Communicating Climate Change in the Media

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“Science is not finished until it is communicated effectively – that’s part of the job of being a scientist”
Herons and egrets
Your Green shoots photographs
Digital revolution

- **IP-enabled Devices**: 1.2 billion devices connected by 2014
- **Video**: ~70% of internet traffic by 2014
- **Smartphones**: 2.5 billion connections by 2015
- **Mobile Internet**: 70% of mobile traffic by 2014
Climate change is a global phenomenon, and its outcomes affect societies around the world. So far, however, studies on media representations of climate change have mostly concentrated on Western societies. This paper goes beyond this limited geographical scope by presenting a comparative analysis of issue attention in 27 countries. The sample includes, among others, countries that have committed themselves to greenhouse gas emission reductions under the Kyoto Protocol such as Germany as well as countries that are strongly affected by the consequences of climate change like India. In a first step, it describes the development of media attention for climate change in these countries from 1996 to 2010. Secondly, it compares the amount of media attention and explores whether it corresponds with indicators measuring the relevance of climate change and climate policies for a country. The analyses show that anthropogenic climate change is a global problem. It is caused by various human activities around the world, such as transportation, electricity consumption and the breeding of livestock. Greenhouse gases produced by these activities, no matter whether in Texas or in Beijing, contribute to an increase in average temperatures on all continents and to global changes in climatic conditions, which then have impacts on both the natural and social world (IPCC, 2007, p. 10ff; Dryzek et al., 2011). Accordingly, political responses and solutions are sought globally. Political institutions worldwide and on the international level are concerned with the mitigation of and adaptation to climate change. The international level is of special relevance for mitigating climate change, because the problem poses a social dilemma, a “drama of the commons” on a global scale (Dietz et al., 2003). Actors profit individually from greenhouse gas-producing activities, whereas they would gain only a fraction of the benefits from unilateral mitigation efforts causing abatement costs. Even climate summits (the so-called Conferences of the Parties, COP) represent an attempt to tackle this situation by international coordination – with 194 of the world’s 206 states participating (Gupta, 2010).

The news media are the central “interpretative system” of modern societies (Peters and Heinrichs, 2005, p. 2) and, thus crucial for the societal uptake of climate change and climate politics. Firstly, they are central agents for raising awareness and disseminating information. As global climate change lies beyond the life-world and biographical horizons of most people (Moser, 2010; Neverla and Schäfer, 2012), knowledge about it is mainly disseminated via public communication. Due to their high circulation and general audience, mass media are pivotal in this latter regard. Correspondingly, several studies have shown that the “public draws most of its knowledge” (Anderson, 2011, p. 535) about the issue from the mass media (e.g. Schäfer, 2012; Ryghaug et al., 2011). Secondly, mass media constitute a central forum for
Where do people get their news from?

- In 2013, UK television remained the most important and frequently-used mode of news consumption by some margin.

- Television: nearly eight in ten (78%) adults used it to access news

- Four in ten used newspapers

- Just under one-third (32%) used the internet, either on a computer or mobile

- 16-24s still prefer TV over online

- UK viewers also rated television highly for accuracy, reliability and trust

Source: Ofcom 2013
Sources for news in the USA, 2013

Main Source for News

- **Television**
  - 2001: 74
  - 2003: 74
  - 2005: 74
  - 2007: 66
  - 2009: 69

- **Newspaper**
  - 2001: 45
  - 2003: 45
  - 2005: 45
  - 2007: 31
  - 2009: 28

- **Internet**
  - 2001: 18
  - 2003: 13
  - 2005: 13
  - 2007: 19
  - 2009: 23

- **Radio**
  - 2001: 18
  - 2003: 13
  - 2005: 13
  - 2007: 19
  - 2009: 23

PEW RESEARCH CENTER July 17-21, 2013. Q46. Respondents were allowed to name up to two sources.
Trust in different sources of news

Mainstream media is considered the most trustworthy source of news.

Blogs and social media sites are considered the least trustworthy.

