

Cultural Spaces of Climate Early Career Researcher Network

Workshop one: 'Challenging established framings of climate and climate change'.

Location: The Lowther Room, Royal Geographical Society, Kensington Gore, London, UK, on 6th - 7th October 2011.

Aims and Objectives

This workshop was the first in a series that aims to explore the following three themes, taking the first as the over-arching theme of the day:

- 1) Challenging the established framings of climate and climate change**
- 2) Methodological and interdisciplinary approaches for climate research
- 3) Contextualising climate at the local, regional and global scales

In addition to the exploration of this theme, the workshop aimed to provide an opportunity for early career researchers to meet in a supportive environment to share, explore and disseminate their research and provide and receive constructive feedback. This aim was central to sessions one and two, however, other more informal spaces were built in to the schedule to maximise the potential for exchange of ideas and feedback. The workshop also enabled participants to have conversations between established and early career researchers, and those beyond the academy, and sessions two, three and four and the visit to the Atmosphere Gallery, Science Museum sought to fulfil this aim. Other objectives for the workshop include producing a collaborative review of the Atmosphere Gallery at the Science Museum, as well as continuing to promote and develop the network.

Participants

George Adamson (University of Brighton)

Alexander Berland (University of Nottingham)

Maud Borie (University of East Anglia)

Anna Carlsson-Hyslop (University of Cardiff)

Dr. Georgina Endfield (University of Nottingham)

James Lyon Fenner (University of Nottingham)

Alexander Hall (University of Manchester)

Mathis Hampel (University Ca'Foscari of Venice)

David Hirst (University of Manchester)

Prof. Mike Hulme (University of East Anglia)

Dr. Rusi Jaspal (University of Nottingham)

Alexandra Johnson (Science Museum)
Martin Mahony (University of East Anglia)
Dr. Carol Morris (University of Nottingham)
Helen Pallett (University of East Anglia)
Kellie Payne (Open University)
Kate Porter (University of East Anglia)
Lizzie Rushton (University of Nottingham)
Dr. Lucy Veale (University of Nottingham)

Thursday 6th October 2011

09.30 - 09.50 am Arrival and Coffee

09.50 -10.00 am Introduction and welcome by Lizzie Rushton

Lizzie Rushton welcomed everyone to the workshop and thanked Dr Gerogina Endfield and Dr Carol Morris for their support of the Early Career Researcher Network in its development from the original AHRC funded Cultural Spaces of Climate network. Lizzie also thanked Dr. Catherine Souch at the RGS-IBG for hosting the event in the Lowther Room. Lizzie noted that the participants and the wider network members include representatives from over twelve institutions across the UK, and beyond, and that the network is growing and developing all the time since its inception only six months ago. This first workshop represents a positive and substantive start in the life of the network. In order to promote and disseminate the work of the network a webpage has been created by Dr Lucy Veale and Lizzie Rushton, hosted by University of Nottingham.

10.00 - 11.30 **Session one:** Presentations and papers from Early Career Researchers

- 1) **Social representations of climate change in the 1988 British broadsheet Press.**
Rusi Jaspal and Brigitte Nerlich, Institute for Science and Society, School of Sociology and Social Policy, University of Nottingham.

Climate change has become an increasingly pressing environmental concern for scientists, social and political commentators and politicians alike. Previous social sciences research has explored media representations of climate changes in various temporal and geographical contexts. Through the interpretive lens of Social Representations Theory, the article provides a detailed qualitative thematic analysis of media representations of climate change in the 1988 British broadsheet Press, given that this year constitutes an important juncture in this transition of climate change from the exclusive domain of science to that of the socio-political sphere. The following themes are outlined: (i) 'Climate change: a multi-faceted threat'; (ii) 'Collectivisation of threat'; (iii) 'Climate change and the attribution of blame'; and (iv) 'Speculative solutions to a complex socio-environmental problem'. The article provides detailed empirical insights into the 'starting-point' for present-day disputes

concerning climate change and lays the theoretical foundations for tracking the continuities and discontinuities characterising social representations of climate change in the future.

Keywords: climate change; media; communication; social representations; qualitative; social psychology.

- 2) **Framing the Sky: The birth of a public orientated national weather service, 1954-59.** Alexander Hall, Centre for the History of Science, Technology and Medicine, University of Manchester.

The 1950s saw British meteorology move from a subject with a limited public profile, relevant only to specialist concerns such as the military and aviation, into a public oriented profession, with meteorologists as household names. As developments made under the duress of war began to be applied to a peacetime footing, the Meteorological Office realised that there was a need for wider dissemination of its forecasts, warnings and expert knowledge. The decade saw popular meteorology exhibitions touring nationally, the introduction of the first national scale flood warning system, the first television weather forecast presented by a meteorologist, and the opening of high street weather centres. These formative forays into science communication raised the profile of the Met. Office substantially, but in communicating the weather meteorologists had to create a simplified notion of the British weather and climate. Unbeknown to those involved, the Met. Office had entered into a world of communicating probability and risk to the public; a world which has only become more pertinent in the subsequent decades.

