Concept Landscape

Technoethics -Project Proposal

Xirui Liao

Outline

Humans have been using and viewing algorithms as subjects, but algorithms are no longer a simple neutral tool. As more-than-human ontologies, they are constantly evolving. The original cognition has been out of touch with reality, so it is urgent to explore new ways to re-understand and review the relationship between algorithms and humans.

Vision could be the most intuitive way to understand the difference between algorithms and human vision. When humans teach machines to learn image recognition, we are also exploring ourselves. We are still unable to fully explain how we distinguish between different kinds of objects and concepts. However, when we test a hypothesis on a machine, we are in a way updating our perceptions, so that the algorithm is an ever-evolving mirror that makes the inner logic of human function clearer and clearer.

The algorithm uses the convolutional neural network (CNN) to recognize the features of pictures. After visualization processing of this algorithm, we seem to have a glimpse of the panorama of algorithmic architecture and what the world in the CNN looks like. However, at present, its image recognition can only be divided into specific object categories, instead of obtaining abstract concepts. If we feed the CNN images or words that represent abstract concepts, such as morality, technology, environment, politics, and then visualize it, can we see the algorithm's understanding of abstract concepts?
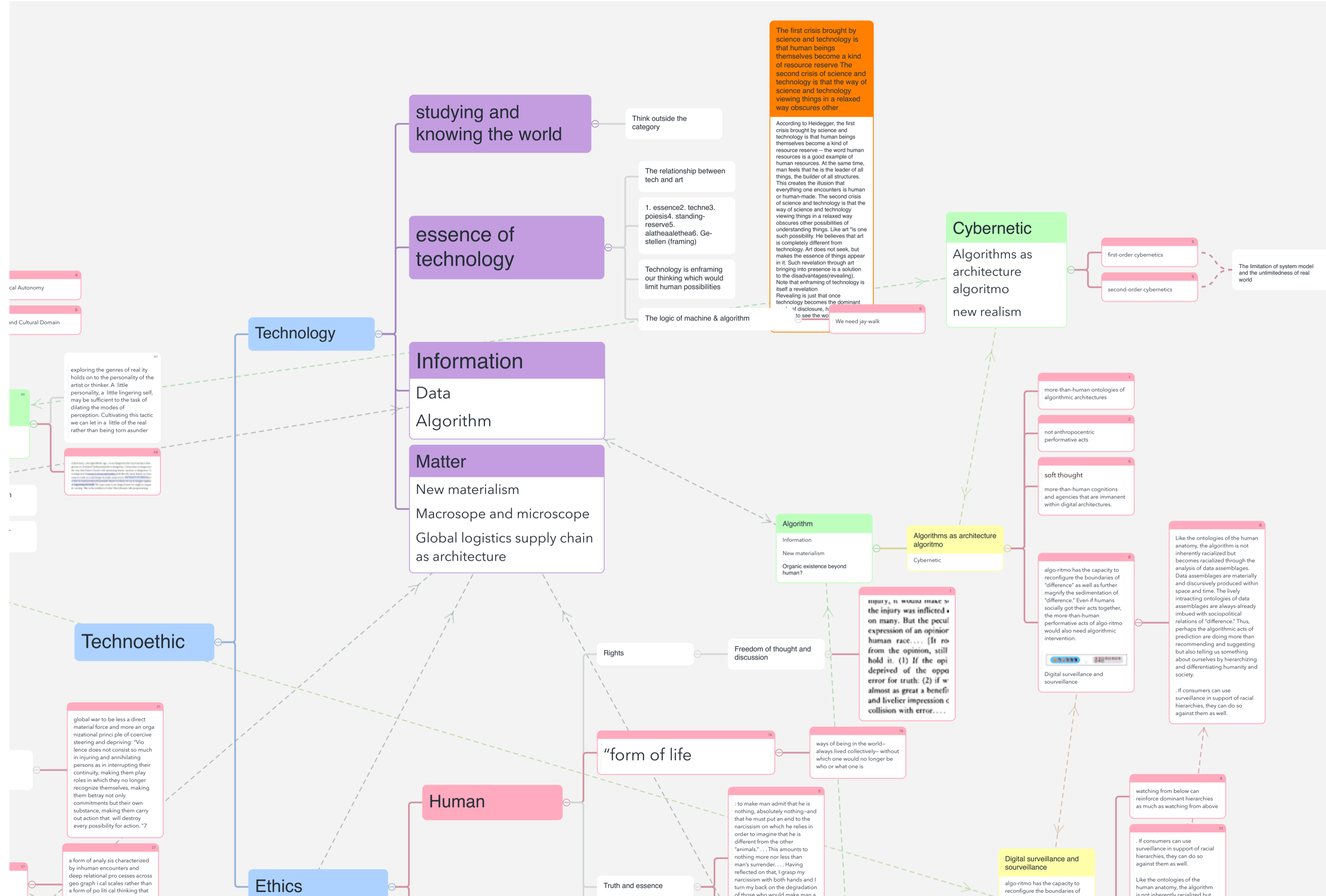

