Climate Change in the Media

Where have we been, and where should we be headed?

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What's the Plan?

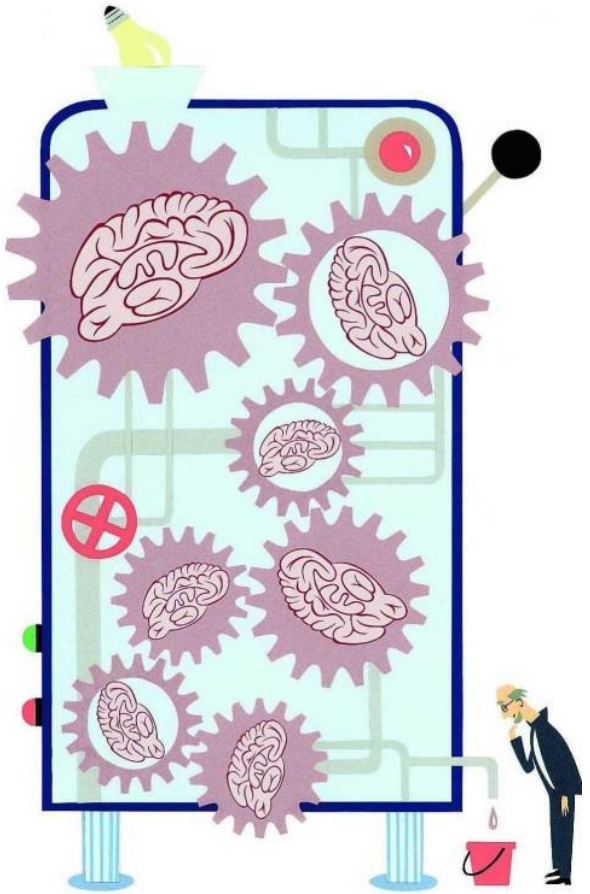
Climate change in the media:
Why should we talk about this?

The Research Field: Development,
Foci, and Gaps

Where have we been? Main findings

Where should we be headed?
Avenues for future research

Conclusion: The Promise of LingClim



Climate change in the media: Why should we talk about this?

Climate change is an ‚unobtrusive' issue …

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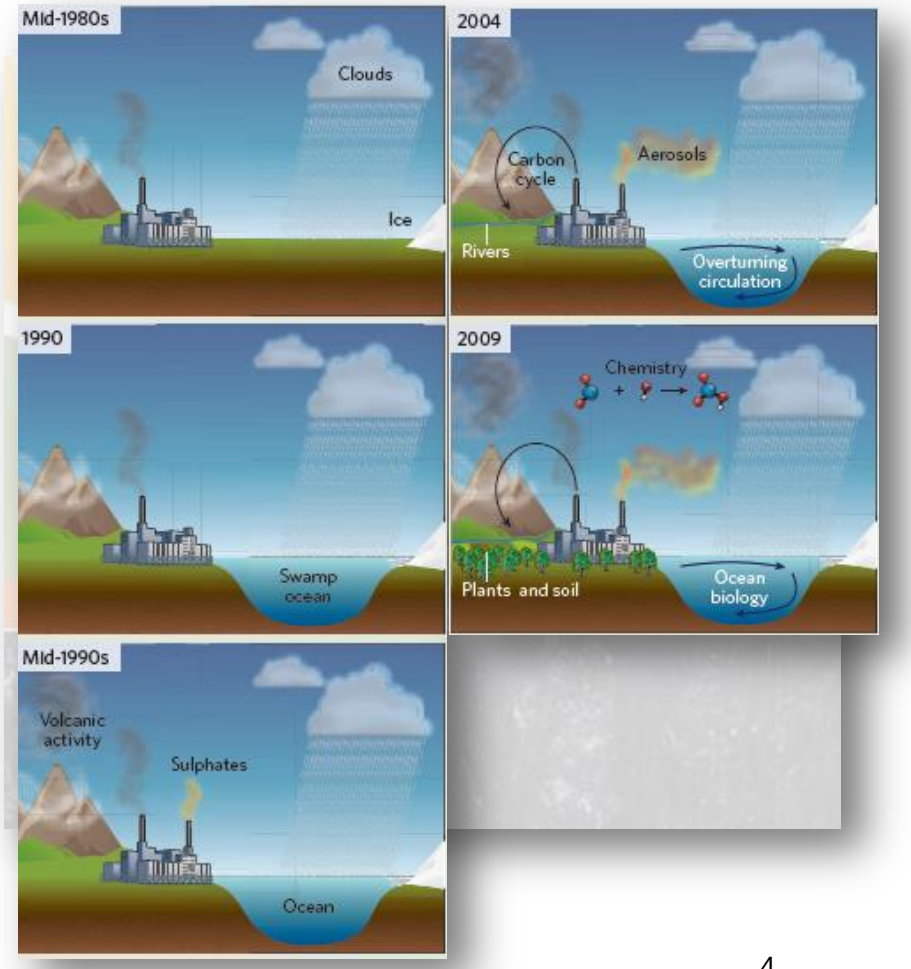
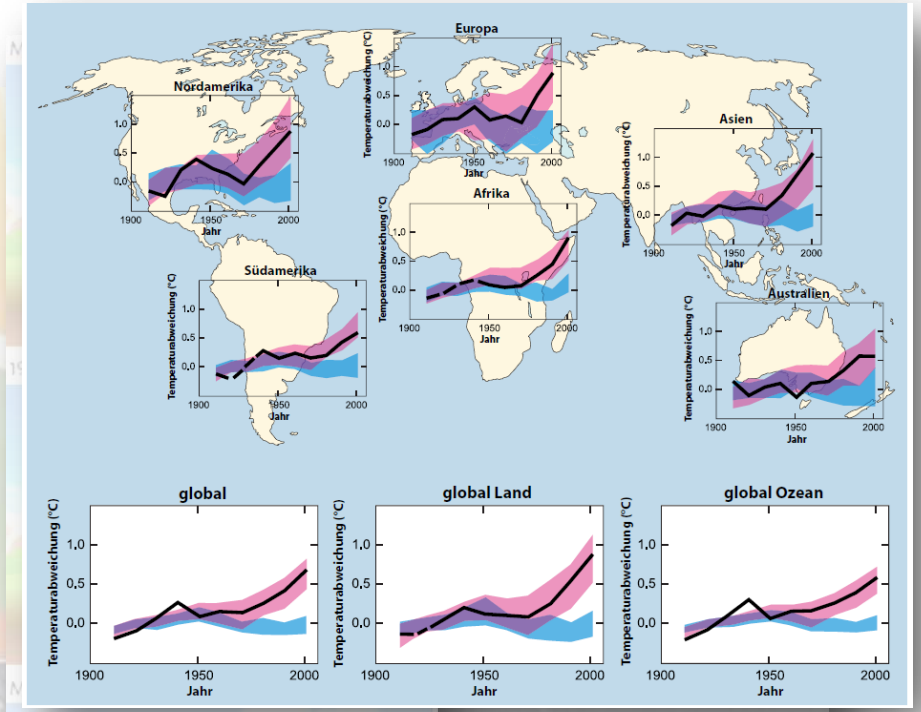


Nature 2010

Climate change is an ‚unobtrusive' issue …

… complex, large-scale,



IPCC 2014 (2007)