- 3) **The making of authoritative climate knowledge at Durham University's meteorological observatory.** Mathis Hampel, University Ca'Foscari of Venice, also associated with Tyndall Centre for Climate Research, University of East Anglia.

The article analyses the production of authoritative knowledge of weather and climate at Durham University's long-running meteorological observatory. I employ analytical tools from actor-network theory (ANT), insights from the sociology of knowledge and geography of science to explore how trust and solidarity among knowledge producers and between a receptive public has been established and at times compromised, how an objective place is constructed to become a formal argument for credibility, and how natural imperatives, notably, anthropogenic global warming (AGW) serve to legitimise 'lines of work' which produce historically contingent realizations of nature's potentiality. Durham Observatory has become an 'obligatory passage point' and respected institution yet struggles to remain relevant for contemporary climate change.

- 4) **Climate change and the political in contemporary art exhibitions.** Kellie Payne, Open University.

To coincide with the UN climate change summit, COP15 in Copenhagen in 2009, two concurrent contemporary art exhibitions were staged in galleries in London and Bristol. Using these as case studies, this paper will compare and contrast the differing approaches to the politics of climate change demonstrated by the contrasting curatorial approaches of the two exhibitions.

11.30 - 11.45 am Coffee break

11.45 - 1.00 pm **Session two** Open discussion around 'Challenging established framings of climate and climate change' aided by images brought by participants in relation to the theme. Lead by Prof Mike Hulme.

Some of these images can be found in the network gallery. The images were grouped into four broad categories that examined artistic interaction with climate, historical perspectives on climate, technology and climate and future scenarios of climate change. These images promoted much discussion and just some of the topics and questions are listed below:

- How are artistic representations of climate framed?
- How is the climate and anthropogenic relationship perceived in artistic interpretations?
- How do historical documentary sources help us understand present climate change?
- How do historical documentary sources help us understand the socio-economic aspect of climate change and aid the exploration of climate variability and associated vulnerabilities?
- What can changes in technology reveal about human-climate interactions and human perceptions of climate?

1.00 - 2.00 pm Lunch

2.00 - 3.30 pm **Session three** Reading group led by Prof Mike Hulme 'Meet the humanities' *Nature Climate Change* (2011)

All workshop participants had been asked to read:

Hulme, M. (2011). Meet the humanities. *Nature Climate Change*. 1:177-179.

Mike began by asking the group to suggest reasons for why he might have written 'Meet the humanities', and why he sent it for publication in *Nature Climate Change*. *NCC* is a new journal (Mike's piece appeared in issue 3).

- Did he want to encourage the journal to have a wider focus? Was this an experiment to see if it would be published?
- Was he continuing arguments started in his book?
- Was he inspired by attending the REC network meetings?

Mike highlighted the role of the editorial board in the piece – in changing terminology and the title. He also explained his decision to use the publication of the next IPCC report as a hook that would be comfortable for the science-focussed readership. The table of special issues acted as a powerful way of focussing attention on the recent contributions the humanities have made.

Mike asked if we thought the piece was anti-scientific, or pro-humanities? What did the piece reveal about the author's relationship to the metasciences? Mike has been criticised by some for lowering the status of science, but the group felt instead that the piece showed that Mike was pro-interdisciplinary studies. The article also made us think about why some humanities are faring better in the field – economics use of scientific language and models making it appeal more to the scientist.

Should Mike have been more confrontational? Is collaboration inherently about confrontation? Should we seek to find a consensus or to retain our differences? Do different disciplines agree about what 'climate change' is or means? For many quantitative modelling

remains the only way to do things. The International Human Dimensions Programme is concerned over the marginalisation of the humanities – questions of identity and belief are central to giving greater recognition to the humanities.

There were two further themes that were discussed and the following questions arose from these discussions:

Storytelling and making

What is the importance of stories relative to facts?

Multiple stories or a universal story?

Is the IPCC a story? – does it need a stronger narrative element?

Personal stories are often the most powerful, but is it possible to tell global stories that don't erase the local? (see Giles Foden on the role of storytelling in global change and Ursula Heise's *Sense of Planet, Sense of Place*).

'Future scenarios' are a popular way of science engaging with stories although these 'storylines' quickly turn into predictions.

What is interdisciplinarity?

To be interdisciplinary you need to be disciplined.

A success of the Tyndall Centre.

Mike concluded by reading an extract from a feature in *Nature* from September 30th 1961 'Science and the classics' by Farrington. The piece speaks to the C.P. Snow positivist argument that only science will save humanity.

What are the dangers of valorising the sciences at the expense of the humanities?

