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Performing the Future: An artist-led project engaging with risk, uncertainty and environmental change

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This paper follows a practice-led methodology to explore how the diverse participants in the 'Performing the Future' project - including scientists working with climate models and over-60s groups in Liverpool and Cambridge - mediated their sense of risk and uncertainty in response to environmental change. We explore the nature of their participation and the different strategies used by the artists leading the project, describing the opportunities that emerged for more nuanced and complex visions of the realities of anthropogenic environmental change, and how we might respond to the impacts of these changes.

Keywords: art, risk, climate change, environmental change, future, uncertainty, artistic methods, performance, care, reassurance, abundance, co-production, co-creation, storytelling, slow technology, practice-led methods

Subject classification codes: include these here if the journal requires them

Introduction

This article employs a practice-led methodology (Niedderer & Roworth-Stokes 2007) to investigate a series of artworks that engage with issues of risk, uncertainty and environmental change, as part of the '*Performing the Future*' project. This work differs from traditional research studies in that it describes the strategies employed across a series of artist-led activities. It seeks to address what we might learn from this process, to inform a broader community interested in understanding and potentially shifting attitudes to risk and uncertainty in the context of environmental change.

'Performing the Future' was led by a key artist, in collaboration with 5 additional artists, academic researchers, scientists and community groups across 5 regions in England (Liverpool, Cambridgeshire, Oxfordshire, Cumbria, Nottingham). Participation in each of the activities was captured through documentation of the artistic process and observations of the different forms of engagement and feedback, monitored by the artists and researchers involved in the project. This follows the *Designing from Within* (Taylor et al. 2012, Jacobs 2013) and *Performance-Led Research in the Wild* (Benford et al. 2013) frameworks, that combine a mixed method approach to analysing artistic processes, taking into account the complex relationship between theory and practice within arts contexts, and the role of iteration. As a result, the following description outlines: (i) the strategies employed by the artists; (ii) the artworks that took place; (iii) observations of how the participants engaged with issues of risk, uncertainty and environmental change; (iv) what a broader research community might learn from these strategies.

Beck suggests that the major threats to society are increasingly changing from naturally occurring hazards to the results of human induced activity (Burgess et al. 2018), and societal responses are becoming ever more sceptical in response (Bulkeley 2001). Research also shows us that the images often used to represent these threats can create feelings of fear, despair and loss of agency (Remillard 2011). By focusing on apocalyptic narratives, the mainstream media, political and

environmental campaigns have been shown to encourage feelings of distance and disempowerment between our everyday lives and the complex realities of these threats, particularly in response to global environmental and climatic change (Boykoff, Washington and Cook 2011: 120, Latour 2017: 191) This is compounded by the disputed belief that the public require a better understanding of the scientific causes of these changes to be better able to respond to the level of threat. (Sarewitz 2004).

Therefore, despite the perceived urgency of the threat (as emphasised by the latest IPCC report¹), there is still very little consensus on how we build strategies that help us envision more positive or nuanced futures, facilitate agency and mediate our responses. Much more research is required to understand how we might co-create opportunities to thrive and adapt to these changes, positively care for, repair, celebrate and maintain our natural environments and the non-humans under threat. The artists involved in Performing the Future make the case that artistic interventions can prompt experiential and emotional approaches that in turn supports the necessary logical thinking, to help us respond, in a way that traditional science communications do not (Jacobs et al 2013, Giannachi 2012).

These works begin to open up opportunities to consider nuanced, sometimes optimistic and complex views on environmental change. Yet, despite an increasing space for these explorations to occur there is still a need to evaluate what we might learn from these approaches.

Hulme's important work outlines some of the reasons why we disagree about how to respond to climate and environmental change (Hulme 2009). Examples of ways that artists are increasingly exploring these different ways to respond space include the Next Nature Network², that celebrates the opportunities for anthropogenic interventions with nature and the non-human; Polli³ and Jereminjinko's⁴ experiments with sensing and responding to localised issues of environmental; and Fernando Palma Rodriguez's⁵ low-fi engineering and animatronics representations of a variety of perspectives on environmental change, including indigenous mythology.

