

**mass media  
and  
climate change**


Max Boykoff  
James Martin Research Fellow  
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*for the scientific briefing day for artists ~  
Ashmolean Museum, Headley Theatre*

**the role of mass media**


“Few things are as much a part of our lives as the news...it has become a sort of instant historical record of the pace, progress, problems, and hopes of society.”

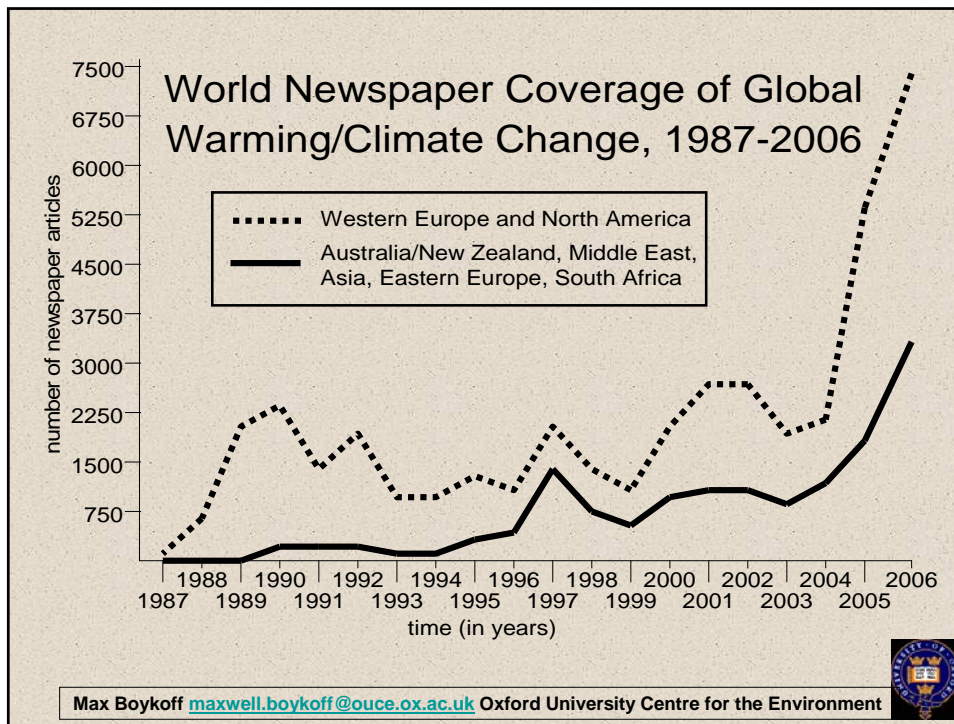
~ W. Lance Bennett, 2002



**consensus/convergence ↔ contention  
VIA MASS MEDIA**

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## anthropogenic climate science

- 2007 IPCC AR4 WGI  
 “Most of the observed increase in globally averaged temperatures since the mid-20th century is **very likely due to the observed increase in anthropogenic greenhouse gas concentrations**”
- 2004 Oreskes study in Science
- 2000 Crowley study in Science
- IPCC 2001 TAR
- IPCC 1995 SAR
- The Keeling Curve (1957 →)

IPCC WGI 2007 fig SPM.4

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# from where does the science come?

[adapted from Taylor and Buttel 1992, Hajer 1995, Adger et al, 2001]

## a 'managerial' community

- draws authority from science
- often top-down processes
- macro-level focus

## Intergovernmental Panel on Climate Change (IPCC)

- top climate scientists from planet Earth
- consensus processes
- largely seen as legitimate communicator of climate research

### Actual Expert Too Boring For TV

SCIENCE, 15 - Dr. Gary Carter, a professor of applied nuclear physics and energy development at the University of Illinois, was named by MSNBC as the most boring nuclear physicist ever.



Carter was brought in for a brief interview to discuss the status of the American Dream, in which he argued that "nuclear energy is probably the most important energy source we have today." He also mentioned that "nuclear energy is the only energy source that is not polluting." Carter was named as the most boring nuclear physicist ever by MSNBC.

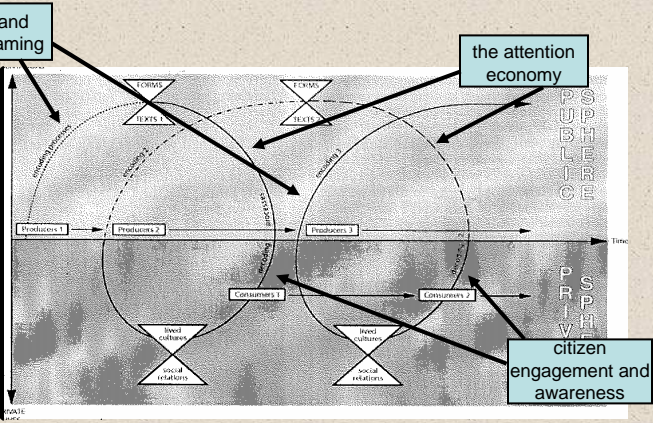
from The Onion (2005)

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# multi-scale factors, pressures & processes

- CONTEXT**
- political landscape
  - economic drivers and factors
  - social conventions
  - cultural influences
  - institutional pressures
  - ethical frameworks
  - technical capacity
  - journalistic norms and values



Carvalho and Burgess (2005)

