

## Impact case study (REF3)

<b>Institution: University of Derby</b>		
<b>Unit of Assessment: 32</b>		
<b>Title of case study: Catalysing change: artistic encounters in a time of climate emergency</b>		
<b>Period when the underpinning research was undertaken: 2015–2020</b>		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Caroline Locke	Senior Lecturer	2001–present
Dr Paula McCloskey	Postdoctoral researcher	2018–present
<b>Period when the claimed impact occurred: 2015–2020</b>		
<b>Is this case study continued from a case study submitted in 2014? No</b>		
<b>1. Summary of the impact</b> (indicative maximum 100 words)		
<p>The impact of this case study stems from complementary artistic research practices that enhance public understanding of and engagement with the more-than-human world. These practices produce encounters, events and interactions that reconfigure perceptions of the relation between humans, 'nature', politics and history in the face of climate emergency. The researchers contribute to this study as experimental practitioners, performers and activists. They create participatory experiences designed to challenge notions of human exceptionalism. The research reinforces public awareness of human entanglement in and responsibilities towards the 'natural world', leading to behavioural impacts as a consequence of that awareness.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words)		
<p>The activities detailed in this ICS collectively ask, how might environmental encounters configured by artistic research contribute to different ecological imaginaries and futures, and foster practices which shift people's understanding of human relationships to the environment. Locke's research creates and positions artworks as sensory encounters between humans and more-than-humans (e.g. trees, water, ice), to translate abstract notions (e.g. measuring tree frequencies) into narratives by offering bridging metaphors or by showing the familiar in an unfamiliar way (e.g. bells in relation to trees). McCloskey's projects invite co-inquirers to engage in devising new collective imaginaries as a tactic through which to counter those that dominate, specifically of capitalism and carbon. What unifies these diverse practices is how they utilise innovative site-specific encounters to facilitate reflections amongst diverse publics; providing alternative ways to socially engage with environmental issues, with a view to shifting behaviour.</p> <p>Locke borrows techniques from engineers, arboriculturists, computer and climate scientists in a series of projects under the title of <i>Significant Trees</i> [3.1]. Data is gathered, reinvented and new experiences are offered to audiences through interactive sculptures, performances, workshops and sound works. For example, <i>The Frequency of Trees</i> [3.1], part of the Yorkshire Sculpture Park (YSP) Open Air collection, is an interactive sculpture that translates abstract sound and frequencies into engaging encounters that aim to shift the way humans think about how their bodies interact with the (nonhuman) environment. Furthermore, <i>The Tree Charter Bell</i> [3.1] is used in tree planting ceremonies in connection with The Woodland Trust.</p> <p>Locke's <i>Performing Data</i> [3.2] projects, involve live and interactive sculptures which act as sensory encounters, amplifying participants' awareness of the physical self and enabling a state of greater connectedness to 'nature' and the human body. Locke's collaborative projects with Dr Rachel</p>		

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Jacobs *Performing the Future* [3.2], were featured as part of a climate change and art symposium at Nottingham Contemporary and continue as part of a developing AHRC funding application.

McCloskey devises co-inquiries with artists, scientists, activists, and local people using innovative participatory methods to explore complex global issues (e.g. wetland loss, resource extraction). *Myths for a Wetlands Imaginary* [3.3] (co-lead Dr Sam Vardy) includes a residency at Walthamstow Wetlands Centre, London and developed as a co-inquiry with scientists (e.g. Dr Ian Crump, Thames Water), local residents (Walthamstow), indigenous artist (e.g. Rod Garlett, Nyoongar People, Australia-based) and UK-based artists (e.g. Season Butler, Gary Stewart). For this research, McCloskey and Vardy produced a site-specific participatory performance, a digital mapping workshop, a story-telling workshop, a film, and a multi-media installation.

*Geopower* [3.4] (co-lead Dr Sam Vardy) considers the complexities of extraction in the ecologically diverse and newly politicised territories of the former Orgreave Colliery, South Yorkshire as well as anti-fracking protest camps around Sheffield's old mining communities. Involving field research working with communities and activists (e.g. Orgreave Truth and Justice Campaign (OTJC), Women Against Pit Closures, anti-fracking), the work produced a performative walk event (scripted to include anti-colonial and indigenous knowledges of global extraction practices) around post-extraction landscapes and an event involving collective conversation with local activists.

### 3. References to the research

**3.1** Locke, C. (between 2014 and 2020) *Significant Trees*, international body of work output: double weighted.

*The Frequency of Trees*, YSP, public interactive sculpture.

*The Frequency of Trees* (2020) published by YSP. *Significant Trees* BEAF Festival Bournemouth, Dorset, public art interventions/sculptures/ international research.

*The Tree Charter Bell projects*, Nottingham City Council.

**3.2** Locke, C. (between 2015 and 2020) *Performing Data*, international body of work output: double weighted.

*The Hastings Sound Fountain and Heart Sensing Sound Fountain*, FACT, Liverpool, live/digital/interactive/sound sculpture.