Performing the Future

Performing the Future is the fourth in a series of environmentally engaged arts/research projects led by the artist *anonymised for review* (initially as part of the arts collective *anonymised for review* and later through her independent arts practice). These artworks have emerged from environmentally engaged, performing and visual arts practices, influenced by sensory geography and anthropology (Tuan 1977, Rodway 2002, Ingold 2011), the psychogeography of DeBord (Debord 1992), and the importance of old and new myths and rituals in connecting us to the natural world (Campbell 2011, Pinkola 1992: 1-10, Bell 1983, Morphy 1998: 71-73, Armstrong 2005).

'Performing the Future' was developed in parallel to *anonymised for review*'s research, based in Human Computer Interaction (HCI). This research investigates how artistic processes can support public engagement with scientific data, sensor based, technology driven 'data' experiences. As with much of Polli and Jerimijenko's work these technologies make visible invisible forces that we can't perceive with our human senses (Polli 2011, Hohl 2012), such as CO2 levels in a forest or city, that

1

http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

- 2 https://www.nextnature.net/welcome/
- 3 http://www.andreapolli.com

5 https://www.bese.com/fernando-palma-rodriguez-debuts-his-glitchy-animal-machine-hybrids-atmoma-ps1

⁴ https://grist.org/article/this-artist-is-using-technology-to-bring-nature-back-into-the-city

have the potential to point us back to, and enhance, our sensory embodied and emotional experience of the world (Jacobs et al. 2013).

The key artist explored how notions of care can help us consider environmental stewardship, as described by Puig de la Bellacasa (2017) as a:

'mode of attention to a more than human life-sustaining web'

and by Tronto (1987) as:

'everything that we do to maintain, continue and repair our world so that we can live in it as well as possible'.

The artist also considered the different ways that participants engaged with, cared for and potentially loved the places they inhabit and call home, described by Scruton as 'oikophilia' – the love of home (Scruton 2013:253-255), and by Ingold as 'dwelling' - where movement through the world:

'encompasses the entire way in which one lives one's life on earth' (Ingold 2011).

The artist also explored notions of reassurance as a key way to mediate our personal and collective sense of risk and uncertainty and our fears of and experiences of environmental loss. Albrecht defined this as 'solastalgia' – the psychic and existential distress caused by environmental change. Whilst Hulme discusses how our belief systems effect our 'faith' in how the future might and should evolve (Hulme 2009: 150-155) little has been explored outside of religious or traditional contexts around the importance of reassurance to feelings of agency and how we co-create the future in response to our differing values.

Considerations of abundance has also emerged in this context, as a way to celebrate nature and the non-human, evolving from a long term collaboration between the key artist and British Brazilian artist Silvia Leal that took place between forests and cities in the UK and Brazil (*anonymised for review*, 2017). Together they explored abundance as a creative force, in reference to how we perceive ourselves within nature and community, by celebrating opportunities for collaborative co-creation - as opposed to seeking out new 'resources' to exploit in response to a sense of lack and scarcity.

Artistic Strategies

The participatory nature of the arts activities described here include artist led dialogues and actions that respond to notions of 'performing nature' where nature is seen as needing,

'to be encountered in order to be perceived' (Giannachi and Stewart 2005: 20).

Performing the Future extends these notions to consider what strategies can be employed to envision more complex and nuanced narratives about the future, in response to environmental change.

Strategy 1: Co-production

The notion of co-production has emerged from previous research exploring alternative forms of science communication that go beyond traditional information deficit and citizen science approaches (Sarewitz 2004). Hulme discusses how key influences on the way we engage with climate

change are connected to our 'endowment of value', our beliefs and the things that we fear, acknowledging that many of us disagree about duty to others, nature and our belief systems. This suggests notions of care; reassurance and abundance are also dependent on differing values.

Strategy 2: Storytelling and narrative

The second strategy invites participants to create their own narratives of risk and uncertainty in response to environmental change. This strategy has previously been seen to create successful ways to enable the

'framing of complex societal issues such as climate change' (Howarth et al. 2017)

as a means of sharing and our different values and belief systems and encouraging greater understanding of the ways they impact on how we respond to issues of environmental change.

