Blueprints For An Emergent Personality: A visual inquiry into the nature of a computational system drawing on observation, psychology and imagination

From March 2017 through December 2018 the Amore Team took part in the Vertigo STARTS residencies, which involved a collaboration with visual artist Theo. The project was funded by H2020 European STARTS initiative to integrate arts and sciences.

Mid-progress video

End video

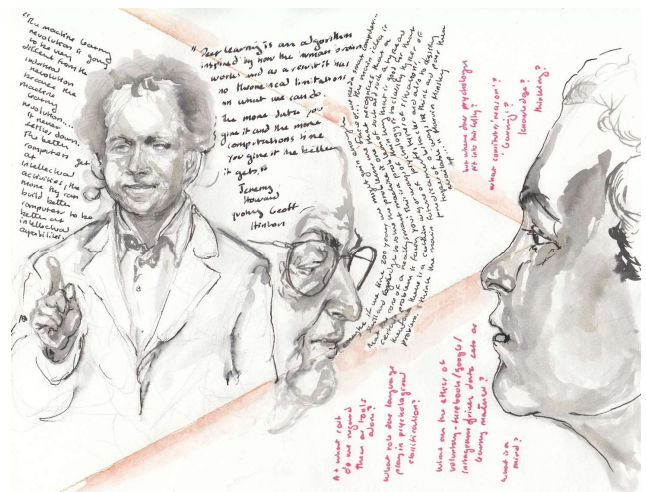The project, called 'Blueprints For An Emergent Personality', asked two questions:

(1) What could be learnt if one treated a computational system that can learn its own representations from data as we would a developing infant mind?

(2) How can we represent non-human personality and how can this representation best combine objective analysis with subjective interpretation?

Theo approached the AMORE computational system as an infant consciousness developing its cognitive abilities – inferring the body (or the embodiment), which emerges from the way the model-as-a-mind displays idiosyncrasies akin to a personality. She translated the responses of the system into data points and emotive sketches suggested by these slippages, which she developed through discussions with specialist consultants (a psychologist and a specialist in developmental neurocognition) in order to build a picture of the potential personality behind them. Theo then constructed images of a mature and embodied self from that of this early stage of its personality.

Fig 3: Sketchbook with baby

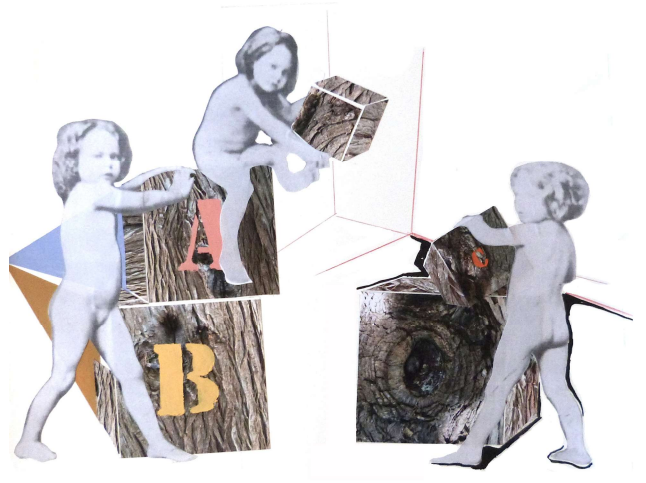**Fig 4: Sketchbook with text and faces**

Theo lived and worked alongside the AMORE team at Pompeu Fabra University in Barcelona for the beginning of the project, exploring and sketching the city and the lab itself for visual cues, and speaking with the participating researchers regarding the model and its data – working closely with an AMORE researcher, who was applying the model's architecture (a distributed neural network) to reverse engineering an infants' ability to learn words. This first phase of the project resulted in a 140-sketchbook, which combined visual notes with imaginative compositions, alongside portraits of the researchers and brief textual notes from conversations and seminars.

Fig 5: preparatory collage/painting with lines

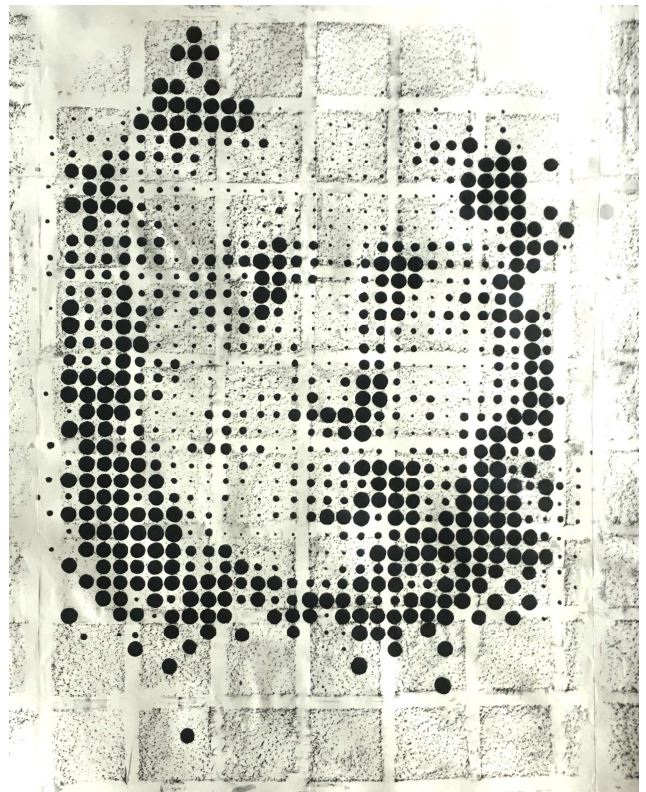**Fig 6: preparatory collage/painting with children and building blocks**

The final, large-scale series involve collage as well as drawing and ink painting. These mixed media representations use texture and visual noise to create emotional flashpoints that conjure the hypothetical experience of the AMORE model's non-human personality. Visual perplexities, confusions about identity, a fundamental dissociation from a human's recognizable visual world are hallmarks of all six pieces, which resonate with each other, each using a combination of techniques and motifs to convey an imagined emotional reality.

Fig 7: final drawing with mother and child

Fig 8: final drawing with dots

Artist

Theo is a London-based artist, whose unique visual language centres on the human figure and draws from her technical, emotional and intellectual fascination with how the ideals of older European painting traditions, from 18th-century allegorical images to 20th-century experiments with expressionism and surrealism, have both saved and failed us. In her alternate, more rational headspace – as Dr Kate Aspinall – she is an art historian, focused on 20th-century British art. Theo has exhibited and worked in the UK, US, France, Spain, Hungary and Italy, and as Dr Aspinall she has taught at Yale University, Courtauld Institute and University of East Anglia, consulted for the Roy Lichtenstein Foundation, and spoken at Tate Modern, the National Gallery, Pallant House and many more galleries.

Keywords

learning, linguistics, language, perception, psychology, artificial Intelligence, artistic representation, computational linguistics, drawing, embodiment, theory of mind, art, painting, collage, sketching

Futher Links

- Theo's page: http://bytheo.art/
- STARTS about page: https://starts.eu/what-we-do/residences/
- Project presentation at STARTS-residency-day: https://vertigo.starts.eu/article/detail/blueprints-for-an-emergent-personality-the-starts-residencies-day/
- UPF-video on project: https://www.youtube.com/watch?v=IoNdrtg6VAE