AI is Human After All by Anna Ridler and Caroline Sinders (2019-2021)

Image credit: Anna Ridler and Caroline Sinders

"Our world is becoming entangled - so much of our consensus reality is being created by the software we hardly understand – financial markets where bots endlessly trade with other bots, social media algorithms that control what narrative we see, even AI deep fakes that make us doubt our own ears and eyes. It becomes harder and harder to sort out where the human influence is in the process of AI." – Anna Ridler and Caroline Sinders

AI is Human After All was an artist residency by Anna Ridler and Caroline Sinders with The New Real on the hidden human labour involved in creating and deploying AI, and on how to face the climate crisis, as a part AI Lab (European ARTificial Intelligence Lab: Ars Electronica).

Between 2019 and 2021, artists Anna Ridler and Caroline Sinders came together for the first time around a shared interest in creating their own datasets from the ground up, and in the way that human labour is often hidden or obscured in AI.

As part of their AI Lab residency with The New Real, they demonstrated foresight in calling out the misuse of human labour in the AI industry as an urgent issue

to address. Since that period, the use of datasets developed by scraping content indiscriminately from the public Internet – without acknowledgment, consent, and fair pay for the original creators – has risen to the very top of issues of concern with AI. At the time of their residency, while the use of vast training datasets in machine learning was already commonplace, the wholesale harvesting of creative content at this scale was not widespread. Ridler and Sinders spotted this was not getting the same attention as other issues in the conversation around AI, and set out to investigate and bring it to light.

Ridler and Sinders were awarded an AI Lab artist residency at The New Real, but landed in Edinburgh just when Covid hit, and their stay in the city was cut short. The experience

Image: Cypress Trees. Image credit: Anna Ridler and Caroline Sinders

of working remotely, as digital artists, was folded into the artistic research and the works they produced. They responded with artistic works that generated AI-mediated experiences of nature and explored the theme of climate grief: Mechanized Cacophonies; Cypress Trees: A Beginning; and Cypress Trees: Fragmentation.
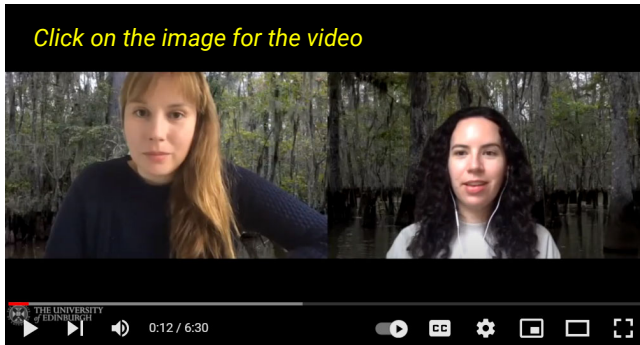

Click on the image for the video

Image: Screenshot of a video where artists Anna Ridler and Caroline Sinders discuss Mechanized Cacophonies

The theme

"the conversations around AI and creativity are centered around algorithms and whether machines will be able to make art, but for us this ignores a fundamental part of what makes this an interesting material for us: people." – Anna Ridler and Caroline Sinders

Rilder and Sinders point to the human hands, decisions, and choices that make up the representation of reality in an AI model. All too often, human labour is hidden or obscured, often papered over by the marketing hype about a 'magical' product. This makes AI seem more autonomous than it really is, it downplays the importance of human design decisions and can keep the monotonous and sometimes traumatic work of content moderators out of view, work often done by women and in the global South. Sinders's prior work, Feminist Dataset[1], was explicitly political and seeks to build on feminist perspectives in developing a machine learning pipeline. Ridler's work is situated in a fine art tradition, but one with a deep sense of the politics and poetics of working with ML data, and in Miriad[2] and Mosaic Virus[3] from 2018 she made visible her hand-crafting of datasets.

Responding to the residency theme of Entanglements

Image: Cypress Trees. Image credit: Anna Ridler and Caroline Sinders

– fair, moral and transparent AI, Ridler and Sinders set out to reveal the entanglements between humans and machines, so people can understand where they have agency. They wanted to force attention to hidden human labour in AI, and raise wider questions around human bias and worker exploitation. Building on their past work, they set out to explore and make explicit through own artistic practice, the human aspects, inputs and decisions involved in each step of creating and deploying AI.