Strategy 3: Co-creating new rites, myths and rituals

The importance of myths, rituals and stories to help us connect with the environmental crisis, the risk society as outlined by Beck (Burgess et al. 2018) and other complex planetary issues has long been explored (Armstrong 2005:10). Psychologists and philosophers including Jung, Campbell (2011) and Pinkola (1992) propose that myths, rites and rituals play a vital role in human societies. These more esoteric approaches to perception play a crucial role in our comprehension of the loss of our sense of self, engaging with the unknown, and that which is felt to be beyond our control - such as natural disasters, harvests, war and conflict. Hulme also suggests the importance of myths in our response to climate change, which he outlines as Lamenting Eden, Presaging the Apocalypse, Constructing Babel and Celebrating Jubilee (Hulme 2009: 340-358).

Strategy 4: Slow Technology

Alongside the artistic processes described in this article, the artist collaborated with HCI researchers to design two technology driven systems that allowed for slow, reflective data driven interactions to take place over long periods of time. This connects to an online data system 'Timestreams' (Blum et al. 2013), that manages the capture, mediation and outputs of weather and climate data whilst allowing the participants to engage with scientific data over different time scales.

The following descriptions of the activities that took place in the Performing the Future project explore how these strategies were used in practice, presenting what took place and what we might learn from them.

The Predictions

The touring interactive artwork - The Prediction Machine is based on end-of-the-pier Victorian era fortune telling machines. It has been designed to mark 'moments of climate change' in our everyday lives and was exhibited at a contemporary art gallery in Liverpool, a public library in Cambridge and at a children's theatre in London.



Figure 1. The Prediction Machine and Promises Machine

The machine tracks the live weather at the exhibition location and predicts future climate change based on the live weather, plus projected temperature increases expected for the period 2040-2050, calculated by the Met Office's UKCP09 climate modelling system⁶. The live weather data, projected future weather, and a selection of video messages of people talking about climate change are



displayed on a screen embedded in the machine, this is powered by visitors turning a hand crank. The machine then prints out narrative based predictions for 30 years in the future.

Figure 2. A child turning the handle of The Prediction Machine at the children's theatre

The printed predictions and video messages were devised by participants who took part in public workshops, that occurred alongside the exhibition. A process that enabled participants to write their own future scenarios, led by the key artist, echoed the ways in which the machine then applied the predictions. Participants were asked to decide on a scale of 1-10 what temperature, humidity, atmospheric pressure, decibel levels, wind, air quality and light they experienced standing outdoors, using their bodies to make subjective measurements e.g. for humidity the artist suggested that people felt their skin, dug a hole in the ground, touched the soil and bark of the tree to make a measurement. These sensory measurements were then compared to scientific measurements captured by a digital weather sensor.

The participants were then asked to write a narrative description of what the 'data felt like' and how they imagined it would feel if the temperature was 3.7 degrees warmer, considering issues such as how warming temperatures effect energy, water and gas, what would no longer be used or needed, how would the world look and feel different? The artist presented different weather scenarios and data ranges that she was using in The Prediction Machine (arctic, freezing, cold, mild,

⁶ http://ukclimateprojections.metoffice.gov.uk

warm, hot, heat wave) and the participants wrote different predictions in response. Over 300 predictions have been added to The Prediction Machine since it was first created in 2015, alongside 25 video messages, providing a growing archive of stories, visions and memories. The artwork provides an interface to this archive, an opportunity for visitors of the exhibition to also reflect on where we are and what we might become.



Figure 3. A printed prediction

The written predictions tended to reflect people's concerns, likes and dislikes based on what was taking place in the world at that time. The level of detail, the descriptive forms and scope of the predictions ranged from the more obvious dialogues around environmental change such as,

'the Midlands will be permanently flooded and you will need to live on a houseboat', 'there will be no true dry season, it will rain continuously'

addressing issues of recycling, renewables and the sustainability of energy and resources, for example,

'you will need to stop cooking on gas as there will be hardly any natural resources left and all fossil fuels will be banned'.

These types of predictions are in keeping with the typical narratives of mainstream media, and environmental campaigns that focus on the impacts of climate change and how we might individually respond and care for our environment (adaptation or mitigation) in response.

At the extreme end of the weather scenarios (hot_extreme and heatwave_extreme) predictions were focused on more apocalyptic visions, such as,

'you will be surviving in a war torn dystopian world caused by energy and climate

insecurity, make plans to keep safe!'

