MACHINE HALLUCINATIONS
an examination of architecture in a posthuman design ecology

THE RISE OF AI

In March 2017 Facebook's AI Research Laboratory conducted an experiment: two AI's were set up to discuss aspects of trade in English with each other. The goal was to create an AI that could communicate with humans about economy¹. Within 24 hours the two AI's named Bob & Alice had developed their own language which was impossible to be understood by humans, albeit it was based on English (fig.1). This example shows the AI's ability to develop forms of communication and expression outside the agency of humanity and as such can be considered a part of posthuman culture. Developing a language per se is a creative process and has been discussed in a series of papers which primarily are concerned with finding methodologies of human-AI interaction². To mention just one of many examples from this branch of research: improved speech recognition when using voice commands for your computer or mobile device. Ludwig Wittgenstein's hypothesis of "Whereof one cannot speak, thereof one must be silent."³ is critically interrogated and put to the test by an AI that in fact just develops a language instead of remaining silent.

The Project, the Church of AI⁴ taps into these opportunities in a twofold fashion. On the one side by employing a design technique that is based on the ability of Artificial Intelligence to generate form autonomously of human interaction, and on the other hand by speculating about the nature of devotion, the sublime and awe in a posthuman society.

EXPLORING NEURAL MESH RENDERERS

The project relies heavily on the use of machine learning and deep learning in order to generate a formal vocabulary. The morphogenesis in this case is completely relying on the ability of AI to mash up imagery – and in a further process 3D models (fig.2). The basis for this project was a dataset of images from two distinct architectural tendencies, the Baroque and a series of images of deeply generic modern slabs and high-rise buildings, primarily distinct by their profoundly repetitive and immensely boring, quality (fig.3). The process of creating variation and difference is propelled further by the possibility to run through a series of results in quick progression. The only human intervention in this case is the selection process at the end, as of which of these results are deemed successful in regards of the criteria to serve as a possibly place of worship, but even this could be automatized provided the AI gets trained to do so.

DO AI'S CREATE THEIR OWN SENSIBILITIES?

The Church of AI can be considered a proof of concept as of how agency can be acquired by Artificial Intelligence. In this case the contingency is the consideration of a benevolent AI, one that shares the space with humanity, and that converts the process of making to a method of worship. The construction of space turns from a necessity to a method of collaborative communion – as work itself does not entail human interaction anymore.
Fig. 1 Facebook's AI Research Laboratory’s Bob & Alice engaged in negotiations – a language not accessible by humanity.

Fig. 2 Neural Render Process to combine a polymesh model with 2-dimensional information to generate a 3D object (image: Hiroharo Katu, Yoshitaka Ushiku, Tatsuya Harada, University of Tokyo 2017)
Fig. 3 A collection of two datasets – Baroque and Modern images – form the basis for the resulting models.

Fig. 4 Section through one of the resulting models.
1: Forbes Magazine, July 31st 2017

2: I. Mordatch, P. Abbeel, Emergence of Grounded Compositional Language in Multi-Agent Populations, arXiv:1703.04908

3: Ludwig Wittgenstein, Tractatus Logico-Philosophicus, Proposition 7, Annalen der Naturphilosophie Nr. 14, 1921

4: The project was executed as part of the studio Architectural Automations at …………………