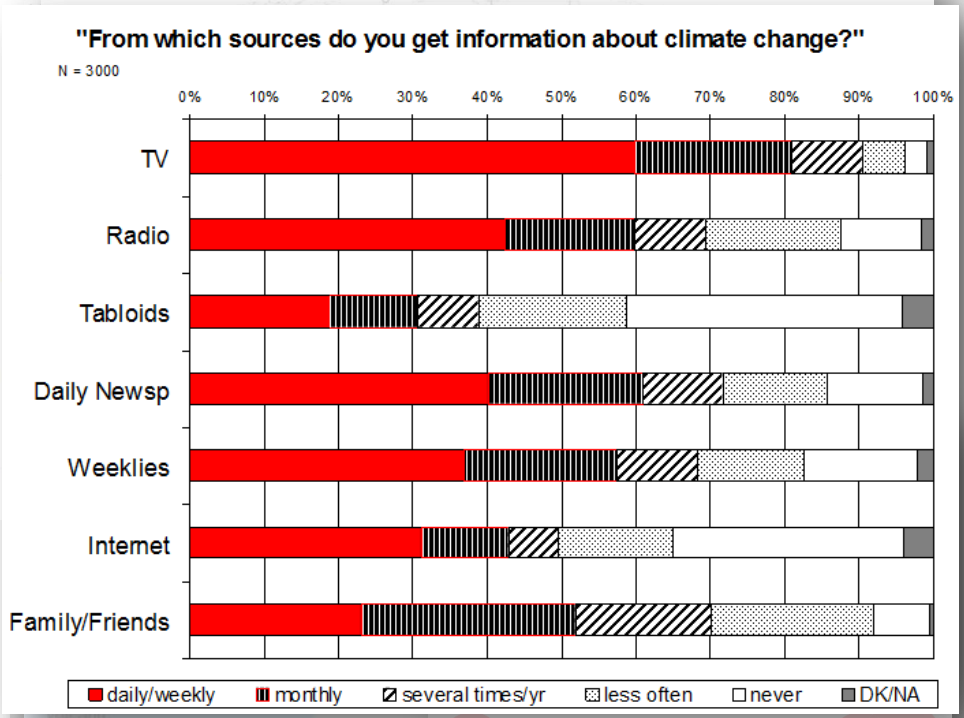
Climate change is an ‚unobtrusive' issue …

… complex, large-scale, with major implications in the future

… which many people experience via media

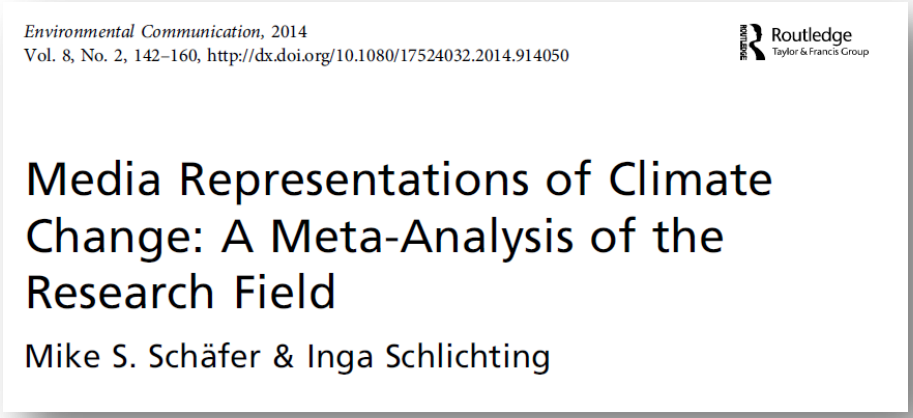
… complex, large-scale, with major implications in the future

… it is an „unobtrusive“ issue, and therefore, media communication about climate change is important



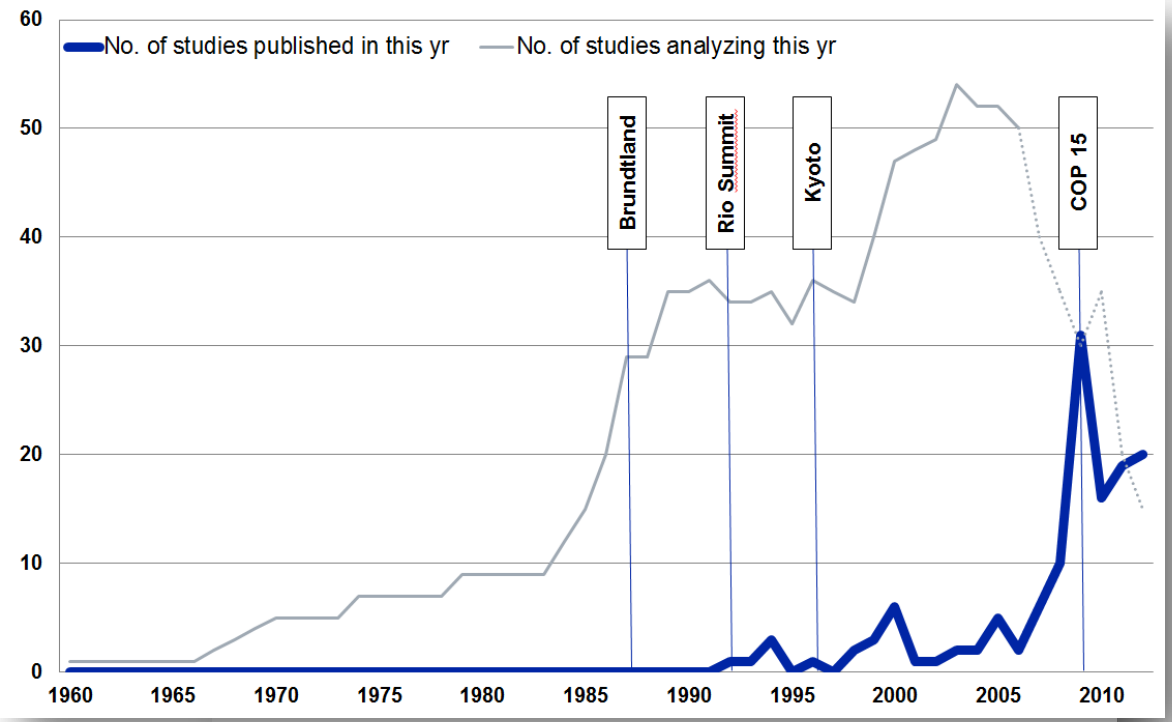
The Research Field

The research field …



The research field …

… has expanded over time



The research field …

… has expanded over time

… diversified itself in terms of the analysed countries,

	All (n = 273)	1957–1989 (n = 67)	1990–1999 (n = 129)	2000–2010 (n = 236)
Europe	39.4	37.3	36.2	40.9
UK	16.1	14.9	10.8	16.0
Germany	4.0	6.0	5.4	3.4
France	3.6	4.5	4.6	3.8
Sweden	2.9	1.5	1.5	3.4
Russia	2.2	1.5	3.1	2.5
Others	10.6	9.0	10.8	11.8
North America	28.1	44.8	34.6	23.6
USA	19.3	29.9	23.8	15.6
Canada	6.9	13.4	8.5	6.3
Mexico	1.8	1.5	2.3	1.7
Asia	14.2	6.0	13.8	15.6
India	3.3	0.0	2.3	3.4
Middle East	2.6	1.5	2.3	3.0
China	2.2	0.0	2.3	2.5
Japan	1.8	3.0	3.1	1.7
Others	4.4	1.5	3.8	5.1
Oceania	9.9	10.4	9.2	10.1
Australia	5.8	6.0	6.9	6.3
New Zealand	2.9	4.5	1.5	2.5
Others	1.1	0.0	0.8	1.3
Latin America	4.4	0.0	1.5	5.1
Brazil	1.5	0.0	0.8	1.7
Argentina	1.1	0.0	0.8	1.3
Others	1.8	0.0	0.0	2.1
Africa	4.0	1.5	4.6	4.6
South Africa	2.2	1.5	2.3	2.5
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	All (n = 199)	1957–1989 (n = 30)	1990–1999 (n = 66)	2000–2010 (n = 155)
Print media	67.5	85.1	83.5	66.9
National newspaper	41.0	53.2	52.2	41.6
Regional newspaper	12.0	6.4	14.9	13.4
Magazines	7.5	17.0	11.9	5.1
Print other	6.0	6.4	3.0	6.4
Newswire	1.0	2.1	1.5	0.6
TV and Radio	15.5	14.9	10.4	16.6
TV News	8.5	12.8	10.4	8.3
TV Other	3.5	2.1	0	3.8
Radio	2.0	0	0	2.5
Film/documentary	1.5	0	0	1.9
Internet	17.0	0	6.0	16.0
Media websites	5.0	0	0	6.4
Social media	4.0	0	0	4.5
Search engines	3.0	0	1.5	3.2
Websites of NGOs	3.0	0	4.5	1.3

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Table 5. What types of countries have been analyzed?