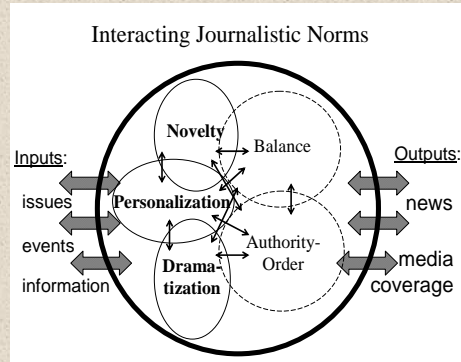
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## journalistic norms and pressures

“Because of the nature of the news business, it is difficult to write about it [climate change]... it runs against the grain of a lot of news conventions”

~ from interview with Robert McClure, *Seattle Post-Intelligencer*



the public arena of mass-media production, where journalistic norms interact in Boykoff & Boykoff (2007)

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## 'balanced reporting'

“Balance aims for neutrality. It requires that reporters present the views of legitimate spokespersons of the conflicting sides in any significant dispute, and provide **both sides with roughly equal attention.**”

~ Robert Entman, 1989

“...a surrogate for validity checks”

~ Dunwoody and Peters, 1992



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some results from U.S. newspaper and television coverage of anthropogenic climate change

**'balance as bias'**

53% of newspaper stories 'balanced'

→ significantly divergent from consensus 1990-2002

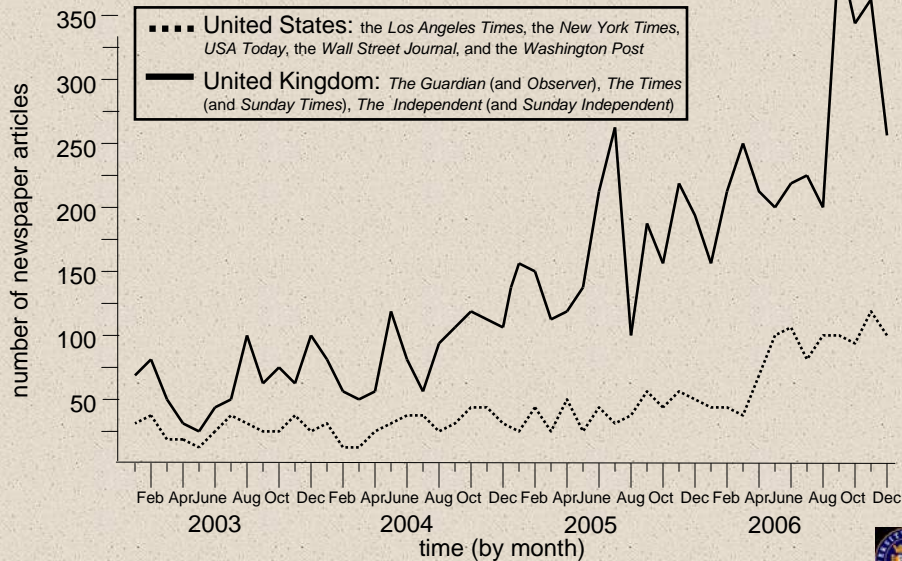
70% of television segments 'balanced'

→ significantly diverged from consensus 1995-2004

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United States and United Kingdom  
Newspaper Coverage of Climate Change



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# US & UK newspapers 2003-2006

## some results: bias as balance update

- UK 'quality' newspapers → no significant divergence over the 4 years
- US 'prestige-press' newspapers → 'significant' 'balanced reporting' in 2003-2004
- but US newspaper reporting → no significant divergence in 2005-2006



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## ongoing challenges

- 'home country effects': politics and contrarians
  - salient moral v. political issue
  - entrenchment of carbon-based industry interests

### → context and labeling



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## further examples of ongoing challenges ~ opportunities for improvements

### journalists and editors

- headlines
- political economic issues: generalists vs. specialists

### scientists

- fear factor: consistency of interactions
- salience of analogies, metaphors

### policy makers/ policy actors

- time demands, communications
- better understand role of science

### citizens/media consumers

- priorities, time-horizons, demands
- scientific literacy

#### Evangelical Scientists Refute Gravity With New 'Intelligent Falling' Theory



KANSAS CITY, KS—As the debate over the teaching of evolution in public schools continues a new controversy over the science curriculum arose Monday in this embattled Midwestern state. Scientists from the Evangelical Center For Faith-based Reasoning are now asserting that the long-held theory of gravity is flawed, and they have responded to it with a new theory of intelligent falling. "Things fall not because they are acted upon by some gravitational force, but because a higher intelligence, God if you will, is pushing them down," said Gabriel Burdett, who holds degrees in education, scriptural studies, and physics from Our Lady of the Lake University. Burdett added: "Gravity—which is taught to our children as a law—is founded on great gaps in understanding. The new theory is the natural force see INTELLIGENT FALLING page 6

from *The Onion* (2005)

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## ongoing considerations

- represents contestations in other/wider struggles of science, politics and society
- watch this (contested) space!
- many challenges remain: opportunities for reframing?

hots

OPINION

### Global Warming Heats Up

Last week, President Bush rejected the 1997 Kyoto Protocol, which requires industrialized nations to curb greenhouse-gas emissions. What do you think?

 Robert Johnson	"I'm sorry, but it's vital to the health of the U.S. economy that we destroy the entire Earth."	 Sarah	"As a Nader supporter, I'm thrilled to see the Green Party's master plan working so perfectly."
 Kelly	"I'm with Bush. What have future generations ever done for me?"	 Brad	"I'm against global warming. I'm also against altering my lifestyle in any way whatsoever to reduce it."
 Stephen Adams	"SUV owners can help reduce toxic emissions by parking in enclosed garages, stopping up their exhaust pipes, getting back into their cars, and tightly sealing all windows and doors."		"As a resident of Greenland, I only have one thing to say: goodbye."

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