Image: Anna Ridler and Caroline Sinders, Cypress Trees: Fragmentation (2021), Project notes. Image © Anna Ridler & Caroline Sinders

After COVID-19 hit, the artists explored new directions: immersive experiences for remote audiences, climate grief and the American Gulf Coast.

Technology as tool or catalyst
***"Through making this project by hand, we are creating slow data."* –** Anna Ridler and Caroline Sinders

This body of work and artist-research collaboration is inspired by a holistic engagement in the human decisions and actions in machine learning pipelines. The artists develop bespoke datasets by hand, from the photography of hard-to-access trees and natural spaces to labelling and cataloguing. The two artistic works involve Generative Adversarial Networks (GANs) that produce imagery of a beach or cypress trees. The heart of each work is the collection and curation of the datasets that the models require. The artists captured photography of the trees and natural environments through extensive time in the field. Ridler and Sinders collaborated remotely during lockdown to build training datasets based on this photography. They then trained the GANs and interacted with the model by manipulating data and weightings. A key artistic intervention in the artists' practice is to identify automated processes in the ML pipeline and develop manual methods to deliver the same outputs. The artists painstakingly and meticulously extract patterns from observed data using manual methods in order to make judgements and to produce the various artifacts that make up the work.

The experience

"The human messiness of the world is so influential in terms of the eventual model output." – Anna Ridler and Caroline Sinders

The process of making the works and the artifacts presented in the gallery or online exposes how AI works as a technology and how each different stage has different expectations, histories, traces and contexts. Ridler and Sinders originally proposed to create an expanded documentary that examines the way that data models are created. When Covid-19 hit, they instead created two works. Mechanized Cacophonies is an
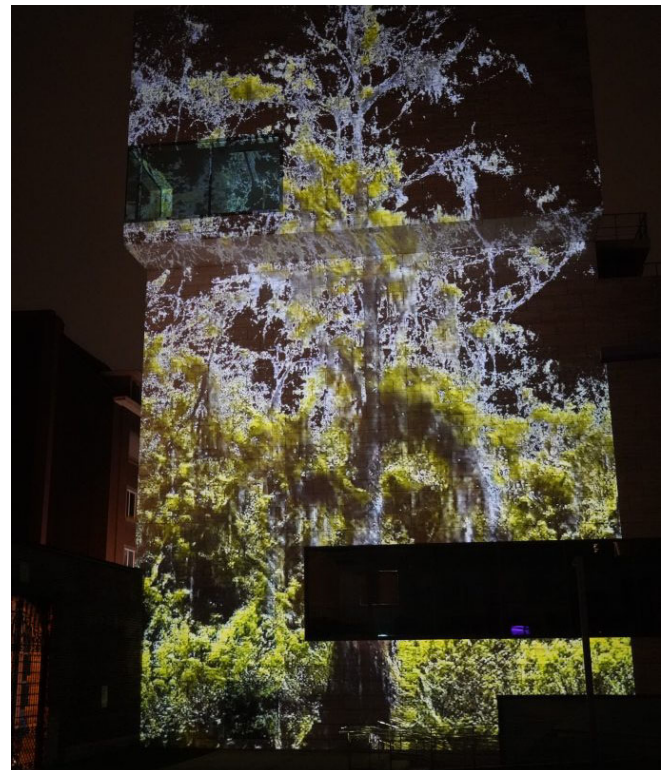

Image: *Anna Ridler and Caroline Sinders, Cypress Trees (2021). Image © Anna Ridler & Caroline Sinders*

interactive online artwork that presents an experience of a natural environment mediated by technology, inspired by Ridler's and Sinders' experiences of lockdown. The artists, working remotely, each captured sounds from a variety of sources, including field and online recordings of both natural and industrial environments. They then trained a machine learning neural network on the resulting dataset to generate eerie and uncanny soundscapes. Cypress Trees is a machine-learning-generated moving image piece that reveals the complexity of data sets and raises questions about climate change, deforestation, memory and loss. Ridler and Sinders created a special dataset of the Bald Cypress on the Gulf Coast of the USA, where both have family ties. These trees, which can live thousands of years, are currently considered to be "threatened" by climate change. Online, a viewer is able to browse an accompanying webpage that features a broad and diverse range of artifacts represented in digital imagery and animations: early epoch of GAN output, photographic training data, annotations and labels, field notes, Google map images, animations, academic articles and press cuttings. The residency itself entailed structured research activities including workshops and interviews. Further dissemination was through talks, blogs and an artist video for The New Real website.