Future Hypercube (2016), Tian Xiaolei, video installation

(I think this installation is really cool, and it's kind of a metaphor for the relationship between people and technology and algorithms.)

Background & Motivation

As a modern artist, I am not only considering the possibility of using algorithms in my works, but also the possibility that algorithms occupy the living space of artists. I had high hopes for algorithms, but I was also terrified.

Fear comes from the unknown of the algorithm. What I can do is to further reveal the algorithm and reposition the relationship between man and algorithm. The project is like a probe into how algorithms see abstract concepts that we humans have developed over time. Are abstractions computable? What are the abstractions that have been calculated? With algorithms breaking through, I think it's time to hear what the machines is saying.

The first crisis brought by science and technology is that human beings themselves become a kind of resource reserve The second crisis of science and technology is that the way of science and technology viewing things in a relaxed way obscures other

According to Heidegger, the first crisis brought by science and technology is that human beings themselves become a kind of resource reserve – the word human resources is a good example of human resources. At the same time, man feels that he is the leader of all things, the builder of all structures. This creates the illusion that everything one encounters is human or human-made. The second crisis of science and technology is that the way of science and technology viewing things in a relaxed way obscures other possibilities of understanding things. Like art "is one such possibility. He believes that art is completely different from technology. Art does not seek, but makes the essence of things appear in it. Such revelation through art bringing into presence is a solution to the disadvantages(revealing). Note that enframing of technology is itself a revelation Revealing is just that once technology becomes the dominant of disclosure, h... to see the wo...

We need jay-walk.

Technology

- studying and knowing the world
  - Think outside the category
- essence of technology
  - The relationship between tech and art
  - 1. essence 2. techne 3. poiesis 4. standing-reserve 5. alatheaalethea 6. Ge-stellen (framing)
  - Technology is enframing our thinking which would limit human possibilities
  - The logic of machine & algorithm
- **Information**
  - Data
  - Algorithm
- **Matter**
  - New materialism
  - Macrosope and microscope
  - Global logistics supply chain as architecture

Cybernetic
- Algorithms as architecture algoritmo
- new realism
  - first-order cybernetics
  - second-order cybernetics
    - The limitation of system model and the unlimitedness of real world

Algorithm
- Information
- New materialism
- Organic existence beyond human?

Algorithms as architecture algoritmo
- Cybernetic

- more-than-human ontologies of algorithmic architectures
- not anthropocentric performative acts
- soft thought
  - more-than-human cognitions and agencies that are immanent within digital architectures.

algo-ritmo has the capacity to reconfigure the boundaries of "difference" as well as further magnify the sedimentation of "difference." Even if humans socially got their acts together, the more-than-human performative acts of algo-ritmo would also need algorithmic intervention.