At this level people's imaginations often became more poetic, echoing the way film and fiction writing responds to visions of future climate change. Iconic images, visions of destruction and apocalyptic scenarios can hinder the public's reading of the problem and can often bolster the public's feelings sense of the *'overawing scale'* of climate change (Remillard 2011). Yet the apocalypse tells an exciting and often heroic story (Goodman et al. 2016) that people are easily drawn to. Some of the extreme predictions also opened up the potential for more nuanced discussions around how we might experience these changes, including:

'you will see magnificent sunsets, particle levels will colour the sky for at least an hour'

There are examples of visitors keeping the predictions they received as a memento, with one participant in the Liverpool workshop, who had received a prediction two years before (at a previous exhibition), describing how he had been carrying it around in his wallet since. The prediction stated that he would,

'retire early and enjoy the warming coastal waters of the North'

He said that he had already retired early but in the last 2 years had been going on holiday all around the North of England with his girlfriend and had found it unexpectedly very warm and sunny.

The participants were able to engage emotionally and imaginatively with the subject of climate change by playing with different narratives, visions, perspectives and interpretations, whilst the very complex and difficult issues of modelling future climate change were supported by a more playful exploration, through the fortune-telling machine. By predicting and telling their own stories about the future the participants (and audiences who received the predictions) were able to reflect on environmental change in ways that reflected their own lived experiences.

The Promises

In the exhibition, the Promises Machine stands next to The Prediction Machine. Here audiences can write their own promise for the future in response to the predictions they have received. The Promises Machine involves an iPad embedded in a wooden structure showing a simple webpage requesting visitors to type into a text box,

'Make a promise to do something positive for the world as the future unfolds'

This strategy, for capturing people's promises is, initially, much more spontaneous than the storytelling approach of the predictions. Visitors were also invited to join a website that enabled them to update or change their promise; they were told they would receive a special edition artwork in the post, 'a message from the future'. The submitted promises were stored in an online database and added to a website.



So by directly filling in a web form visitors were being invited to briefly reflect on the future, as opposed to the more reflective and slow process of writing the predictions during a workshop.

Figure 4. Typing a promise into the Promises Machine

Visitors were also invited to join a website that enabled them to update or change their promise; they were told they would receive a special edition artwork in the post, 'a message from the future'. The submitted promises were stored in an online database and added to a website.

In contrast to the predictions, these promises tended to be much less poetic or complex, often relying on the more traditional and practical narratives of environmentalism, such as,

'I promise to keep my carbon footprint as low as possible'

These promises focus on opportunities for individuals to keep a commitment to something manageable within their own lives. Some of the promises talked about care in a broader sense, such as,

'I will be happy and the earth will not be a mess'

They also explored opportunities to celebrate abundance and consider reassurance, by reflecting on wishes for themselves and the world, for example:

'I will have fled society for a relaxing life on a beach'

This immediate strategy of collecting promises reflects our more familiar online interactions, the reactive writing of a short piece of text such as a Tweet, Facebook update, or signing petitions, leaving comments on other people's utterances about the world, often without thought for the consequences.

The artist in collaboration with an HCI researcher developed a concept of sending people a gift in return for these promises, a year later. The artist embossed each of the promises into clay tablets, which she made by hand, these were wrapped in muslin and sent back to the people who submitted their postal addresses to the website. The labour of making these words concrete, yet somehow fragile, carefully wrapped in soft material, considers what it means to make a commitment and how we might engage on a longer time frame with risk and uncertainty as the future unfolds.

As a conscious human being, rather than a computerised algorithm, the artist had to make curatorial decisions about turning the promises into concrete form. A few of the promises reflected the broader problems of opening up an uncensored space, with one particularly relevant example:

'I promise to make selfish and thoughtless people infertile, thus reducing the irresponsible population'

This posed ethical and moral concerns whilst potentially revealing complex issues about the ethics of caring beyond the human world, linking to Puig de le Bellasca's ethics of care (2017: 134-136). Was the artist happy to make concrete and disseminate such a crude perspective that challenged her own values and beliefs? If the tablets had been created using automated 'fast technology' such as an algorithm linked to a 3D printer then this question would not necessarily occur.

The contrasts between the spontaneous storytelling approach via the online form, the slower interactions with the website that stored the promises and the physical posting and receiving the gifts therefore revealed some important questions around how our visions of how we care for the world can be brought from the personal into the public sphere, in order to be realised in the longer term as we engage with environmental change.