	%
Responsibility	
Ten countries with the largest total CO_2 emissions (in order from highest to lowest: China, USA, India, Russia, Japan, Germany, Canada, Iran, UK, and South Korea; according to United Nations Statistics Division (2013)).	56.2
All 38 Annex-B countries to the Kyoto protocol (in alphabetical order: Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Japan, Latvia, Liechtenstein, Lithuania, Luxemburg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK, Ukraine, and USA; according to United Nations Framework Convention on Climate Change [UNFCCC] (2013)).	78.8
Vulnerability	
All 31 countries acutely threatened by climate change (in alphabetical order: Afghanistan, Armenia, Bolivia, Bosnia and Herzegovina, Cambodia, China, Croatia, Cuba, El Salvador, Gambia, Georgia, Greece, Guyana, Hungary, Iran, Lithuania, Mauritius, Moldova, Morocco, Mozambique, Namibia, Nicaragua, Peru, Portugal, Romania, South Africa, Spain, Tajikistan, Uruguay, Vietnam, and Zimbabwe; according to DARA Vulnerability Monitor (2013)).	5.2
Ten countries most affected by negative impacts of climate change between 1992 and 2011 (in order of risk from highest to lowest: Honduras, Myanmar, Nicaragua, Bangladesh, Haiti, Vietnam, DPR Korea, Pakistan, Thailand, and Dominican Republic; according to Climate Risk Index, see Harmeling and Eckstein (2013, p. 6)).	0.0

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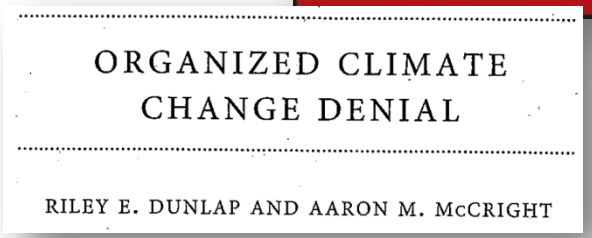
Where have we been?

We‘ve been to many interesting places

Stakeholder Communication and Agenda Building

- different modes of agenda building with prominent involvement of scientists: successful scientific agenda building in GER, persistant „climate denial machine“ (McCright & Dunlap 2011) in US

Der Spiegel 33/1986



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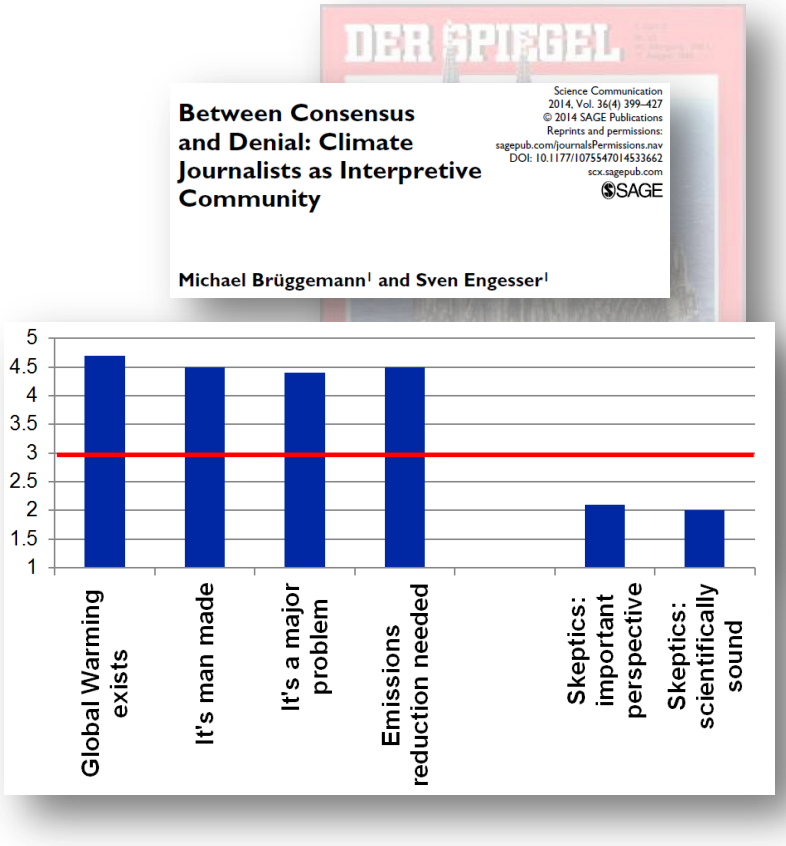
„Climate Journalists“

- professionalization of „climate journalists“ who mostly share IPCC positions



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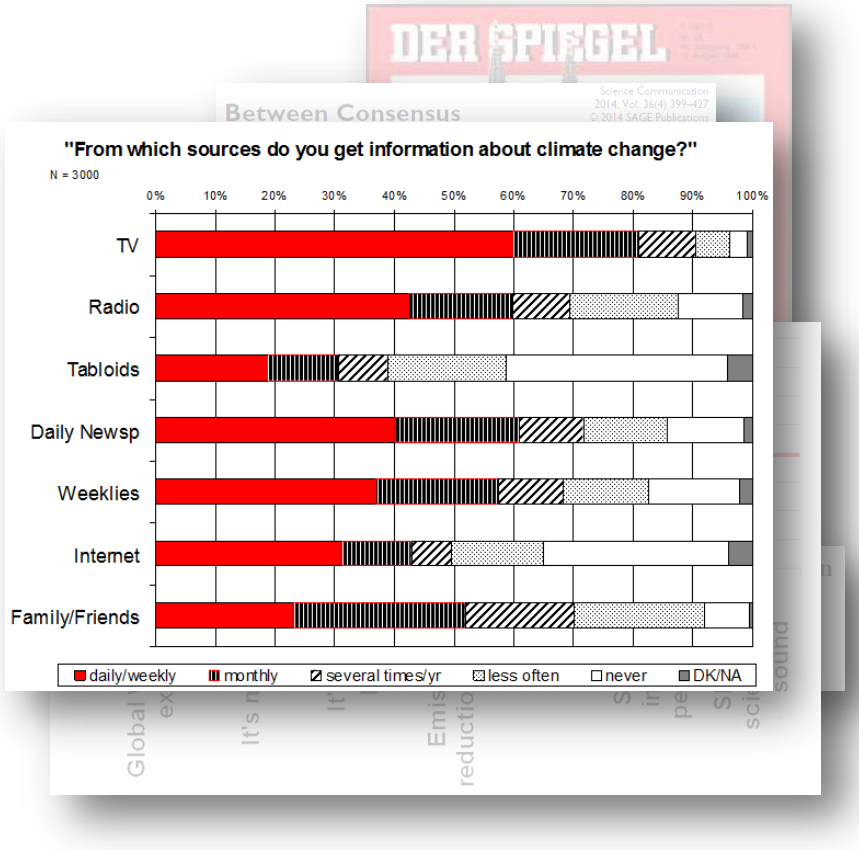
The Audience: Use and Effects

- media as important & trustworthy sources of information about climate change



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The Audience: Use and Effects

- media as important & trustworthy sources of information about climate change
- agenda setting effects, cognitive effects; but limited or no discernible attitudinal and behavioral effects

Sampei & Aosagi 2009

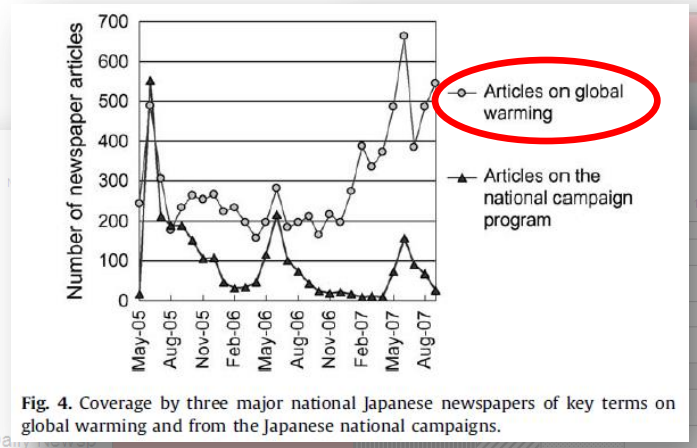


Fig. 4. Coverage by three major national Japanese newspapers of key terms on global warming and from the Japanese national campaigns.