Digital surveillance and sourveillance

Like the ontologies of the human anatomy, the algorithm is not inherently racialized but becomes racialized through the analysis of data assemblages. Data assemblages are materially and discursively produced within space and time. The lively intraacting ontologies of data assemblages are always-already imbued with sociopolitical relations of "difference." Thus, perhaps the algorithmic acts of prediction are doing more than recommending and suggesting but also telling us something about ourselves by hierarchizing and differentiating humanity and society.

. If consumers can use surveillance in support of racial hierarchies, they can do so against them as well.

Technoethic

global war to be less a direct material force and more an organizational principle of coercive steering and depriving: "Violence does not consist so much in injuring and annihilating persons as in interrupting their continuity, making them play roles in which they no longer recognize themselves, making them betray not only commitments but their own substance, making them carry out action that will destroy every possibility for action."7

a form of analysis characterized by inhuman encounters and deep relational processes across geo graphical scales rather than a form of political thinking that

Rights
- Freedom of thought and discussion

inquiry, it would make s... the injury was inflicted ... on many. But the pecul... expression of an opinion human race.... [It ro... from the opinion, still hold it. (1) If the opi... deprived of the oppo... error for truth: (2) if w... almost as great a benefi... and livelier impression c... collision with error....

"form of life
- ways of being in the world– always lived collectively– without which one would no longer be who or what one is

Human
- : to make man admit that he is nothing, absolutely nothing–and that he must put an end to the narcissism on which he relies in order to imagine that he is different from the other "animals." . . . This amounts to nothing more nor less than man's surrender. . . . Having reflected on that, I grasp my narcissism with both hands and I turn my back on the degradation of those who would make man a

- Truth and essence

watching from below can reinforce dominant hierarchies as much as watching from above

Digital surveillance and sourveillance
- . If consumers can use surveillance in support of racial hierarchies, they can do so against them as well.
- Like the ontologies of the human anatomy, the algorithm is not inherently racialized but
- algo-ritmo has the capacity to reconfigure the boundaries of

Ethics

exploring the genres of real ity holds on to the personality of the artist or thinker. A little personality, a little lingering self, may be sufficient to the task of dilating the modes of perception. Cultivating this tactic we can let in a little of the real rather than being torn asunder

...cal Autonomy

...and Cultural Domain

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Research

Here I show some image recognition and text recognition to image algorithms. It can be seen that the logic of machine in image recognition is very different from that of human beings, but similar to human beings in some places.
This logic through feature recognition can show part of human recognition function, but not all of it. However, through countless iterations, the algorithm itself has developed some logic and forms 'beyond' human beings.

