Polymorph II is a result of research into multisensory, distributed Ai working fluidly across different forms of matter, connecting the indeterminacy of complex physical systems with fixed, generative Ai models to produce emergent outcomes.

In this iteration, small changes in air current, the movement of bodies, and fluctuating electromagnetic interference are entangled with fine-tuned generative Ai models.

Data 'leaps' and 'leaks' across layers and formats at various time scales and between the tangible components of the work, producing sensorial magnitudes with no singular hierarchy. The sensing, auditory, and optic elements act as both inputs and outputs, forming a dynamic manifold/structure of feedback loops.

Polymorph II comprises a fine-tuned Stable Diffusion model, 2 steel plates which function both as sensors and sound resonators, and thin strands of conductive 'hair' that wave according to changing air currents in the room. As data transforms across formats and forms of matter, the dataset generating the visible and auditory components of the work expands, merging with the environment within which the work is immersed.

Bending down to view the small onscreen image will fold the sensed presence of the body into the emerging long-term structure of the work.

RP2-9 Artificial and Distributed Intelligence

Research team:

Dr Jeremy Keenan, Maggie Roberts, Sonia Bernac, Dario Srbic, [Prof Johnny Golding (PI)]