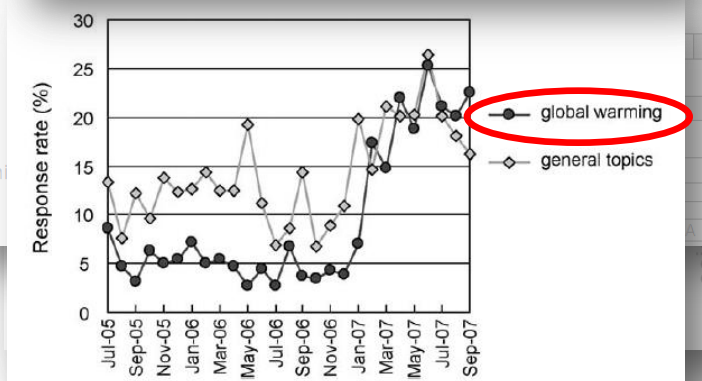


Fig. 7. Response rates for the two sub-categories of the ‘environment’ response, ‘global warming’ and ‘general topics’.

CC is a relevant media issue around the world

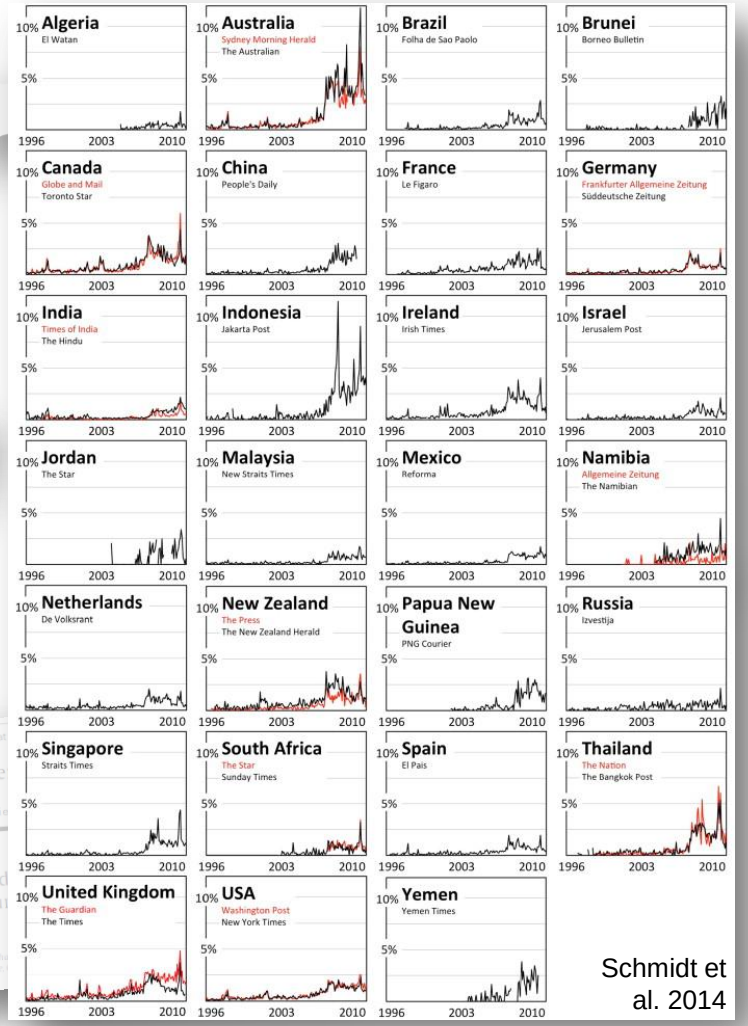
Media attention in 27 Countries over 15 Years

- using quality print media, 1996-2010
- approx. 150,000 articles
- measuring percentage of entire coverage that mentions CC
- using complex search strings and extensive manual cross-checks

CC is a relevant media issue around the world

Media attention in 27 Countries over 15 Years

- attention rises in all countries, particularly since mid-2000s
- overall attention levels comparatively high (e.g. compared to „genohype“ (Racine et al. 2006))
- pronounced peaks around certain events, particularly COP 15 in 2009



Schmidt et al. 2014

Media coverage is triggered mainly by socio-politics

Triggers of media attention for climate change

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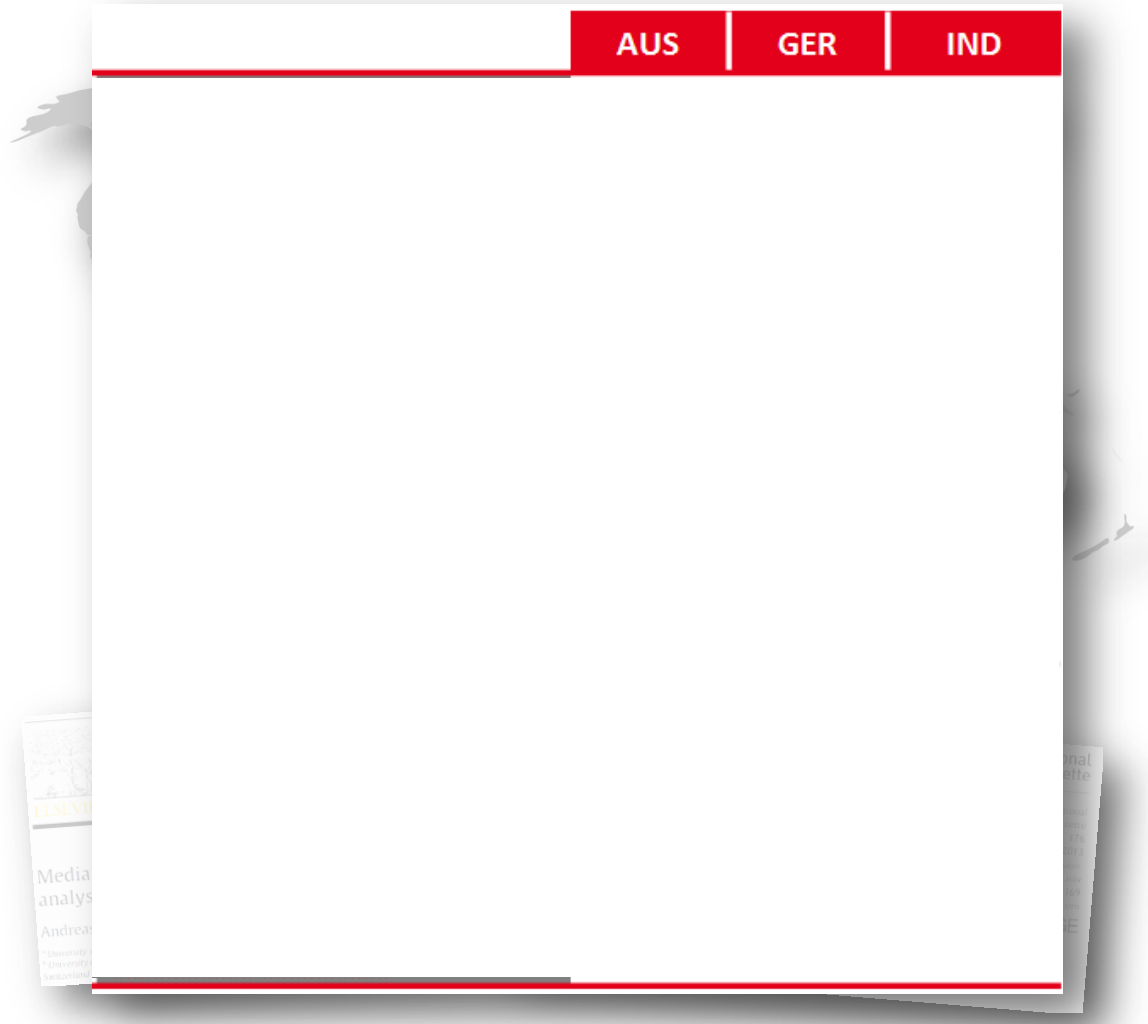
Triggers of media attention for climate change