*Terre Ice Chandelier*, Primary, Nottingham, video art.

*Ice Holes*, Primary, Nottingham, sound installation.

**3.3** McCloskey, P. (2019) *Myths for a Wetlands Imaginary*, body of work output:

*Five-month residency at Walthamstow Wetlands Centre which included a site-responsive performance, digital films, soundscape, digital mapping, storytelling and gallery exhibition commissioned by Arts Catalyst.*

**3.4** McCloskey, P. (2019) *Geopower* (& Spatial Self Organisation Against Injustice in Sheffield) commissioned by Arts Catalyst, performance walk, curated event and participatory workshop around post-extraction landscape of Orgreave/Treeton.

McCloskey, P. (2020) *Geopower*, video presentation as part of an online event 'Music, Art and Activism', organised by OTJC.

### Details of funding awarded

YSP: GBP3,000, 2014, Caroline Locke (*The Frequency of Trees*).

University of Derby: GBP2,000, 2014, Caroline Locke (*The Frequency of Trees*).

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Frocester Engineering: GBP1,000 (in-kind), 2014/15, Caroline Locke (*The Frequency of Trees*).

Arts Council of England: GBP5,000, 2015, Caroline Locke (*Performing Data*).

Mixed Reality Laboratory, The University Nottingham: GBP5,000, 2015, Caroline Locke (*Performing Data*).

Royal Academy of Fine Arts Antwerp, Belgium: GBP500 (in-kind), 2016, Caroline Locke (*Performing Data*).

Arts Council of England: GBP10,000, 2018, Caroline Locke (*Performing Data*).

Frocester Engineering: GBP1,000 (in-kind), 2018/2019, Caroline Locke (*Performing Data*).

The Norwegian Polar Institute: GBP600 (in-kind), 2020, Caroline Locke (*Performing Data*).

Queensland University of Technology, Australia: GBP950 (in-kind), 2019, Caroline Locke (*Significant Trees*).

John Taylor Bells: GBP1,000 (in-kind), 2020, Caroline Locke (*The Tree Charter Bell*).

The Woodland Trust: GBP200 (in-kind), 2020, Caroline Locke (*Tree Charter Bell*).

The Woodland Trust: GBP400, 2020, Caroline Locke (*Tree Cryer/Tree Charter Bell*).

Nottingham City Council: GBP1,000 (in-kind), 2020, Caroline Locke (*Tree Cryer/Tree Charter Bell*).

Primary Studios: GBP200 (in-kind), 2020, Caroline Locke (*Tree Cryer/Tree Charter Bell*).

Art Fund: GBP5,000, (GBP1,500 in-kind), 2016, Paula McCloskey (*Myths for a Wetlands Imaginary*).

Art Catalyst: GBP1,000 (in-kind), 2016, Paula McCloskey (*Myths for a Wetlands Imaginary*).

Arts Catalyst: GBP300, 2017, Paula McCloskey (*Geopower*).

Arts Catalyst: GBP800 (in-kind), 2017, Paula McCloskey (*Geopower*).

Please Note: in-kind support is included as typical for this UoA, and as a demonstration of the recognition of the esteem held for both contributors work by collaborating partner organisations.

#### 4. Details of the impact

Locke's research makes significant contributions to the international discourse of art and science. She has developed research with The Scott Polar Institute, The Norwegian Polar Institute and The Mixed Reality Laboratory, by using climate data to control various mechanisms within sound sculptures. Her practice-based research has informed the iterative development of software tools to capture data from a variety of sensors, particularly physiological and environmental, and its storage, manipulation and representation [5.7]. These interactive sculptures assist in making the science accessible to the general public allowing for closer connection with and greater understanding of the environment.

*Significant Trees* includes research which achieves substantial public engagement. The *Frequency of Trees* is part of the YSP's 'Open Air' collection, which receives an expansive visitor footfall (700,000 visitors during 2015 and 2016). Public audiences engage with the research directly when walking through YSP. Spectators can witness, and may discuss, how sound moves and how the body responds. The artwork generates learning within various educational programmes at YSP (e.g., The Sound Based Walk, Talk, Make Tour – [5.4]). Locke makes school visits, discussing the work and its translation of



Figure 1. Caroline Locke, *Recording the Sound of Melting Ice in an Arctic Lake*. From the *Performing Data* project.

nature through sound in connection with the Year 3 National Curriculum. A Head Teacher observed that Governors in her school had noted the success and educational importance of Locke's work: "*Caroline directly contributed to the evidence-based research that children need to experience a multi-sensory curriculum*" [5.3]. The Head Teacher also reported that *The Frequency of Trees* changed the children's understanding of sound and engaged them with environmental issues [5.3]. Another of Locke's projects, the *Tree Charter Bell* is the focus of outdoor ceremonies that increase awareness of tree planting activities in Nottinghamshire. The ceremonial ringing of the Tree Charter Bell, forged specifically for these events, attracts the attention of passers-by, who, together with attendees, then discuss issues about climate change in site-specific public spaces [5.2].