Image: Anna Ridler and Caroline Sinders, Mechanized Cacophonies (2021). Image © Anna Ridler & Caroline Sinders.

Insights

"In order to have a fair and moral AI system it is essential that these issues are addressed."
– Anna Ridler and Caroline Sinders

The artist residency highlighted that what we think of as machine intelligence is actually human intelligence at many points in the system. The art practice of Ridler and Sinders debunks the neat representations of 'autonomous' technologies and exposes the situational, embodied nature of machine learning systems. Models such as the GPT family have taken the misuse of human labour to a whole new level and as a result the concerns around accreditation, consent, rights and fair pay that Rilder and Sinders alerted us to are far more prominent than they were three years ago. The residency raised wider questions around human bias and worker exploitation and presses us to envision methodologies and pipelines for AI development in which human labour is acknowledged and honoured. The artists extract patterns from observed data using

manual methods, and in this sense turn a foundational definition in AI on its head, by the human artist doing a task usually done by the computer and associated with machine intelligence. The resulting works – Cypress Trees and Mechanized Cacophonies – support reflection on the politics of climate change, memory and loss, on mediated experiences of nature, and on what affected areas might be like in the future, with and without the trees. Rather than for problem-solving, human-machine intelligence is applied to produce imagery and gallery installations that represent the ordering of knowledge by AI and climate change impacts.

The research with The New Real research team was published as a paper presented at ACM Fairness, Accountability and Transparency (FAccT) in Chicago on 13 June 2023. In this paper, we explore the potential for AI Art – particularly work in which AI is both tool and topic – to facilitate public AI literacies and consider how tactics developed before the current generative AI boom have continued relevance today.

References:
1. https://carolinesinders.com/feminist-data-set/
2. https://annaridler.com/myriad-tulips
3. https://annaridler.com/mosaic-virus

Artist bios:

Anna Ridler is an artist and researcher who lives and works in London. She is interested in working with collections of information or data, particularly self-generated data sets, to create new and unusual narratives in a variety of mediums, and how new technologies, such as machine learning, can be used in the creative process. Her work has been exhibited widely at cultural institutions worldwide including the Victoria and Albert Museum, Tate Modern, the Barbican Centre, Centre Pompidou, HeK Basel, The Photographers' Gallery, the ZKM Karlsruhe, and Ars Electronica.

Caroline Sinders is a critical designer and artist. For the past few years, she has been examining the intersections of artificial intelligence, abuse, and politics in digital conversational spaces. She has worked with the United Nations, Amnesty International, IBM Watson and others. Sinders has held fellowships with, amongst others, the Harvard Kennedy School, the Mozilla Foundation, the Sci Art Resonances program with the European Commission. Her work has been featured in Tate Exchange at Tate Modern, Victoria and Albert Museum, MoMA PS1 and others.

Links
The New Real, Artist Residency, https://newreal.cc/art/human-after-all
Anna Ridler, Artist Website, https://annaridler.com
Caroline Sinders, Artist Website, https://caroline-sinders.com
Cypress Trees: A Beginning, 2021, Archival print of dataset with handwritten annotations: http://annaridler.com/cypress-trees-2021
Cypress Trees: Fragmentation, 2021, Projection of GAN video (30:00): http://annaridler.com/cy-press-trees-fragmentation
Mechanized Cacophonies, interactive website: http://annaridler.com/mechanized-cacophonies
Ars Electronica 2021, https://ars.electronica.art/newdigitaldeal/en/cypress-trees
Edinburgh International Festival, 2021, https://www.eif.co.uk/archive/2021-mechanized-ca-cophonies

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