- time series regression models explaining amount of issue attention
- for Australia, Germany, India



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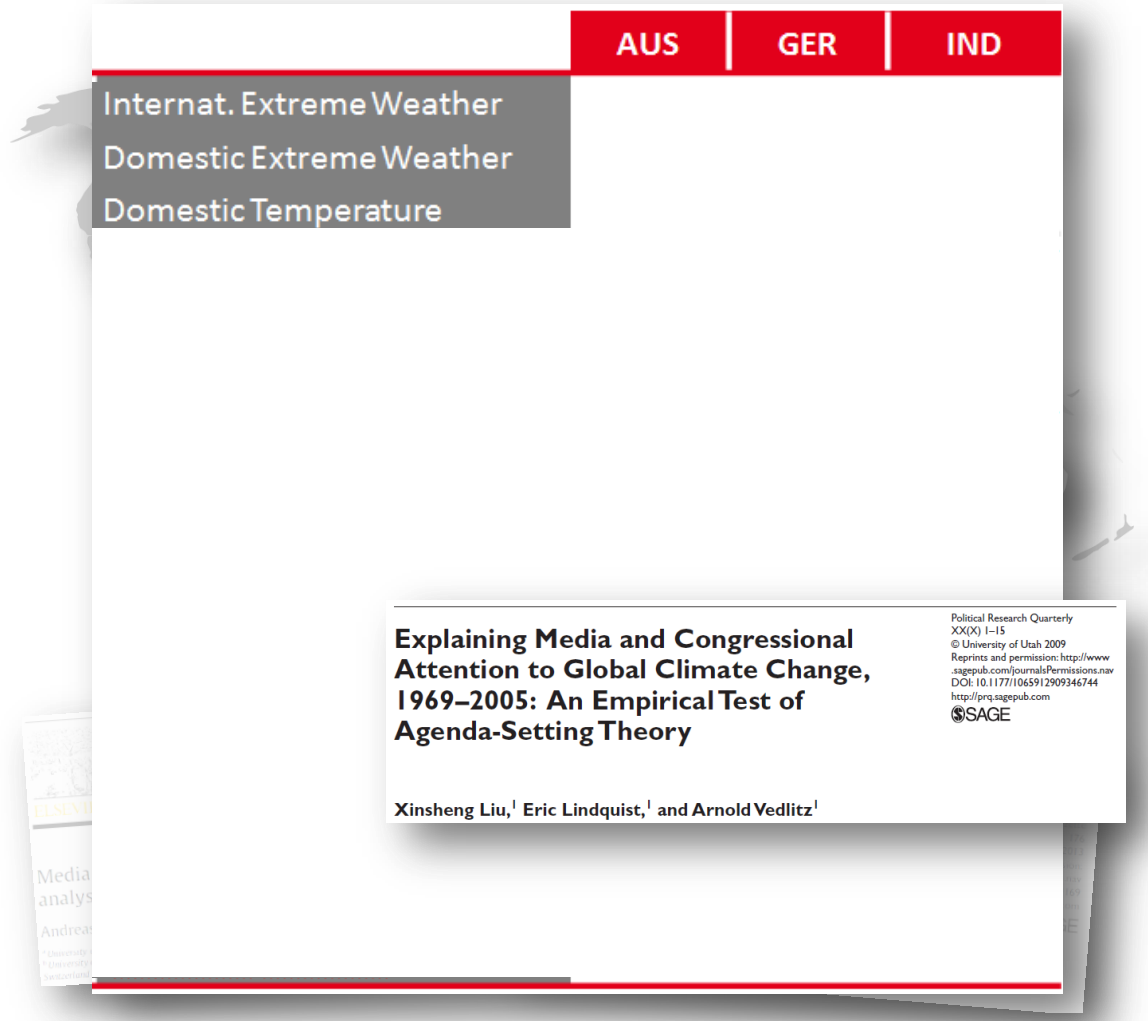

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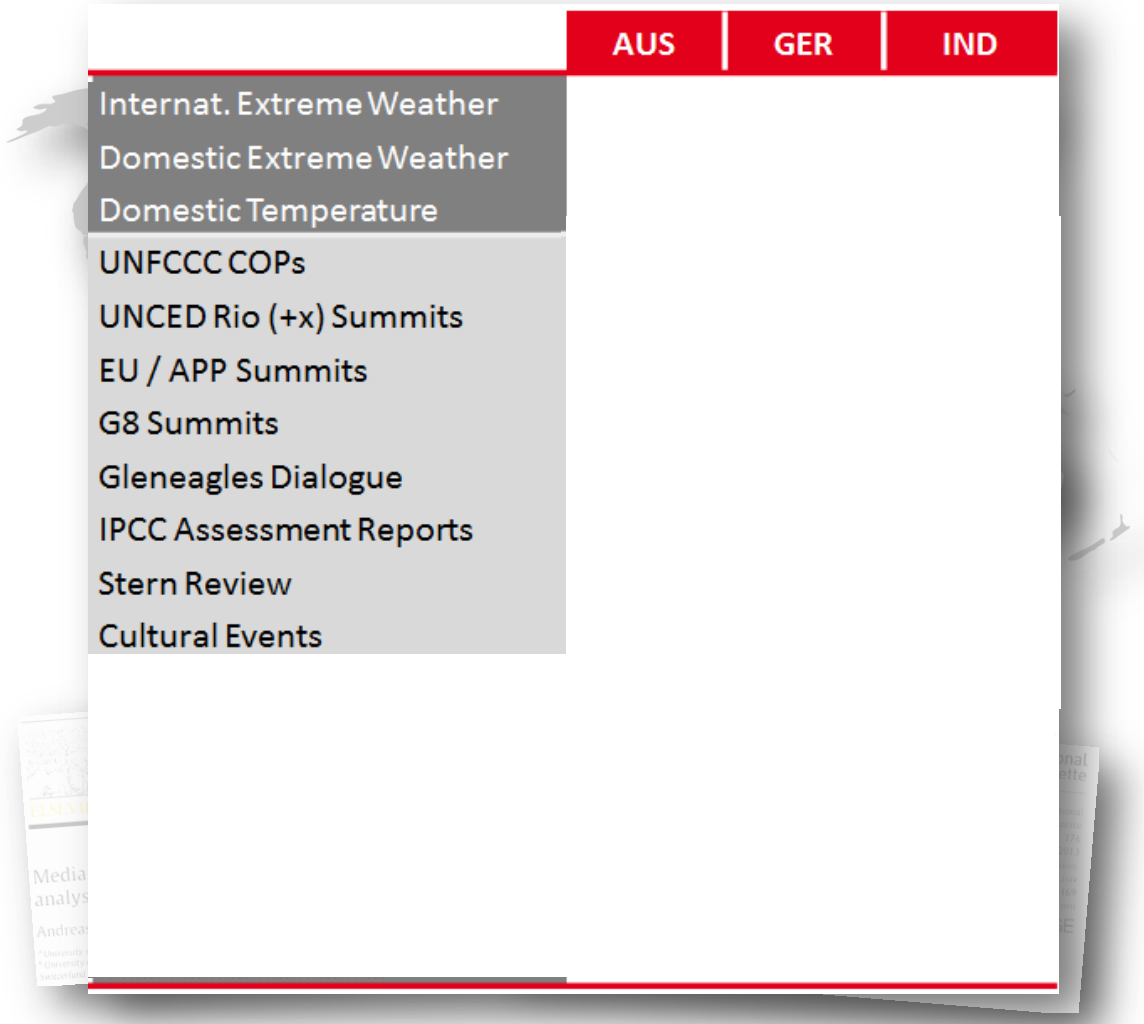