https://distill.pub/2019/activation-atlas/
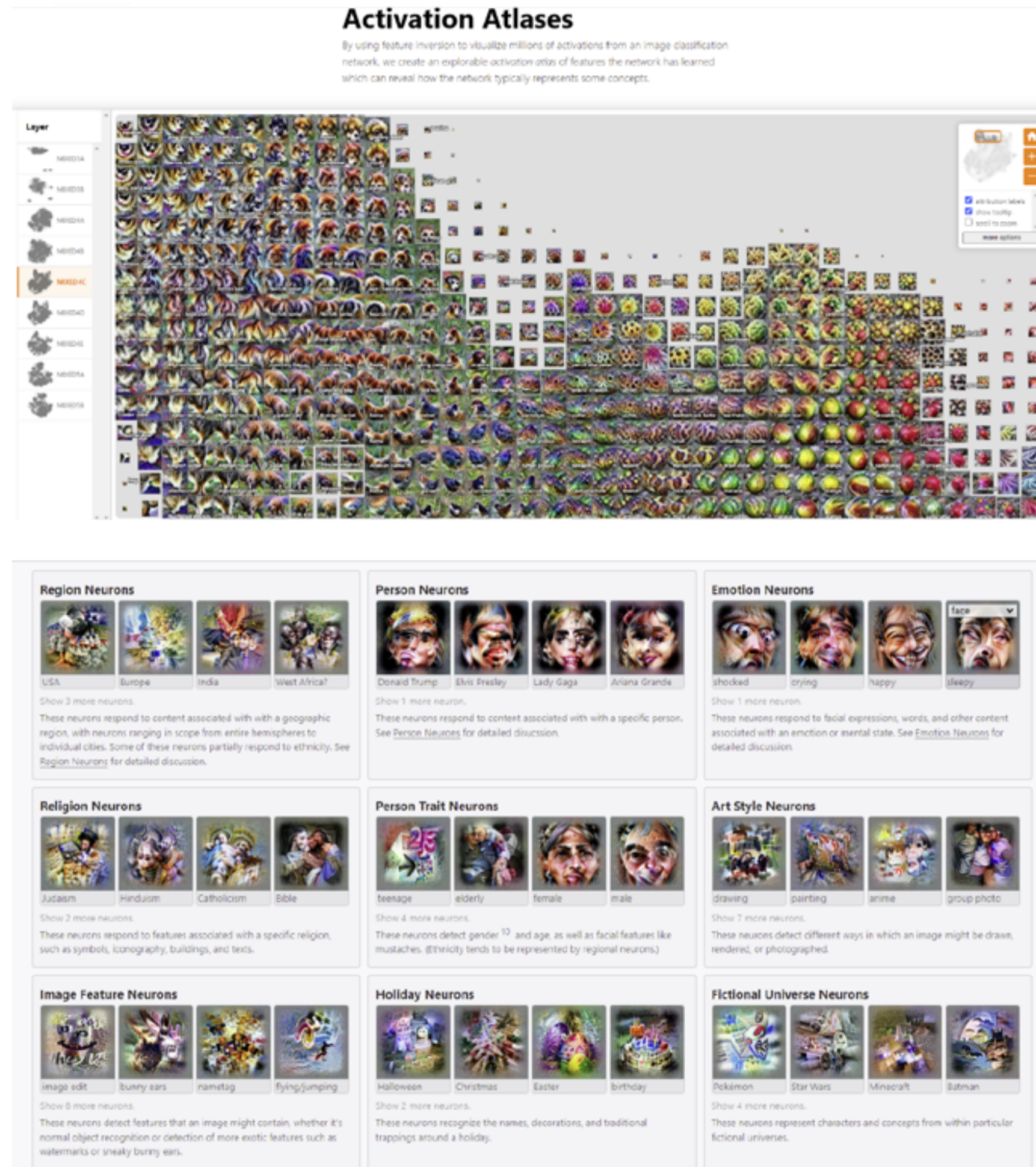
By using feature inversion to visualize millions of activations from an image classification network, they create an explorable activation atlas of features the network has learned which can reveal how the network typically represents some concepts.