Source: Digital News Report, RISJ, 2013
Information about science

In 2011, 54% of the British people regularly used television as a source of information for science, which came before newspapers (33%) and the internet (19%)

Percentage who regularly use science blogs...

2 %

Source: BIS (Department for Business Innovation and Skills) *Public Attitudes to Science.* 2011
Who do people trust on climate science (UK)?

Source: Carbon Brief, April 2013
Poles Apart
The international reporting of climate scepticism

James Painter
Number of articles mentioning sceptics as a percentage of climate change articles across the time periods, UK print media
Uncontested sceptical opinion pieces or editorials as a percentage of all articles including sceptics (2009/10)
Scientists and politicians are increasingly using the language of risk to describe the climate change challenge. Some researchers have argued that stressing the ‘risks’ posed by climate change rather than the ‘uncertainties’ can create a more helpful context for policy makers and a stronger response from the public. However, understanding the concepts of risk and uncertainty—and how to communicate them—is a hotly debated issue. In this book, James Painter analyses how the international media present these and other narratives surrounding climate change. He focuses on the coverage of reports by the Intergovernmental Panel on Climate Change (IPCC) and of the melting ice of the Arctic Sea, and includes six countries: Australia, France, India, Norway, the UK and the USA.

‘How the media communicates risk and uncertainty about climate change is critically important. This book highlights good and bad practice by the media and provides extremely sensible suggestions for improvements in the future.’

Lord [Nicholas] Stern, Chair of the Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science

James Painter is Head of the Journalism Fellowship Programme at the Reuters Institute for the Study of Journalism, Oxford University. He worked for several years for the BBC World Service and has written extensively on climate change and the media. His latest publication is Poles Apart: The International Reporting of Climate Scepticism (Reuters Institute for the Study of Journalism, Oxford University).
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The president of the prestigious National Academy of Sciences, Ralph Cicerone, and more than a dozen other scientists contacted by the AP said the 95 percent certainty regarding climate change is most similar to the confidence scientists have in the decades’ worth of evidence that cigarettes are deadly.
Nine Lessons and Carols in Communicating Climate Uncertainty

By Tamsin Edwards
Posted: December 6, 2013

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About a month ago I was invited to represent the Cabot Institute at the All Parliamentary Party Climate Change Group (APPCCG) meeting on “Communicating Risk and Uncertainty around Climate Change”. All Party Groups are groups of MPs and Lords with a common interest they wish to discuss, who meet regularly but fairly informally. Here are the APPCCG - APPCCG register, blog, Twitter and list of events.

The speakers were James Painter (University of Oxford), Chris Rapley (UCL) and Fiona Harvey (The Guardian), and the chair was (Lord) Julian

Twitter: @flimsn
For more information on Tamsin Edwards
IPCC: 30 years to climate calamity if we carry on blowing the carbon budget

Global 2C warming threshold will be breached within 30 years, leading scientists report, with humans unequivocally to blame

Fiona Harvey in Stockholm
The Guardian, Friday 27 September 2013 19.36 BST

Calved icebergs in Qaortoq, Greenland. The IPCC report says the world is on the way to dangerous levels of global warming. Photograph: Joe Raedle/Getty Images

The world’s leading climate scientists have set out in detail for the first time how much more carbon dioxide humans can pour into the atmosphere and still meet the 2C warming goal.
How hot will it get?

Change in average global surface temperature, relative to 1986-2005

4°C  Scenario assumes emissions continue to rise (business as usual)
3°C  Forecasts
2°C
1°C
0°C
-1°C
1950  2000  2050  2100

SOURCE: INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE
Credit: Guardian graphics

"Once again, the science grows clearer, the case grows more compelling, and the costs of inaction grow beyond anything that anyone with conscience or commonsense should be willing to even contemplate," he added.

