly severe and frequent storm surges could cause the peninsular to once again become a group of islands as it had been before the development of roads. He concluded that protection by higher and higher sea walls was the only way to ensure the continuation of a viable community in the area. However, an audience member challenged this idea with the example that her neighbour who was building a swimming pool had found water two and a half meters below the site, indicating that more walls are not going to stop the water table from rising. Another brought up the issue of building works taking place on reclaimed land where the developer proposed to raise the land to an additional one and a half meters, thereby making his own island. Professor Coco then questioned whether the option of a heavily engineered coastline was really suitable for a place like Devonport, as bigger and bigger sea walls will cause the beach to disappear, which changes the character of the place and thus the reason why people choose to live in such an area.

The conversation with the audience moved on to Richard Wallis' provocation: "What people have to do is model the future that they want to live in and start behaving like that" (Blue Radius Talks: Audience, 2022, 09:09). Communities can cool their environments by eating food that is grown with composted food waste, which puts carbon into the soil instead of methane into the atmosphere. The good news is that we all have agency and can develop opportunities to model best practice locally when it comes to dealing with rising sea levels and reducing CO_2. It can begin as a conversation starter, improving awareness by speaking to neighbours, and realising that it is something for us as communities to address rather than rely solely on others to deliver for us.

> *"There is a need to relocate at the centre of our societies the value of solidarity and mutual principles of social organization beyond […] conventional economics and utilitarianism."* (Kothari et al., 2014, p. 372)

Contemporary art not only makes our interpretation more vivid, but it can reveal lost or unseen stories, build understanding, and create meaningful connections with gallery visitors. As Eisner (2002) posits, the process of making and experiencing art, supports a "cognitive transformation" through which we learn to think about, know and interpret the world and each other in new ways. For my part, I envisaged Blue Radius as having an integrative approach—head, hand, and heart—to break barriers and convey solidarity, appreciation, and respect for the people who are experiencing and witnessing the main drivers of biodiversity loss on their doorsteps and feel as powerless as the species they advocate for to do anything about it. Blue Radius was for all of these people to let them know that their voices have been heard, amplified, and validated as worth listening to. In the conclusion I now return to degrowth and reflect on how ecological curation relates to its agenda.

6. Conclusion

> *"The elites of Davos have failed. The elites of Brussels have failed. The elites of Washington DC have failed. We must peacefully rise up. We must save ourselves. Our leaders have wasted precious time. We can stand by no longer. We are the ones we've been waiting for."* (Small, 2024)

As degrowth acknowledges, the emerging world order will be more *situational* rather than the universal, centralised means of organising that the Modern/Colonial Worldview has imposed. If a degrowth agenda is to be successful, the post-colonial world needs to return to being a more pluralised world of multiple agents and perspectives, where the pathways of transition will be enacted by communities according to their own situations and conceptions of self-determination and self-governance.

In this article, I have shown how a collective art-based and behavioural change project can

be conducted in partnership with creative, scientific, and ecological organisations, considering this to be "art-science-activism." Art with an ecological focus seeks to reclaim, restore, or remediate natural environments and inform the public about the environmental problems we face. Ecological art re-envisions ecological relationships by proposing new possibilities for co-existence, sustainability, and healing (Geffen et al., 2022; Kagan, 2014), towards a post ownership society (Johar, cited in Castle, 2018). The lens of *art as verb* as instrumental action (Gell, 1998) and a process of reciprocal creative labour (Kester, 2011), illuminates how the creative practices of making, observing, sensing, and experiencing can help to influence perceptions in relation to climate change and biodiversity loss.

Blue Radius shows us how the gallery and its associated activities opens up a space for audiences to observe, sense, and experience plural knowledges and perspectives on climate-change issues. Here, the gallery provided a space for collective participation in the debate of climate change solutions whilst unmaking colonial narratives. This initiative highlights the possibility of adopting curation practices to foster a common understanding and shared vision which instils a sense of ownership and the ability to learn from and with each other through the creative process (Scopa, 2003).

For degrowth, this example highlights that we should work with art practices to summon a more positive future and help us to perceive with new eyes, new minds, and new awareness (Eagleman & Brandt, 2017), especially if our perceptions are linked to more holistic perspectives that have empathy for the creatures we live with. Such interconnected thinking develops in unexpected correspondences that are encountered at the nexus between lived experiences, artmaking, and people (Ingold, 2017).

In my role as an ecological artist, I present the different ways that taking environmental responsibility can be both perceived and delivered. My approach seeks out the creation of new relationships with other artists and practitioners, activists, scientists and community organisations deliberately exposing conceptual differences yet similar concerns that lie, for example, between the indigenously informed sculptural work, *Tuakana Teina* and the scientifically informed online game, *My Coastal Future*. The intention is that our distinct agencies, experiences, and expertise allow the audience to gain new perspectives.

Whilst making fundamental changes to our ways of living is difficult to contemplate, we can activate change by getting involved in local mitigation practices, ecological activism, or restorative projects and give ourselves a more positive role (Figueres & Rivett-Carnac, 2020). To this end, art can help by providing an emotional focus to process the pain of *eco trauma*—"feelings of powerlessness, numbness and complicity in the face of ecological crises" (Amarok, 2007, p. 31), and develop instead feelings of joy, ingenuity, self-respect, and a responsible attitude (Mantere, 1992). These positive states of being are important for helping us to feel more empathetic towards nature and see ourselves as part of the nature/culture continuum (Amarok, 2007; Demos, 2016), which aligns with the degrowth imperative for balance with the living world in a way that reduces inequality and improves human well-being (Hickel, 2020).

Conflict of interest

The author has no conflict of interest to disclose.

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Figure 8. Depot Artspace. (2023) *Family playing My Coastal Futures online game in Depot Artspace* [Photo]. https://www.limenlab.org/my-coastal-future

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Laura Donkers is a British/Irish multi-media visual artist, curator and independent researcher specialising in strategic community engagement and behaviour change projects. She holds a PhD which explored how artistic co-creative methods strategically promote eco-social regeneration for small island communities. Laura is a multi-media visual artist, and founder of Limen Lab – a not-for-profit creative agency working with community and environmental organisation which delivers eco-art projects documenting and promoting the exchange between society and ecosystems. Her work mediates complex ideas associated with contemporary, historical and cultural readings of place through a variety of methods, strategies and processes. She employs field-based research, interdisciplinary collaboration and socially engaged activism to explore the interconnections between nature, culture and science. Her Practice-led PhD research at DJCAD, University of Dundee was awarded an AHRC scholarship, which included comparative research visits to Elam School of Art, University of Auckland to learn about *Kaupapa Māori* from an art engagement context because of its relevance to values, principles and plans and as a foundation for action.