Stories of Loss and Gain

The final storytelling activity invited participants to write on one side of a card something they felt they had lost and gained in their lifetimes, and on the other side something they wanted to protect or get rid of in the future. This resulted in a collection of over 100 cards that will be used to inform future work on risk and uncertainty. Social media and technology appeared in the stories across all of the communities, but often in contradictory ways. For example, one participant wrote:

'what I have lost is time, what I have gained is social media (boo), what I want to protect is forests and what I want to lose is the internet'

Forests, soil, animals and oceans appeared across all the communities as things to protect as well as things that they had lost. Many of the over 60s participants wrote about morals, ethics and social behaviour in terms of loss and gain, including,

'Lost: innocents (as nothing seems to grow naturally) and Gain: unity (sort of) as we are

trying to fix the innocent lost'

'silence'

'the slowness of time'

This activity created a direct opportunity for discussion in the groups around risk, uncertainty and opportunity. In some cases this process started quite heated debates on issues such as immigration and climate change. The activity also provided stimulus for the other workshop activities, triggering a broad range of responses that moved the discussions beyond the participants initial



thinking, to consider more complex future scenarios.

Figure 5. A selection of the loss and gain cards from the Liverpool group

This activity again focused on storytelling and narrative as a strategy to enable the participants to move from a simple discussion of threats and opportunities to more subtle and personalised discourses of the potential for both loss and gain and positive and negative.

Making Future Machines

A series of artist-led workshops took place over the duration of the project, each inviting a different community of participants to design their own 'future machines'. This included a workshop with a total of 30 academics from the disciplines of computer science, geography, respiratory medicine, art history and classics, and a workshop with climate scientists. Two workshops took place in Liverpool and Cambridge with a total of 50 participants from local groups for over-60s.

The participants were invited to work together in small groups to create a mock up of a future machine in response to their stories of loss and gain and consider different types of data inputs, what the interface, object or experience might look like. They were finally asked to consider how the system might help them act or make decisions about the future. This process was supported by a discussion about the differences between slow, reflective, real world processes (such as ritual, myth and performance) and faster algorithmic, technology driven systems

Zeus the Gnome was designed by one of the groups of academics. The design is of a sculpture for a community garden that registers how well the garden is thriving. Zeus would have detachable parts and members of the community garden would put the sculpture together based on the PH of the garden soil (the data triggering which parts would be assembled at each point of the ritual), motivated by research into loss of insects⁷. The gardeners have to be in the garden to do it, although a social media space manages and shares the data. . Zeus celebrated care and abundance through the emphasis on the garden thriving and being healthy, the 'gardeners' being face to face in order to build the sculpture, celebrating their connection the garden they were tending, although a social media space manages and shares the data. Zeus the Gnome also provided predictions about the future that opened up opportunities for the gardeners to consider the risks and uncertainties of caring for the garden.



Figure 6. Zeus the Gnome and The Tree

The Tree was also designed during the academic workshop. It is a mock up of a wireless system that measures air quality inside and outside the users home. This object, shaped like a tree, measures the levels of accuracy of the data depending on the amount of blue and red leaves that light up, revealing levels of certainty and uncertainty in the data whilst providing opportunities for different

⁷ https://phys.org/news/2017-10-three-quarters-total-insect-population-lost.html

forms of interpretation. Green and black leaves represent the actual pollution levels in the air, also providing opportunities to celebrate moments of abundance and thriving. The app then provides suggestions on how to improve the air pollution and opportunities to consider how to respond.

Both Zeus and The Tree sought to mediate gardening practices via visual and narrative strategies tied to the physical activities they embodied in a more accessible manner than graphs or spread sheets.

The workshop that took place with climate scientists focused more specifically on representations of risk and uncertainty in climate science. In this case each participant was invited to represent their research in a visual way and pass this visual representation on to another participant who added an additional layer, question or problem, eventually passed around all the participants.

The Balloons was a mock up of a game to show how hard it is to predict measuring CO2 levels in the atmosphere and what will happen next. The size of the balloon represented atmospheric CO2 levels and the colour global temperature through a sequence of glacials (cold, low CO2 = small blue balloons) and interglacials (warm, higher CO2 = larger red balloons). Later three additional grey and three purple balloons were added representing possible futures – which one we end up with is up to us!