https://www.arxiv-vanity.com/papers/2105.00162/
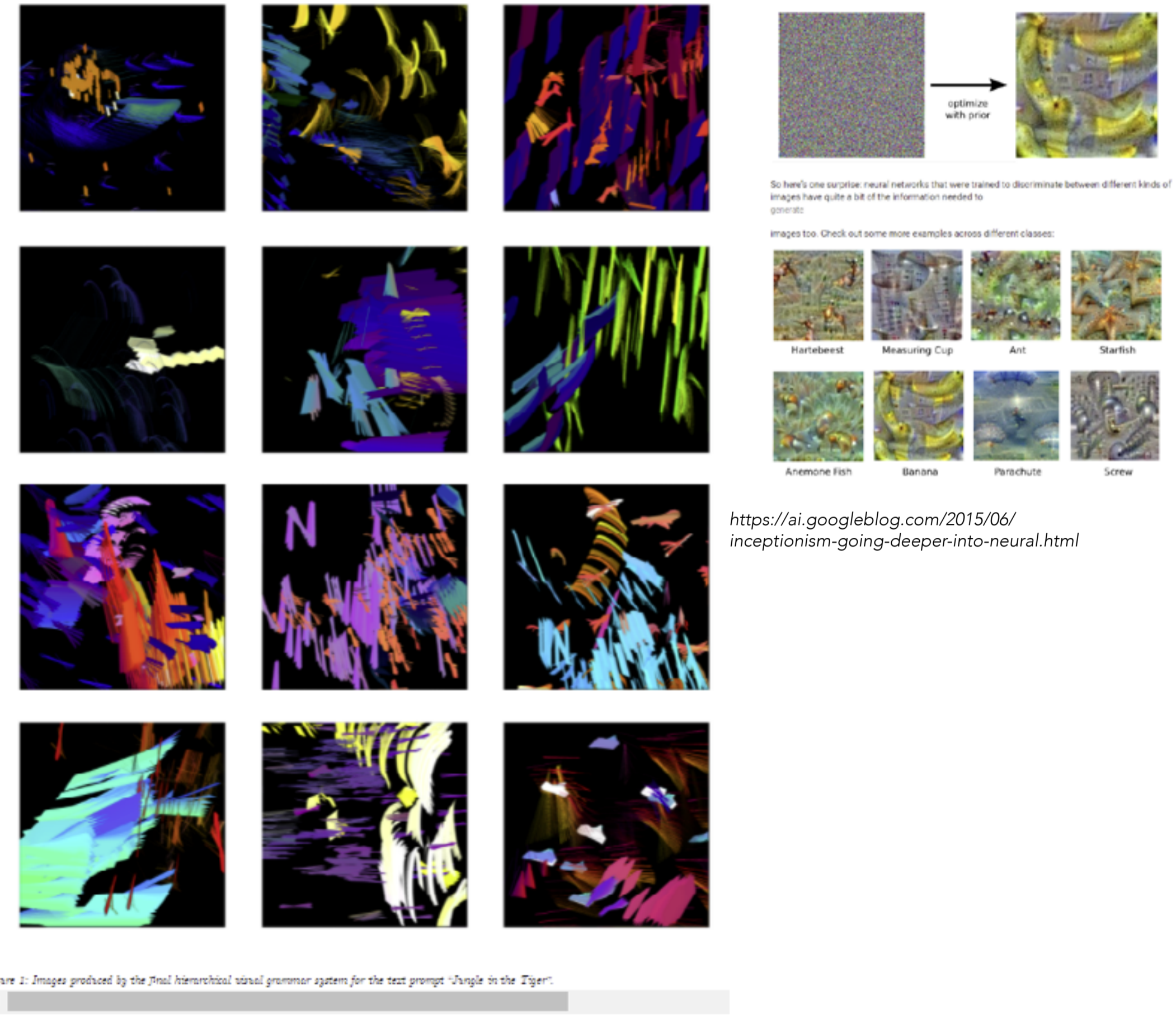
In this paper, a novel algorithm for producing generative art is described which allows a user to input a text string, and which in a creative response to this string, outputs an image which interprets that string. It does so by evolving images using a hierarchical neural Lindenmeyer system, and evaluating these images along the way using an image text dual encoder trained on billions of images and their associated text from the internet.

https://ai.googleblog.com/2015/06/inceptionism-going-deeper-into-neural.html

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Artist Reference

Brain Factory offers a new perspective on bringing humans into AI, and the Brain Factory title suggests that humans may have to understand their specific role in brain power in the age of AI, much as robots played the role of human hands in the industrial age.

I think the core idea of this work is consistent with the concern raised by Heidegger in *The Question Concerning Technology. According to Heidegger, the first crisis brought by science and technology is that human beings themselves become a kind of resource reserve -- the word human resources is a good example of human resources. At the same*

time, men feels that they are the leader of all things, the builder of all structures. This creates the illusion that everything one encounters is human or human-made.

At the same time this project attempts to use brainwave reading to capture the materialisation of some abstract concepts to give cognitive feedback from the physical, which I found enlightening.