The IPCC also rebuffed the argument made by climate sceptics that a "pause" for the last 10-15 years in the upward climb of global temperatures was evidence of flaws in their computer models. In the summary for policymakers, published on Friday morning after days of deliberations in the Swedish capital, the scientists said: "Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850. In the northern hemisphere, 1983-2012 was likely the warmest 30-year period of the last 1,400 years."
GLOBAL warming has been put on ice, the world’s leading experts are expected to confirm today. The United Nations’ Intergovernmental Panel on Climate Change is set to reveal world temperatures have barely risen in the past 15 years, despite growing amounts of greenhouse gases being pumped into the atmosphere. Critics say this shows carbon dioxide is not as damaging as had been claimed. Indeed, the report is expected to admit that computer models of climate change were too pessimistic. However, some scientists insist the slow-down is temporary — and warn that global warming remains a pressing threat.

The IPCC report — the first in six years has been compiled by more than 250 scientists. It will be used to inform government policy around the world. Officials from 195 countries have spent this week behind closed doors in Stockholm, Sweden with UN scientists, hammering out a 30-page summary document due to be released today.

It is expected to give the strongest warning yet that climate change is man-made and will cause more heatwaves, droughts and floods unless governments take action. But it says it is ‘extremely likely’ — with at least 95 per cent certainty — that the burning of fossil fuels and other human activities are the main cause of rising temperatures since the 19th century.

That level of certainty is up from 90 per cent in the last report in 2007, and 60 per cent in 2001.

The IPCC, led by Rajendra Pachauri, will also give new estimates of the effect of global warming on sea levels, glaciers and ice sheets. But its explanation of why the rise in global average surface temperatures has ‘paused’ will be the most contentious passage. After the IPCC’s last major report was widely criticised for a litany of errors — including the since-withdrawn claim that Himalayan glaciers would vanish within 25 years — confidence in the new document’s conclusions will be crucial.

The report is expected to say that temperature rises have dropped from 0.12°C per decade since 1961 to just 0.05°C per decade since 1998. The slowdown is great enough to be termed a ‘pause’ or ‘hiatus’ by scientists.

Climate change sceptics argue this means that the heating effect of carbon dioxide has been greatly exaggerated. Controversially, several governments have called for the references to the slowdown to be amended or even removed from the report.

Germany has asked for the passage to be deleted, saying a timespan of 10 to 15 years is misleading in the context of climate change, which takes its toll over longer periods. Belgium objects to using 1998 as a starting year for the statistics, as it was exceptionally warm. Climate scientists say such pauses in warming occur regularly throughout history and can last for up to 20 years — but cannot be predicted. In addition, the IPCC is expected to say much of the ‘missing’ heat is being stored deep beneath the sea, preventing it from contributing to temperatures at surface level.

Volcanic eruptions and changes in the sun’s activity are also thought to have contributed to the slowdown. However, the summary is also likely to acknowledge that some of the computer programmes used to predict changes to the climate over-estimated the effect of carbon dioxide. Ed Hawkins, a climate expert from Reading University’s department of meteorology, said: ‘The current “pause” in global surface temperatures certainly does not mean climate change has stopped.’

‘Greenhouse gases are continuing to build up in the atmosphere and are warming the climate, but we believe temporary factors such as small volcanic eruptions and a decline in solar activity, alongside extra heat being absorbed into the deep ocean, are acting to temporarily cool the climate.

When these temporary factors subside, we should see a return to warming.’ The IPCC report is also expected to say that the world has already burned through half the amount of fossil fuel that will bring about dangerous levels of climate change, and that many of the changes that have already occurred to the atmosphere, land and sea are ‘unusual or unprecedented on time-scales of decades to millennia.

Two more IPCC reports will be issued shortly, covering the impact of the changing climate and how to limit the damage, ahead of treaty talks in Paris in 2015.

It is set to warn that the Gulf Stream, which brings heat north from the tropics and keeps Britain warmer than it would be otherwise, could slow down. A 30 per cent speed reduction could make Britain 1°C cooler.

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Some concluding thoughts

1) Vast body of literature out there on comms/media
2) DO engage with the mainstream media – it’s fun and interesting
3) Be aware of some of the pitfalls
4) Wrestle with what sort of language, metaphors, and concepts work

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