The Dials Machine had a selection of dials that represent different elements of climate change, you can only change one dial but they are all interconnected so each of them change. Additional dials and datasets where added as the drawing was passed around, reflecting different perspectives in relation to the data, including economic options such as raising income tax.

Workshops with the over-60s group in Liverpool also involved co-designing a series of machines using the Prediction Machine as a basis for the designs. The participants were given a small computational device that could receive data from a weather station (temperature, wind speed and rainfall and the date and time). At one point during the presentation discussing how the group felt about Liverpool, home and the changes they had experienced throughout their lifetimes they broke into song, singing the hymn "Jerusalem"⁸.

The themes they focused on included tracking the migration of humans around the world as a result of climate change, measuring the declining bird species in the region, tracking warming sea temperatures. As the participants investigated further the things that they felt had been lost and gained, captured their own data and built mock ups they had the opportunity to enact their own scientific processes, and reflect on the opportunities for reassurance, care and abundance.

The aim of the workshop activities across each of the groups was to co-create visions of the future, informed by scientific data yet going beyond simply measuring and visualising (Tufte 1998, Bateman et al. 2010) to reflect on the risks and uncertainties inherent in these measurements. Whilst many of the designs tended to emphasise 'measurement' of data, the strategies of co-production and storytelling also encouraged participants, to question their subjective perspectives and reflect on considerations of care and abundance in response.

When This Tree Blossoms...

As a result of one of the experimental artist labs that took place alongside the workshops and tour of The Prediction Machine, the artists *anonymised for review* and *anonymised for review* worked together to devise a performed activity, an annual ritual, which would both embody risk and the values of dealing with future uncertainty.

⁸ https://www.songandpraise.org/jerusalem-hymn.htm

Many communities have a tree at their heart that was originally the place where people would meet to bargain, mark time, make decisions and share gossip. The notion of a physical meeting at a tree, in a memorial garden in Nottingham (opposite the artists studio were they are both based) that was 'announced' through a range of information networks, on a timescale dictated by the weather, became the core feature of the project. Although a shabby and neglected site, this council owned garden comes to life when the cherry trees blossom in the spring. A video 'haiku' was created by *anonymised for review* of the tree in the snow and dark announcing, "when this tree blossoms we will meet here to talk about the future". The video invitation was circulated on social media and taken up by Leeds Digital Festival, shown in Leeds Millennium Square. Linked to this video 'haiku' was a live publicly accessible webcam looking onto the tree and a discussion board.

Figure 7. A screenshot of the video haiku

The invitation Haiku was constructed as a digital message, the kind of online scrolling sign, which can be put together with almost facile ease and circulated online with the press of a few buttons.



The video was made to reveal the hidden labour and commerce behind such digital ease by elaborately re-purposing empty commercial product boxes and precariously mounting them on wheeled devices from car boot sales before dragging them past the camera in a blizzard. It was similar to the elaborate physical crafting of the clay tablet 'Promises' in relation to the Promises Machine. This re-assertion of the slow technology and clunking physicality of the message was coupled with the risky use of the tree blossoms to instruct us when to meet. Rather than us imposing a timetable on nature, the actual physical meeting in the park was to be the most 'natural' point in the process, where people met up face to face free of agenda, to celebrate a moment and talk about the future.

The elements of risk contained within the project were temporal, in terms of when the tree blossomed; socio-cultural in terms of inviting a wide and unknown public constituency; and political in terms of having no agenda beyond "talk about the future". The project was a performative process, creating an event, a moment which could continue over future years.

A dialogue with the local council that owned the park emerged as part of this process. It was made clear that the artists needed to complete a 'risk assessment' that included bringing a loud hailer, a first aid kit and a trained first aider, a sign warning that photographs may be taken, the food needed to be provided by a certified food retailer with ingredients displayed (rather than contributed by people who attended, more like a picnic), they needed a plan in place to prepare for fire in the undergrowth, a DBS checked person available if children were present, public liability insurance, and a designated place of safety in case of 'riots, bomb scares or terrorist attacks'. The suggestion was also that they cancelled in case of inclement weather.