Media coverage is triggered mainly by socio-politics

Triggers of media attention for climate change

- time series regression models explaining amount of issue attention
- for Australia, Germany, India
- explanatory factors: „problem indicators“, „key events“, „societal feedback“

	AUS	GER	IND
Internat. Extreme Weather			
Domestic Extreme Weather			
Domestic Temperature			
UNFCCC COPs			
UNCED Rio (+x) Summits			
EU / APP Summits			
G8 Summits			
Gleneagles Dialogue			
IPCC Assessment Reports			
Stern Review			
Cultural Events			
Domestic Political Activity			
International ENGO Activity			
Domestic ENGO Activity			
Internat. Scientific Activity			
Domestic Scientific Activity			
Domestic Business Activity			

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Triggers of media attention for climate change

- showing low importance of climate/weather events

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Domestic Extreme Weather	-	√√√	-
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Triggers of media attention for climate change

- showing low importance of climate/weather events
- high importance of key events, esp. political events

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- showing low importance of climate/weather events
- high importance of key events, esp. political events as well as of political and NGO activity

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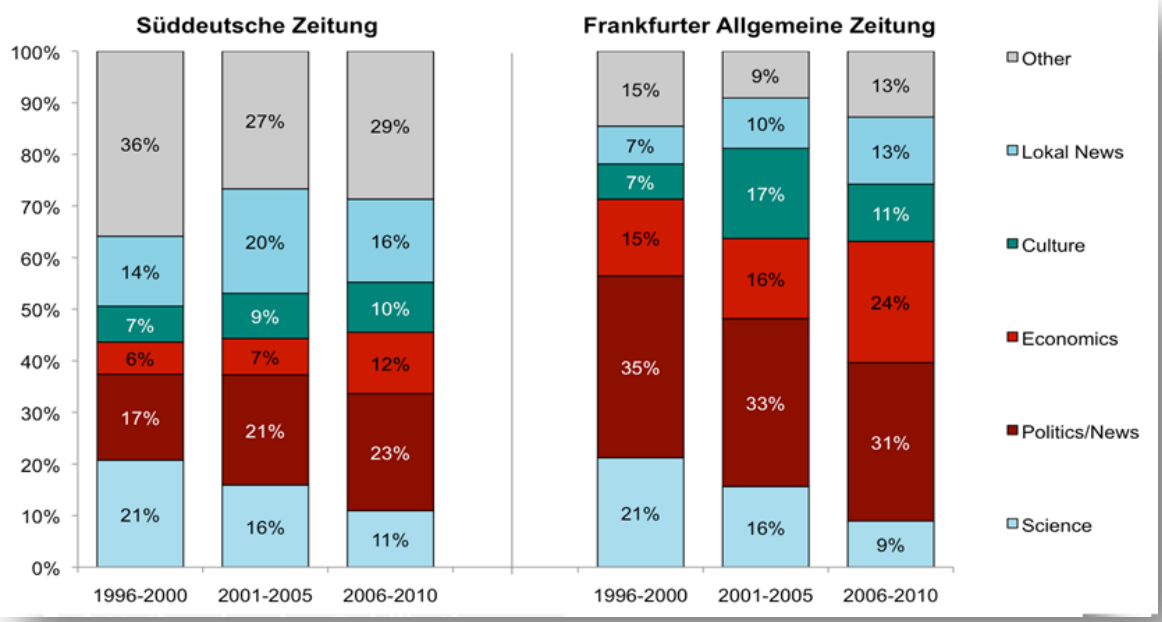
A „societal turn“ in media coverage

Trend towards societal issues in climate change reporting over time

A „societal turn“ in media coverage

Trend towards societal issues in climate change reporting over time

- not merely a science issue anymore: issue moves from science desk to politics & economy



Ivanova 2013

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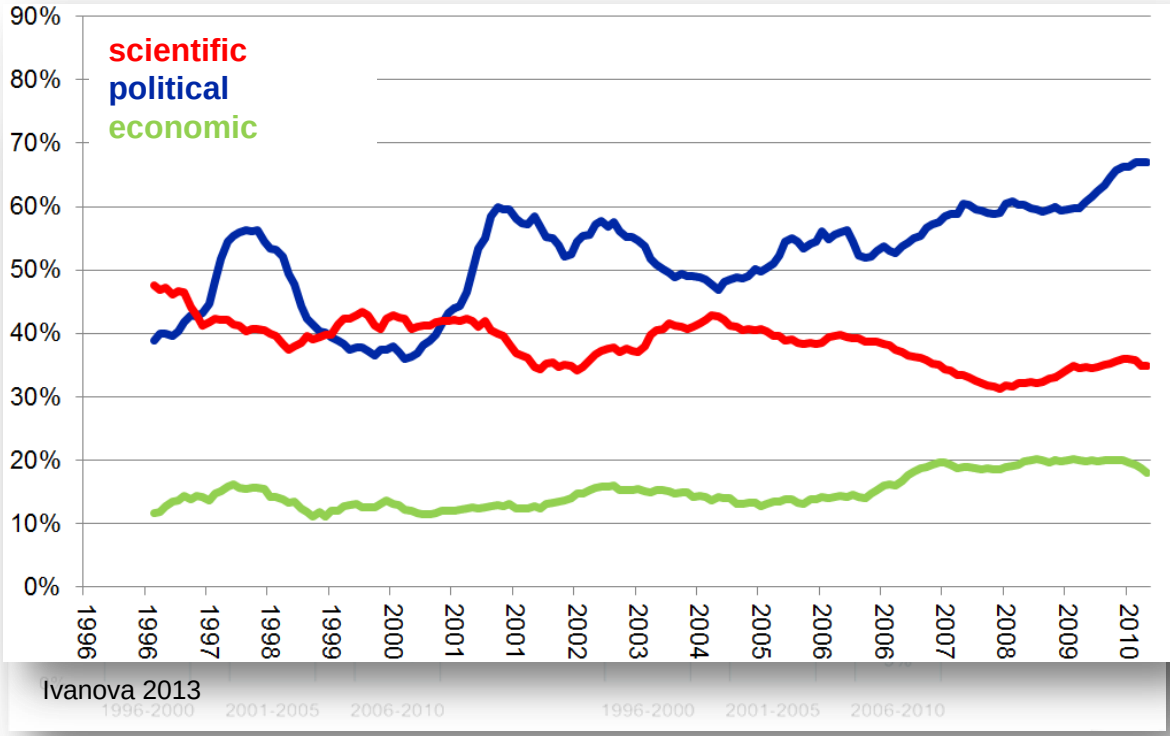
- content of coverage less scientific, more political & economic