Transactional Poetry

FAIRNESS is like DEMOCRACY

Brain Factory(2016), Maurice Benayoun, Tobias Klein , Interactive Installation
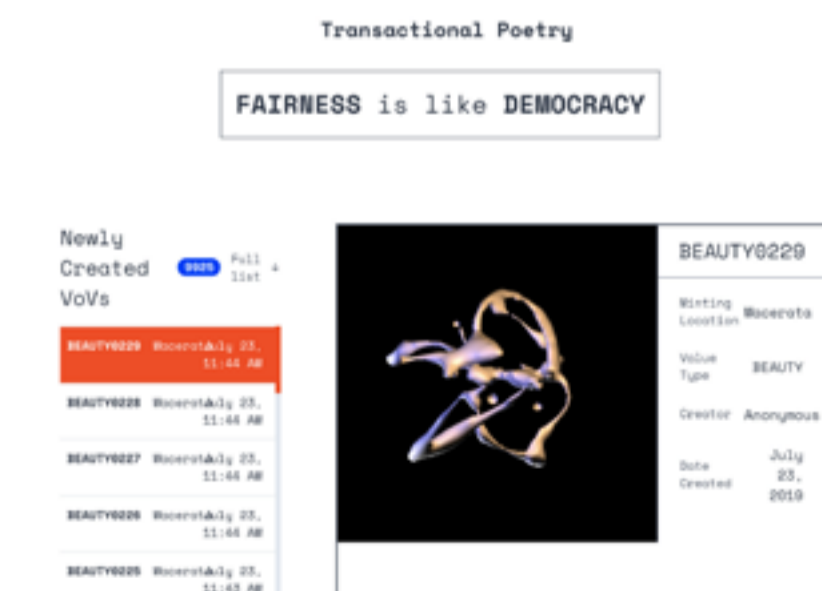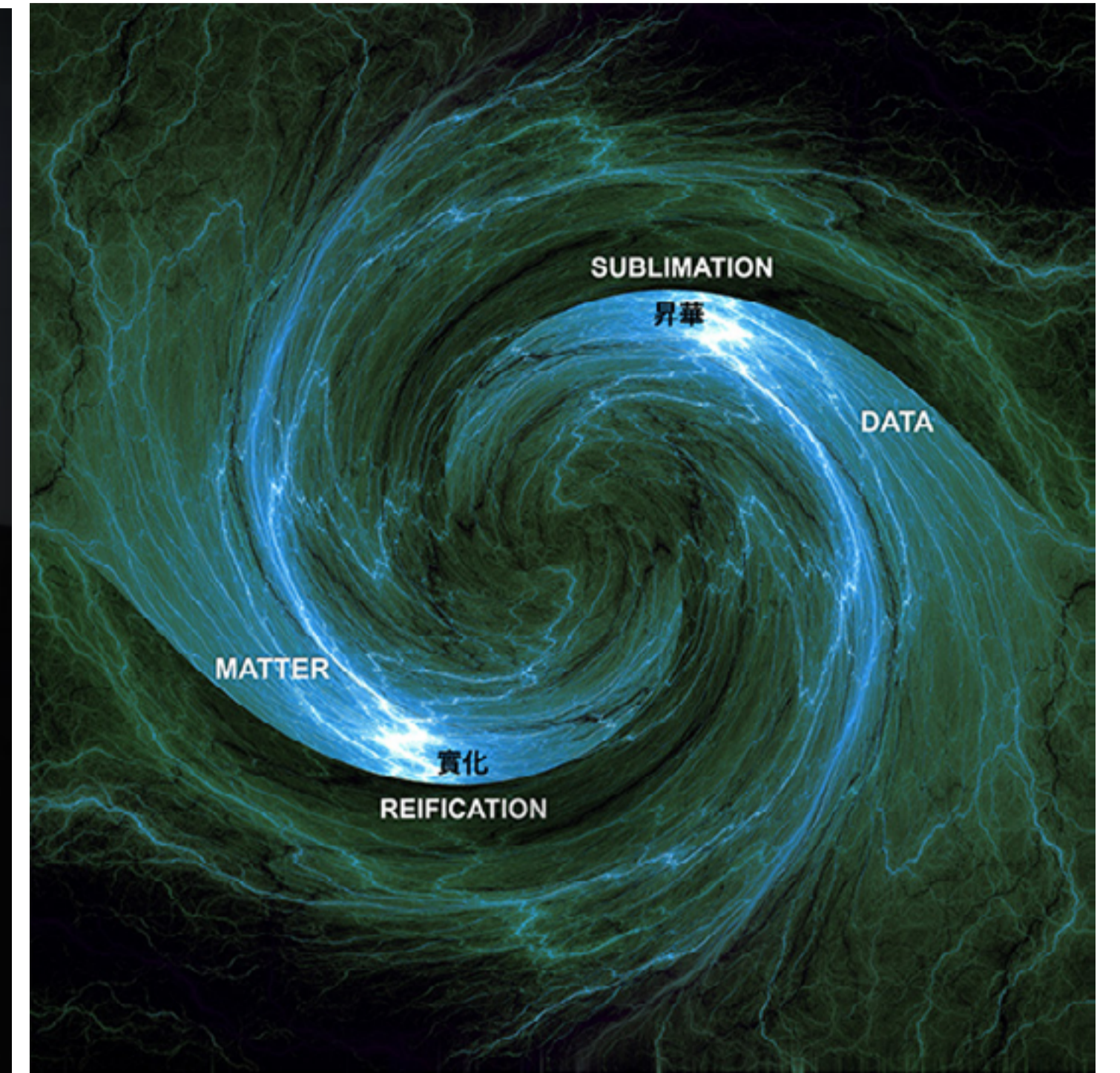
Brain Factory is an installation that allows the audience to give a shape to human abstractions through Brain-Computer Interaction (BCI), and then to convert the resulting form into a physical object. The work examines the human specificity through abstract constructs such as LOVE, FREEDOM, and DESIRE. The project articulates the relationship between thought and matter, concept and object, humans and machine.

