Multidisciplinary understandings of Indeterminacy, Uncertainty and Risk Chris Fremantle Gray's School of Art, Robert Gordon University



Practice-led research

- Live project activity and reflection
- Exemplary work



Research projects involved:

'newLEAF: Learning to adapt to an uncertain future: linking genes, trees, people and processes for more resilient treescapes'

Part of UK Research & Innovation

'The Future of UK Treescapes' programme

https://www.uktreescapes.org/projects/newleaf/

'Creative Landscape Futures'

Part of UK Research & Innovation Landscape Decisions programme

https://creativelandscapefutures.blogspot.com/



Contributors

Chris Fremantle (Art & Design, Robert Gordon University),

Louise Barwell (Ecological Modelling, UK Centre for Ecology and Hydrology),

Anne Bevan (Art & Design, University of the Highlands and Islands),

Stephen Cavers (Population Ecology, UK Centre for Ecology and Hydrology),

Jen Clarke (Art & Design, Robert Gordon University),

Tim Collins and Reiko Goto-Collins (Art & Ecology, Collins and Goto Studio),

Malcolm Combe (Law, University of Strathclyde),

Joan Cottrell (Population Genetics, Forest Research),

Anne Douglas (Art & Design, Robert Gordon University),

David Edwards (Social Science and History, Forest Research),

Aaron Ellison (Ecology, Harvard Forest),

Deirdre Heddon (Performance, University of Glasgow),

Wallace Heim (Philosopher and Artist),

Petra Tjitske Kalshoven (Anthropology, University of Manchester),

Glenn Marion (Ecological Modelling, Biomathematics and Statistics Scotland),

Seth Oliver (Arts, Fizzi Events),

Vadim Saraev (Economics, Forest Research),

Sietske Veenman (Social Sciences, Radboud University Nijmegen),

Jo Vergunst (Anthropology, University of Aberdeen)



Definitions

Uncertainty is usually used to refer to a state or condition of knowledge – it is epistemic

Indeterminacy refers to randomness and intrinsic variation – sometimes called aleatory

Risk – things where we understand enough about the likelihood and the consequence in order to be able to put in place forms of management – e.g. financial, health and safety.





Claire Gavronsky The Theorist's Blind Spots, 2012







Thomas Cole, 1836 The Oxbow (The Connecticut River near Northampton)







Caspar David Friedrich, 1818 Chalk Cliffs on Rügen









Discussion

- Objectives (what we know and what we choose to do about it) and how we imagine things
- Translation from sciences to intermediary disciplines eg law/economics (with their own uncertainty/indeterminacy issues) to policy (with its own concerns with uncertainty/indeterminacy)
- Variety of approaches from artists a characteristic of creative practice – underlying message that we need to work with uncertainty/indeterminacy to produce novelty



Conclusions

Preponderance of contributions address 'epistemic' uncertainty Fewer are concerned with natural variation and randomness Four broad areas:

- Knowledge
- Futures
- Change
- Action