Ivanova 2013

A „societal turn“ in media coverage

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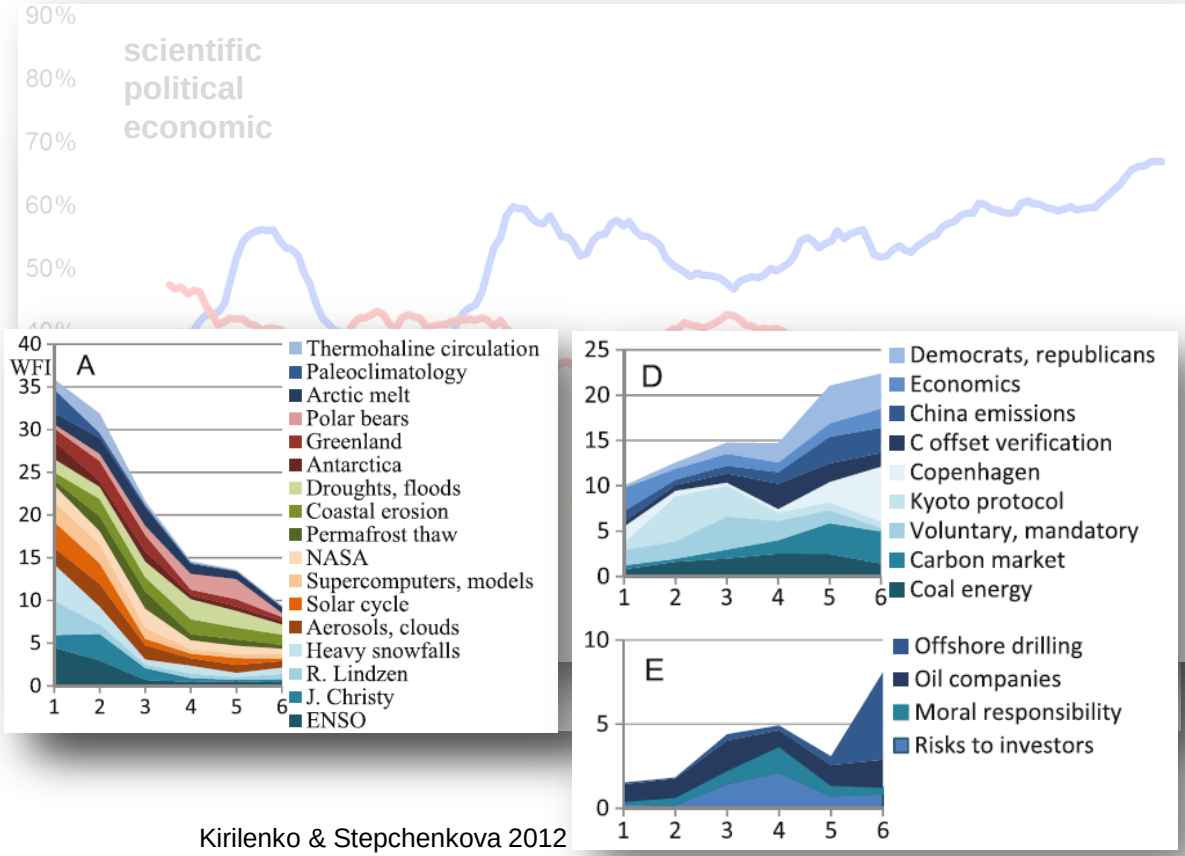

Kirilenko & Stepchenkova 2012

But considerable differences remain

Apart from temporal changes and general trends, differences in content between countries/regions remain

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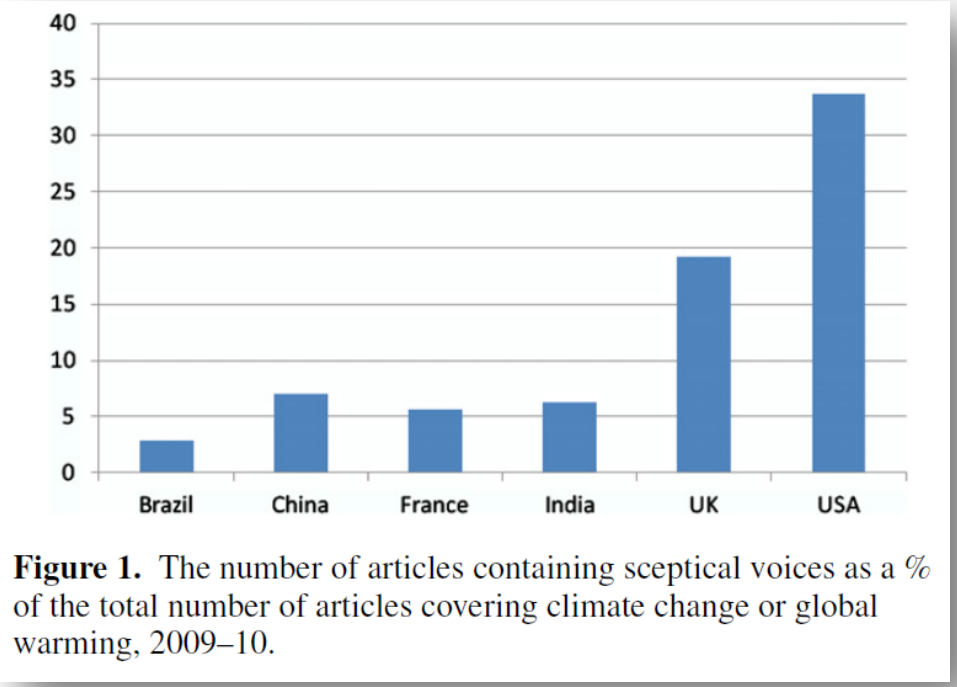


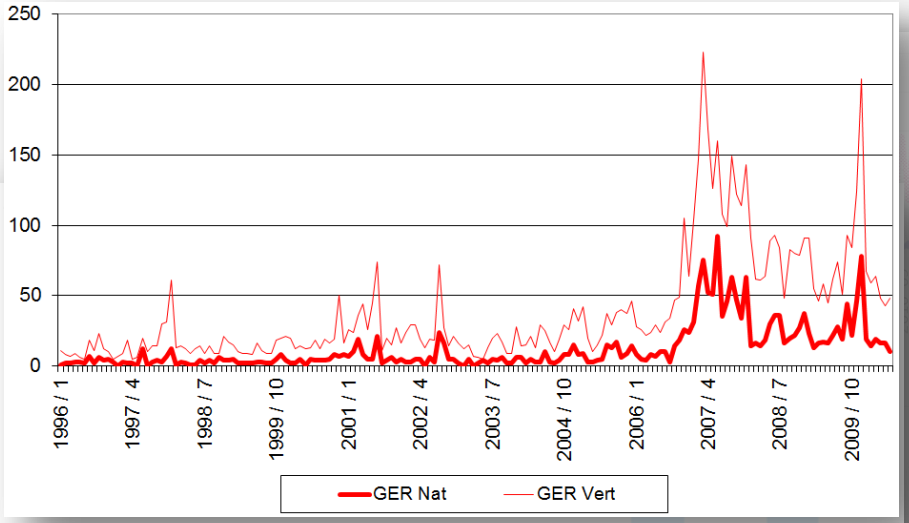
Figure 1. The number of articles containing sceptical voices as a % of the total number of articles covering climate change or global warming, 2009–10.

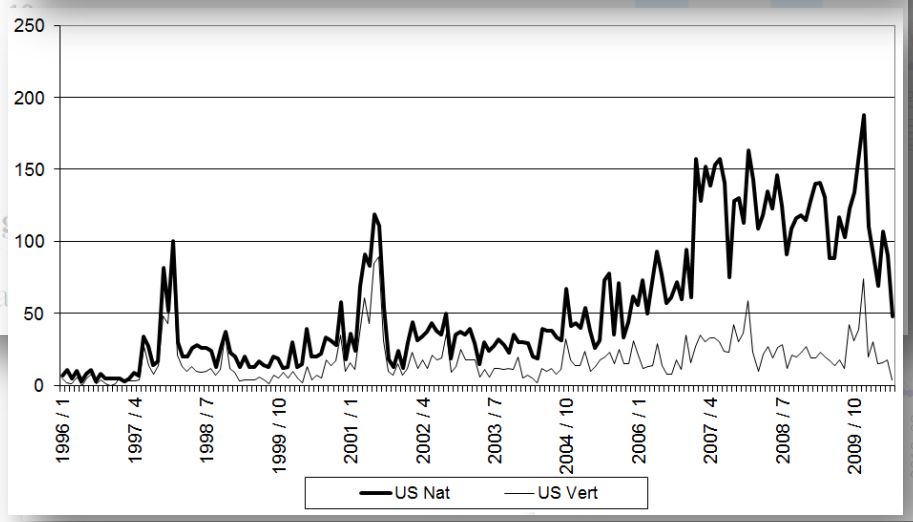
Painter & Ashe 2012

But considerable differences remain

Apart from temporal changes and general trends, differences in content between countries/regions remain