Thought gets no help from science. Divorcing knowledge from thought means science without reflection. We need to 'think with the whole of our past and with all of our disciplinary traditions'.

3.45 - 4.30 pm **Session four** – An Introduction the 'Atmosphere Gallery', Science Museum, with Alexandra Johnson, Exhibitions, Science Museum.

Alex Johnson worked on the development of 'Atmosphere' between 2009-2010 and before introducing the network to the gallery itself, she outlined how the Science Museum has already tackled the subject of climate change:

- Can algae save the world? (2001)
- Climate Change – the burning issue (2002)
- Food Futures (2008)
- Prove it (2009)
- Climate Changing (2010)
- Atmosphere (2010)
- Ten Climate Stories (2011)
- Water wars (2011)

- Cockroach tour (2011)

Alex Johnson introduced 'Atmosphere', which has a five year life span aimed at independent non-specialist adults, keystone three and families with children aged 8+. The gallery's sponsors include Shell, Siemens, Merrill Lynch Bank of America. There are five zones and a central exhibit which deliver the key messages. The five zones are as follows:

- 1) Exploring the climate system (science of the system)
- 2) Exploring the energy balance (the greenhouse effect)
- 3) Exploring the carbon cycle (anthropogenic impact)
- 4) Exploring what might happen (prediction)
- 5) Exploring our future choices (adaptation and mitigation)

There are ranges of interpretation with interactive, objects, touch screen information zones, an art installation, web games and resources for teachers. The gallery has a blue 'atmosphere' and surface which aim to create an immersive experience so that people could feel more connected to the issues raised. There is also a reflection area by the art installation to enable visitors to seat and consider what they have experienced. Alex suggested that the gallery has the following key aims and objectives:

- Engaging the denier
- Deepening understanding
- The role of science and technology
- Supporting dialogue
- Independent, not campaigning
- Impact of climate change on people
- Science Museum's position based on scientific evidence
- Extending the visit

Alex took questions and the issue of sponsorship of the gallery was raised, she suggested that the Science Museum, like every other similar institution needed funding to promote and support these events and that the Museum retained editorial control. Also raised was the question of 'climate-gate' and its impact in 2009 on the 'Prove it' campaign. Alex said that this period had made the Science Museum 'hyper aware' about language and that it went 'back to basics' and re-imagined what it was the audience wanted. After much discussion and research the Science museum ascertained that visitors had pockets of information that were not linked together and that there was confusion surrounding research issues. Research reconfirmed that the central role of the Science Museum was to explain and discuss the science of climate and climate change.

Friday 7th October 2011

10.00 – 12.00 Visit to 'The Atmosphere Gallery', Science Museum, to explore and discuss an example of current framings of climate and climate change.

In order to explore further some of the ideas and discussions that arose from the previous day a group visited the Atmosphere gallery (see the photographs in the gallery). We also explored the 'Ten Climate Stories' exhibits, which are a series of ten interventions that explore stories surrounding climate in the context of well established exhibits. The temporal scale is long term and the series seeks to showcase artworks from established and emerging artists. These included 'Blazing Entrails, Newcomen steam engine, 1791'; 'March of the Pylons, Parsons electricity generator, 1891' (Energy Hall); 'Earth from Space, V2 rocket engine, 1944' (Exploring Space); 'The Toaster Project, Thomas Thwaites, 2009'; 'New

Landscapes, Yao Lu, 2006 and 2007'; 'Longplayer, Jem Finer, 1999-2999'; 'One Thousand Motorcars, Ford Model T car, 1916'; 'Antarctic Adventure, Tucker Sno-Cat, 1955'; 'The Mighty Atom, Million-volt accelerator, 1937' and 'The Whole Earth, Apollo 10 command module, 1969' (Making the Modern World). Some of the questions that we held in mind as moved around the different spaces included:

- Is a changing framing of climate and climate change apparent? If there is a change, where is this apparent – is it in the academic, political, professional and/or amateur sphere?
- What is the role for narratives and stories in framings of climate and climate change?
- What are the different perspectives and scales displayed in the museum displays of climate and climate change? (these might include global, local, scientific, cultural, positive, negative, amateur, professional).
- Are displays showing cultural, social, values and belief aspects?
- What knowledge and data counts in the museum displays of climate and climate change? Is there a diversity and multiplicity of data and knowledge?
- Do the framings of climate and climate change display ideas surrounding memory or cultural knowledge, especially that associated with extreme events?
- Are the framings of climate and climate change site sensitive?
- Do the framings of climate and climate change display public value? If they do, what are the terms that this value is expressed?
- Is there a consensus/coherence in the displays visited? Is this important or desirable?

Responses to these questions (especially with reference to Atmosphere) have been written by members of the group and will be collated into a group response or statement which will appear shortly, either on this webpage, or through publication.