Blame! provides an interesting identity swap. Algorithms get out of control, and the entities they construct -- architecture become the masters, expanding and proliferating crazily. They regard human beings as pests that hinder their development. Human beings do not understand the purpose of architecture and can only survive under the rule of architecture.
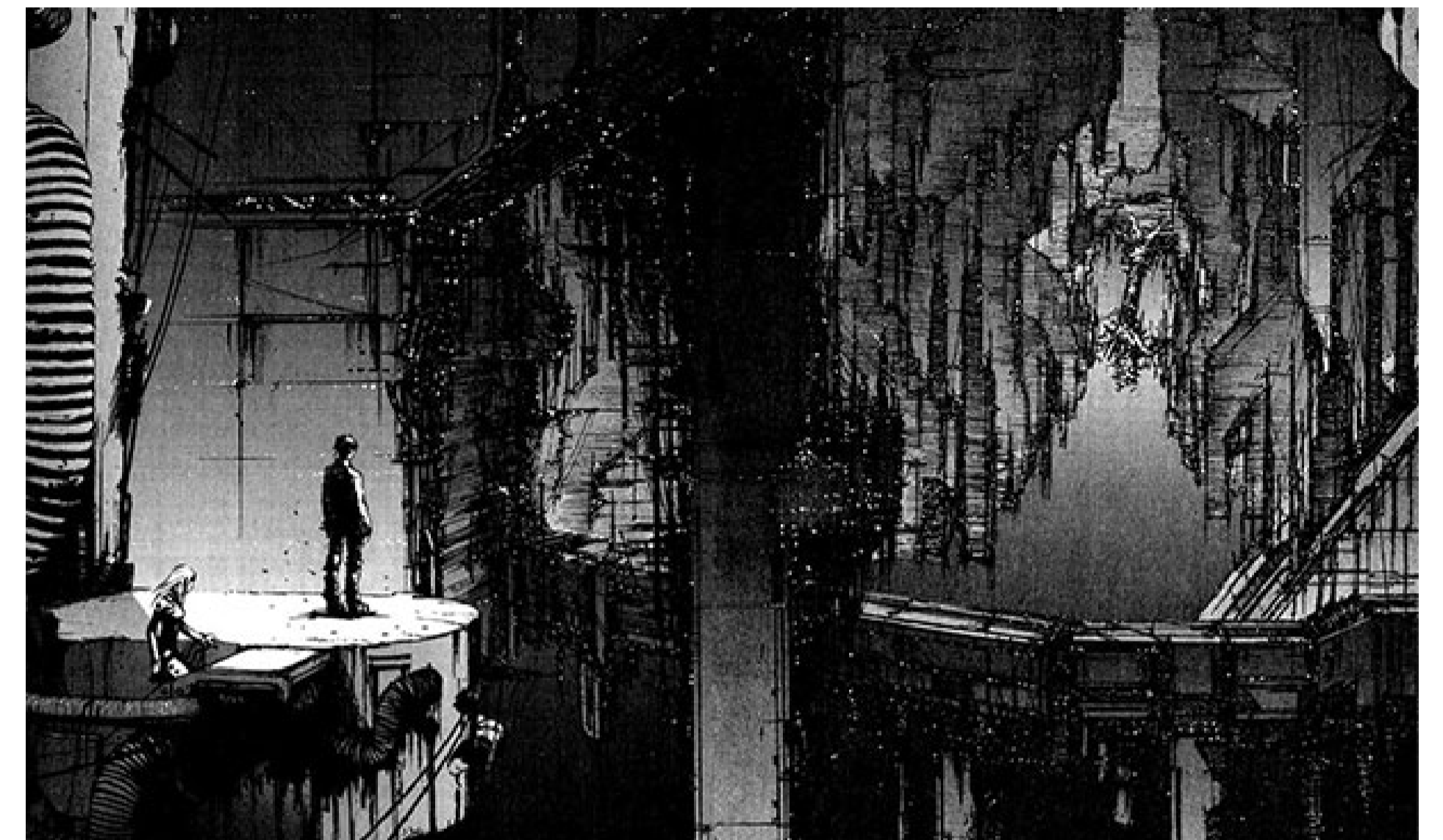
BLAME! (2003),Tsutomu Nihei, Comics