The 'bureaucracy of risk' descended upon the project and highlighted the increasingly precarious situation in which the simple public meeting of individuals in a context where the aim and agenda has not been strictly defined can create an atmosphere of anxiety and concern. This attempt at

genuinely open discussion became mediated by the surrounding atmosphere of institutional risk and anxiety. In the end they were able to reach a compromise, tick some boxes and move ahead with the event.

Watching the tree closely over several weeks was a job of care, patience and reassurance for both the artists and the 386 viewers watching the live stream. The 1000 views indicated a lot of people were returning to see what was happening over the weeks of waiting. Watching the tree became a regular topic of conversation on social media, at the artist studios, at the University partnering on the project and further afield, with viewers in China, US, Japan and India. The process tracked the weather as much as the trees coming into bloom, bringing to the fore some of the extreme weather being experienced in Britain (and globally). At the end of March a snowstorm arrived (called the 'Beast from the East' by the press), the cold weather continued until a sudden heat wave pushed the trees to blossom at the end of April.



Figure 8. Screenshots from the webcam before the blossoms and in full blossom

The meeting under the blossom tree finally happened on Sunday April 22nd 2018, the weather giving us a date later than originally expected. The brightness of the pink was a true transformation. The artists set up a table with tea and coffee in flasks and some seasonal rhubarb cake made by a local bakery. *Anonymised for review* brought a litter picker and people helped him pick up litter around the gardens bringing people together for a moment of attention and care for the place where they had gathered. Some people stood and looked at the trees. Some people sat on the tarpaulin laid under the trees to talk together as a group.



The artists gave out cards to people as they arrived echoing the lost and gained storytelling activity, with the words 'Lost/Gained/Protect/Lose' written on them. In this case they were designed to help trigger conversations rather than stories, inviting people to choose two cards. Many of them mentioned that they wanted a positive card. Despite this, it was observed that the majority of conversations expressed concern or negativity about the future, particularly in response to the themes of technology, Brexit and Trump (some of the key topics in the media at this time). Somehow in 'talking about the future' without a specific agenda the opportunities to express reassurance and celebrate abundance appeared more limited than when people had been asked to write stories and coproduce systems, despite the abundance of blossom surrounding them and the discussions that warmer weather was finally on it's way. Therefore a question remains for how future re-enactments might engage people with a wider range of responses beyond expressing feelings of fear, loss and despair.

When This Tree Blossoms combines strategies for creating rituals that resulted in a public meeting without an agenda with the co-creation of narratives which are emergent rather than imposed. This work also explores the use of slow technologies through observations of evolving data, in contrast to the physical parody of 'fast media' through the breaking news style scroll. This work shows us that by creating slow, reflective online experiences that emerge from nature and community people can co-create shared responses that reflect their real worlds and everyday lives.

Conclusion

Increasingly in the fluidity of online conversations fears and anxieties about the dangers of how we are able to operate freely in the physical reality of our everyday lives, and our conflicting values that provoke these fears, are being stoked up. Without the trust and ability to share responsibility with each other by meeting together under a tree, making and sharing a promise, discussing and co-creating a vision of the future the diverse participants in the Performing the Future project would have been hindered in their ability to collaborate as friends and strangers and negotiate their sense of risk, uncertainty and the future.

The strategies employed by the artists within the Performing the Future project enabled the participants to connect on these more emotional and embodied levels than more traditional, mainstream discourses about risk, uncertainty and environmental change. The performative elements asked people to co-create their responses allowing participants to reflect in a deeper way on their personal as well collective perspectives.

By considering notions of risk and uncertainty through these artistic strategies, away from the presentations of scientific data and abstract concepts used by the IPCC, policymakers and regulators, these concepts were made relatable to people's lived experience.

It is our hope that this work opens up new questions to a broader community around the methods we employ to evaluate our responses to environmental change, whilst providing opportunities to explore new strategies for mediating our sense of risk and uncertainty within our everyday lives, as the future unfolds.

Acknowledgments

Figures

Figure 1. The Prediction Machine and Promises Machine
Figure 2. A child turning the handle of The Prediction Machine
Figure 3. A printed prediction
Figure 4. Typing a promise into the Promises Machine
Figure 5. A selection of the loss and gain cards from the Liverpool group
Figure 6. Zeus the Gnome and The Tree
Figure 7. A screenshot of the video haiku
Figure 8. Screenshots from the webcam before the blossoms and in full blossom
Figure 9. Meeting under the blossom tree

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