McCloskey's *Myths for a Wetlands Imaginary* was developed for Waltham Forest Borough Council's Art Assembly event to explore the notion of a 'wetlands imaginary' as a local and global decolonising agenda through different modes of artistic research. The project explores innovative ways of socially engaging the public during a residency and public gallery event. New dialogues and complex ideas about interrelations between climate, decolonisation, art and science were generated and engaged with by academics, artists and a diverse range of people in the local community. For example, the installation on 23 November 2019 attracted between 500 and 700 people [5.10]. Audience comments included, "...it made me think about wetlands from a new perspective"; whilst another participant observed: "*It made me realise how connected we are on a global scale and how we all face similar environmental challenges*" [5.10].



Figure 2. Paula McCloskey engaging with the public during *Myths for a Wetlands Imaginary*.

Thames Water also suggested that *Myths for a Wetlands Imaginary* further strengthened their core company messages (using water wisely, valuing nature as natural capital and wastewater management for future population growth) [5.9]. The research contributes to and accelerates the pace of an increasing awareness of the need for change. The project offered new ways of thinking, knowledge and understanding to assist the company with preparing to adapt for the future.

Locke makes significant contributions to socially-engaged practice in art. The research enables interactive public engagement with new communities and audiences. Activities include, not only the active dissemination of research through art practice, but also opportunities for knowledge exchange and encounters, in which communities and audiences contribute their own local understanding. Behavioural impact is direct within the environment and a deeper investment in the environment is supported and encouraged through the work [5.2].

In an interview with Notts TV (300,000 weekly viewers) and as part of a live webinar [5.5] with the Arboricultural Association (over 500 views in 29 different countries), Locke discusses Nottingham City Council's agreement to sign a pledge to The Woodland Trust's Tree Charter, resulting in changes to the council's approach to tree management [5.1]. She opened up discussions with Councillors, offering positive and constructive support for a re-wilding bid by Nottinghamshire Wildlife Trust to transform the former Broadmarsh shopping centre into a public green space.

Thames Water expressed its gratitude to McCloskey [5.9] for her work *Myths for a Wetlands Imaginary*, which highlighted the value and benefits of their Walthamstow Wetlands site to the local community. The project contributes to educating collaborators, locals and participants about the value of wetland spaces beyond physical needs, developing greater understanding of

the species which share the wetlands as a home through direct involvement in the site. Behavioural changes within the company/community are evolving as a result of this project, as it contributes to global and local climate debates.

*Geopower* was the opening event for *Recentring Attention*, Arts Catalyst's new programme that informs the first phase of its relocation to Sheffield. 'Music, Art and Activism', an event organised by OTJC 2020 included a talk on 'Geopower' (over 3,200 views). Arts Catalyst praise the way McCloskey brings together diverse communities by making conversations accessible despite their complex and nuanced nature stating they have learnt from "her methodologies and from the flexibility that characterises them" [5.8].

#### **5. Sources to corroborate the impact** (indicative maximum of 10 references)

**5.1** Testimonial from Nottingham City Council Tree Officer on working with Locke as part of the *The Tree Charter Bell* project in November 2020 (date of testimonial: 4 February 2021).

**5.2** Group of testimonials in relation to the impact of the *Tree Charter Bell* project run in November 2020:

- Member of the Public (date of testimonial: 1 February 2021).
- The Woodland Trust (date of testimonial: 2 January 2021).

**5.3** Testimonial from the Head Teacher at Haydn Primary School, Nottingham on students engaging with Locke and *The Frequency of Trees* in 2018 and 2019 (date of testimonial: 11 May 2020).

**5.4** Testimonial from a member of the Artist Educators Team at YSP on *The Frequency of Trees* (date of testimonial: 22 May 2020).

**5.5** Testimonial from the Technical Director at the Arboricultural Association on Locke's contribution to the *Building a Mass Movement of Trees and People* webinar on 28 October 2020 (date of testimonial: 5 February 2021).

**5.6** Testimonial from collaborating artist on *The Frequency of Trees* (date of testimonial: 31 March 2020).

**5.7** Testimonial from Assistant Professor, School of Computer Science, The University of Nottingham on the *Performing Data* project (date of testimonial: 1 May 2018).

**5.8** Testimonial from the Curator at ArtsCatalyst on the 2019 projects *Geopower* and *Myths for a Wetlands Imaginary* (date of testimonial: July 2020).

**5.9** Testimonial from the Biodiversity Field Officer at Thames Water on the 2019 project *Myths for a Wetlands Imaginary* (date of testimonial: 17 June 2020).

**5.10** Data from ArtsCatalyst providing visitor numbers and audience feedback on the installation, workshop and performance comprising *Myths for a Wetlands Imaginary* in November 2019.