



School: Creative Industries

Researcher: Charlie Tweed

Project Title: The Signal and the Noise

UOA: 34 – Communication, Cultural and Media Studies, Library and Information Management

300-Word Statement

Commissioned by Animate Projects and funded by a Wellcome Trust Arts Award (£12,000), 'The Signal and the Noise' is a multi-component output that was developed during collaborative research with biomedical scientist Dr Darren Logan at Sanger Institute, Cambridge. The research considers how new methods of 'design fiction' can foster new forms of collaboration within the field of Sci/Art, exploring how science and art can develop a shared critical toolkit. In particular, how can such an approach yield results that move beyond traditional research outcomes, such as data visualization? Tweed engaged diverse audiences, generating debate about the future of genetic science. Outputs comprise a script and storyboard for a film, as well as the resulting film. Contextual information includes documentation of exhibitions and other public engagement activities and images taken from the initial research.

Tweed explored Logan's work on genetically influenced behaviour, the science behind it and the technologies used to sequence and analyse genes. Tweed examined the parallels between DNA coding and computer coding, and this was interrogated via a fictional script, which considers futures of genetic and hardware computing technologies, including the ability to manipulate behaviour and the future possibilities of gene editing. Educational materials accompanied the work, including a science guide for the public.

The film draws on a shared history of genetic and hardware computing, and is voiced by anonymous future technologies who look at humans as 'inefficient machines'. It considers ways of improving their code (to 'remove the noise'), speculating on future forms of hybrid computing. The film was presented at film festivals, galleries and science festivals. The research underpinning the work was presented at the Silent Signal conference (Derby University, 2016). The film itself was selected for a screening at the renowned Oberhausen Film Festival (2016) and a special edition of Sci/Art magazine Labocine (2017).