- in the focus on science and the degree of climate change “skepticism”
- in the degree of ethnocentrism





Ivanova 2013

But considerable differences remain

Apart from temporal changes and general trends, differences in content between countries/regions remain

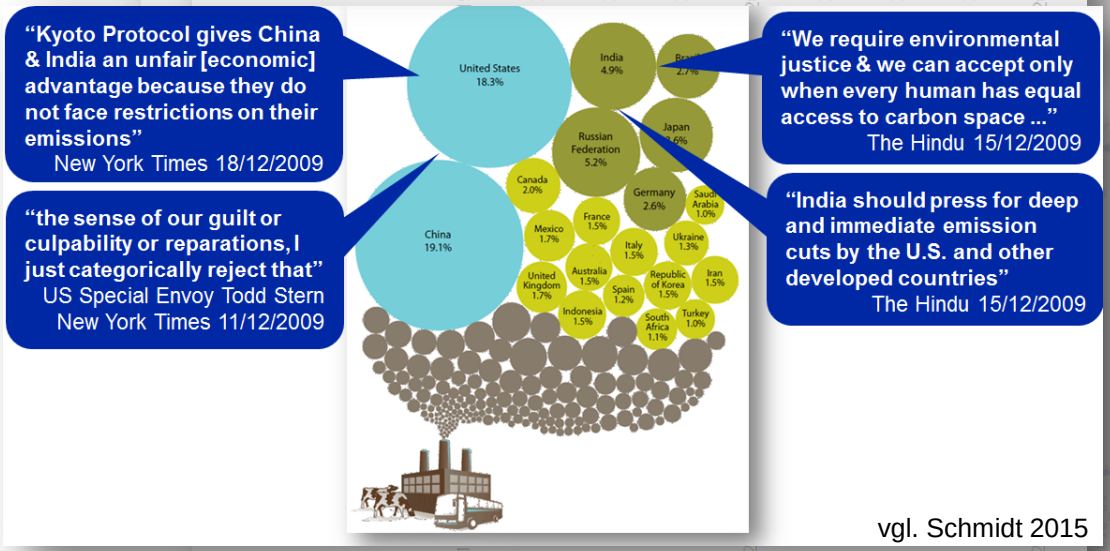
- in the focus on science and the degree of climate change “skepticism”
- in the degree of ethnocentrism
- in the framing of climate change between the ‘Global North’ and ‘South’

Climatic Change (2010) 99:1–16
DOI 10.1007/s10584-009-9605-3

Dividing climate change: global warming in the Indian mass media

Simon Billett

by framing climate change along a ‘risk-responsibility divide’, the Indian national press set up a strongly nationalistic position on climate change that divides the issue along both developmental and postcolonial lines.



vgl. Schmidt 2015


Where should we be headed?

Where should we be headed?

Follow the „societal turn“! Focus on communication about socio-political implications more.

Area (2007) 39.2, 000–000

Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006

Maxwell T Boykoff

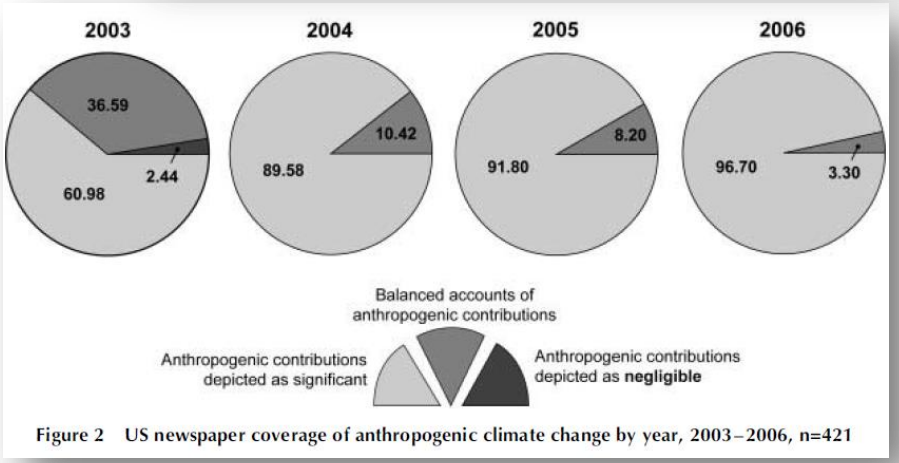


Figure 2 US newspaper coverage of anthropogenic climate change by year, 2003–2006, n=421

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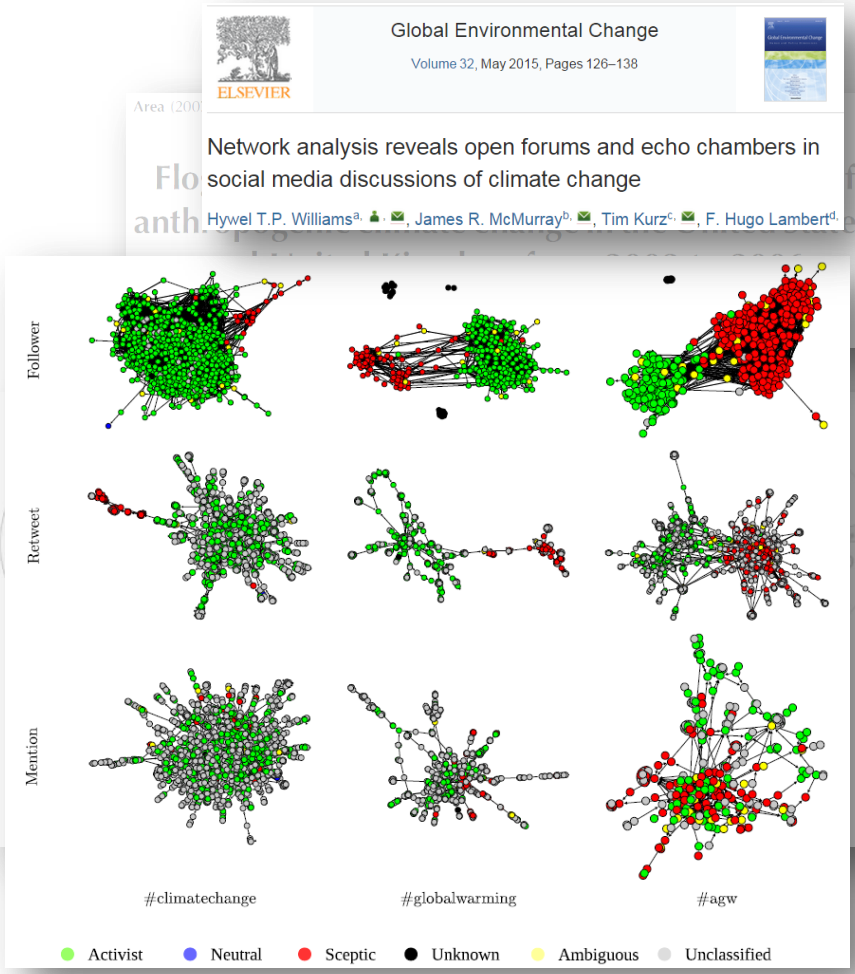
Account for the diversification of the media! Include online, social and mobile media as well as fictional/entertainment content.



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Connect media presentation to consumption!

De-Westernize Research! And analyse the (potential) transnationalization of communication.


Conclusion

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Several of those challenges can be addressed with a new kind of interdisciplinarity

- "big" data is available: newspaper databases, social media, even some TV archives, …
- we need to adapt our theories and methods for that, combining disciplinary approaches

Thank you for your attention!

Mike S. Schäfer

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www.ipmz.uzh.ch/Abteilungen/Wissenschaftskommunikation.html