International workshop on geoengineering, 11 October 2013, Paris

Venue: ISCC, 20 rue Berbier-du-Mets, 75013 Paris

Organisers: M. van Hemert, A. Dahan

Centre Alexandre Koyré (CNRS) et ANR ClimaConf / IFRIS

Geoengineering on the climate change agenda / La géoingénierie sur l'agenda du changement climatique

Over the last few years, geoengineering - an umbrella term for technoscientific proposals promising a large-scale manipulation of the climate system to counteract global warming - has gained prominence on the climate science and policy agendas. We think it is time to take a step back and reflect on the promises, risks and pitfalls of geoengineering as thoroughly as possible. In Europe, the debate on geoengineering research is taking shape at this very moment: France and the European Union are preparing a research agenda, while the UK and Germany already ventured into funding a wide range of research projects, from R&D for specific geoengineering options to reflection on its desirability. At the international level of climate change politics, the positioning of geoengineering as an option besides mitigation and adaptation is taking on concrete form: in the next IPCC report, geoengineering will be assessed by WG I and WG III - the WG I report will just have been released when this workshop takes place. In the WG I report, geoengineering is largely assessed on the basis of climate simulations and scenarios, which begs questions on the assumptions that shape them. There is also a fair amount of research on the governance of geoengineering going on which, perhaps unintentionally, risks to perform the stance that developing geoengineering is indeed a responsible option if 'appropriate governance frameworks' such as high level principles and codes of conduct are in place.

The rise of geoengineering on the scientific and policy agendas thus raises many questions. What made the rise of geoengineering on these agendas possible in the first place? How to understand and deal with the credibility geoengineering proposals and scenarios have gained in recent years? What research on geoengineering is taking place at present? What kind of research on geoengineering should be publicly funded – if any? How to monitor and respond to privately funded geoengineering R&D and political lobbying in these circles? What kinds of worlds would geoengineering bring into being? How to reflect on the governance of geoengineering without performing it as feasible? In this workshop, we aim to bring historical, philosophical, climate politics and 'inside' climate science perspectives together to open up the debate on these and other questions and to identify resistances and openings towards other imaginaries. Scholars and scientists implicated in the debate will present their views and 'inside' experiences of the research and debate as it has been taking shape.

From a historical perspective, geoengineering appears to bring back dreams of planetary control, some dating from the Cold War. The strategies of protagonists and the contexts in which ideas are formulated, received and evaluated have changed, however. Geoengineering proposals have been

developed at labs which changed their orientation from military to environmental research. A stateled science policy has been replaced by a neoliberal science policy. The climate change regime, with its dual strategy of emission reduction and enhancing carbon sinks has come to be seen as a failure, since worldwide emissions are rising. Promissory discourses about green technologies and the imaginary of the Anthropocene have also changed the game of the geoengineers. But how exactly has the game changed?

For climate scientists, geoengineering raises epistemic questions about competing climate paradigms, the reliability of models and their ability to predict regional dimensions of climate, and about the range of uncertainties and unknowns that may play a role in assessing impacts of geoengineering schemes. The political dimension of these issues comes to the fore in the moves and countermoves of geoengineering advocates and critics. A question which perplexes many climate scientists is how a few advocates of geoengineering appear to have become so influential as to impose a geoengineering research agenda on a majority that is still very reluctant and critical, if not opposed to geoengineering. How are critical climate scientists mobilizing knowledge and resources to provide a counterweight to geoengineering advocates? What are the major controversies?

From a philosophical perspective, the idea of geoengineering raises questions about the relationship between humans and the Earth, and between its inhabitants – in different times and places -, that are at once ethical and ontological. What would it mean to make the climate? What kind of Anthropos and what kind of Earth are presumed? What about (in)commensurability between ideas about 'engineering the planet' and heterogeneity of cosmologies, knowledges, cultures and the Earth itself? What paradigms of (un)ruliness guide the thinking? And what kind of hubris do geoengineering proposals express?

A climate political perspective asks about the challenges to democracy that geoengineering would pose, and the geopolitical realities in which it would unfold. How could agreement be reached about global experiments that affect each and every inhabitant of the planet? What conflicts might arise when adverse climate conditions would be attributed to geoengineering experiments or deployment? How likely are conditions of international governance to be fulfilled given that the climate change regime has not worked as hoped for? How (in)compatible is geoengineering with democracy and with principles of justice and equity, between North and South, and between generations? A reflection on the current politics of geoengineering research agenda building is also necessary.

Preliminary programme:

9h00 Introduction

Mieke van Hemert, post-doc researcher IFRIS/Centre Alexandre Koyré, Paris, France

9h15 History of geoengineering:

Mieke van Hemert & Régis Briday, PhD candidate in history of science at the Centre Alexandre Koyré, Paris, France (40 min.)

Matthias Dörries (discussant), professor in history of epistemology, science and technology at Strasbourg University, France (20 min.)

Discussion (30 min.)

Short break

11h00 Debates in climate science:

Peter Irvine, Research Fellow at the Institute for Advanced Sustainability Studies (IASS) in Potsdam, Germany (40 min.)

Olivier Boucher (discussant), CNRS Research Director at the Laboratoire de Météorologie Dynamique, Paris, France (20 min.)

Discussion (30 min.)

12h30 - 14h lunch

14h Anthropos, Earth, Hubris

Bronislaw Szerszynski, senior lecturer & head of department at the Institute for Environment, Philosophy and Public Policy, Lancaster, UK (40 min.)

Bernadette Bensaude-Vincent (discussant), professor in epistemology and history of science and technology at Paris University I, Paris, France (20 min.)

Discussion (30 min.)

Short break

15h45 Geoengineering and climate politics:

Mike Hulme, professor of Climate & Culture, King's College London, UK (40 min.)

Amy Dahan (discussant), emeritus CNRS Research Director, Centre Alexandre Koyré, Paris, France (20 min.)

Discussion (30 min.)

17h15 General Discussion with intervention by Clive Hamilton, professor of Public Ethics at Charles Sturt University, Canberra and the University of Melbourne, Melbourne, Australia (45 min.)