I think it is an interesting piece of news, with a thought-provoking quote: 'Technology (Ai-da) has emerged to warn people of the potential dangers of technology'. It reminds me of Asma abbas' suggestion that 'In a liberal society, every performance of justice requires a performance of suffering', does the caution against technology also require a purposeful performance?

An Art-Making Robot Was Detained on Her Way to Show at the Pyramids Because Egyptian Customs Officials Thought She Was a Spy

Border agents kept the robot artist Ai-Da in custody for 10 days and debated removing her eyes, which have built-in cameras.

Sarah Cascone, October 20, 2021

https://news.artnet.com/art-world/robot-artist-ai-da-detained-by-customs-officials-2023380

"People fear robots, I understand that. But the whole situation is ironic, because the goal of Ai-Da was to highlight and warn of the abuse of technological development, and she's being held because she is technology." He added: "Ai-Da would appreciate that irony, I think."

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Readings & Bibiography

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2. The Question Concerning Technology, Martin Heidegger

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Other References

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3. Fernando, C., Eslami, S., Alayrac, J., Mirowski, P., Banarse, D. and Osindero, S., 2022. Generative Art Using Neural Visual Grammars and Dual Encoders. [online] Arxiv-vanity.com. Available at: <https://www.arxiv-vanity.com/papers/2105.00162/> [Accessed 18 March 2022].4. https://news.artnet.com/art-world/robot-artist-ai-da-detained-by-customs-officials-2023380

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7. BLAME! (2003),Tsutomu Nihei, Comics