







Climate Change in the Media

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

Mike S. Schäfer

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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

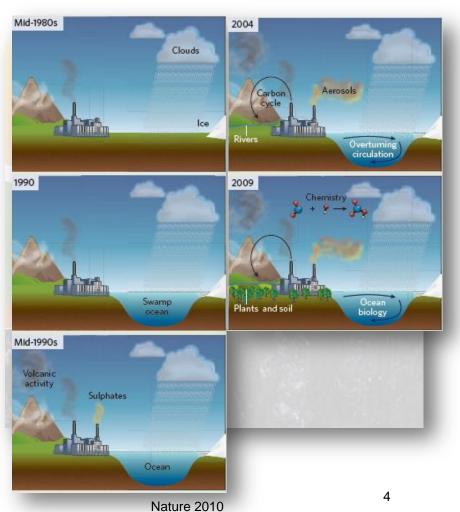






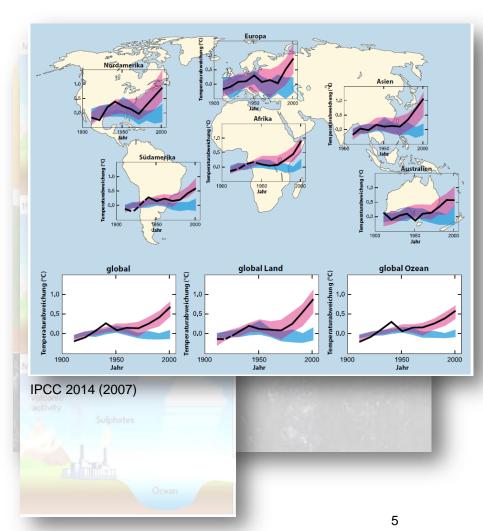
Climate change is an ,unobtrusive' issue ...

... complex,



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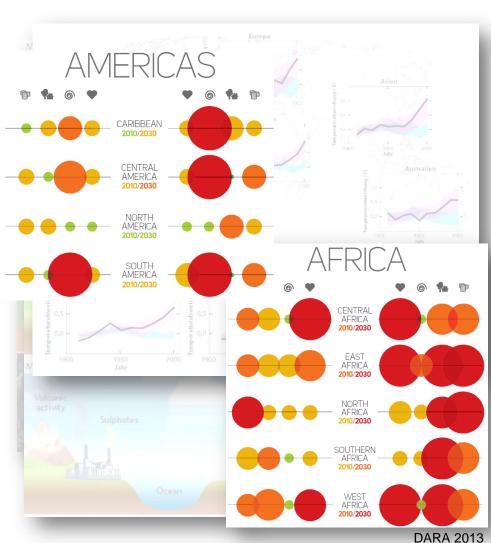
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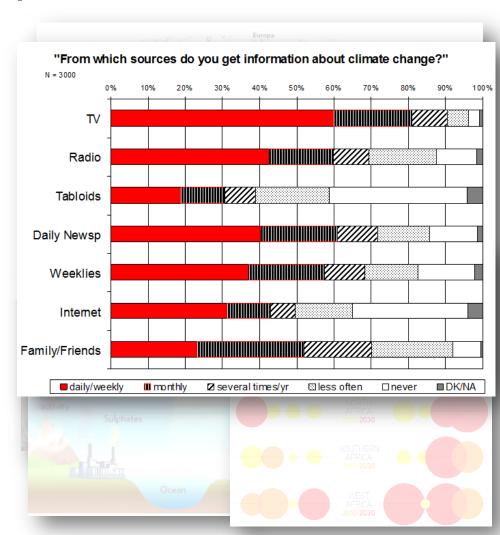
Climate change is an ,unobtrusive' issue ...

... 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 ...

Environmental Communication, 2014 Vol. 8, No. 2, 142–160, http://dx.doi.org/10.1080/17524032.2014.914050

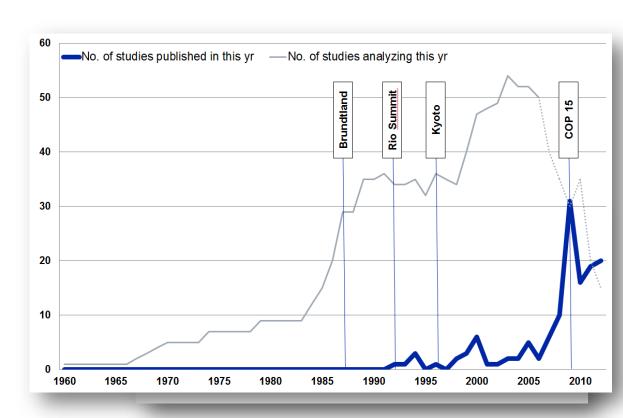


Media Representations of Climate Change: A Meta-Analysis of the Research Field

Mike S. Schäfer & Inga Schlichting

The research field ...

... has expanded over time



The research field ...

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... diversified itself in terms of the analysed countries,

	All (n = 273)	$ \begin{array}{r} 1957 - 1989 \\ (n = 67) \end{array} $	$ \begin{array}{r} 1990 - 1999 \\ (n = 129) \end{array} $	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
60 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
40 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 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 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
10 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
O Africa	4.0	1.5	4.6	4.6
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	All $(n = 199)$	$ \begin{array}{r} 1957 - 1989 \\ (n = 30) \end{array} $	$ \begin{array}{r} 1990 - 1999 \\ (n = 66) \end{array} $	2000-2010 $(n = 155)$
Print media	67.5	85.1	83.5	66.9
National newspaper	41.0	53.2	52.2	41.6
D!1	12.0	6.4	14.9	13.4
Magazines Print other	7.5	17.0	11.9	5.1
	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
Ca Radio	2.0	0	0	2.5
Me Film/documentary	1.5	0	0	1.9
Internet	17.0	0	6.0	16.0
Media websites	5.0	0	0	6.4
Mi Social media	4.0	0	0	4.5
Ch Search engines	3.0	0	1.5	3.2
Websites of NGOs	3.0	0	4.5	1.3
Others				5.1
		10.4		10.1
Australia	5.8			6.3
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- ... but gaps & analytical challenges remain TV is under-researched

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Websites of NGOs	3.0	0	4.5	1.3
Predominantly quantitative	47.8		54.0	49.5
Predominantly qualitative	44.8		40.0	41.0
Balance of quantitative and qualitativ			6.0	9.5
Design	7.5	5.1		7.5
Case study	39.6	31.3	22.0	37.1
Longitudinal study	23.9		6.0	23.8
Comparative study	20.9		46.0	24.8
Comparative and longitudinal study	10.4		20.0	11.4
Other	5.2		6.0	2.9
South Africa	2.2	1.5	2.3	2.5
Others				

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- ... but gaps & analytical challenges remain TV is under-researched, there is a ,Western' bias and a focus on ,responsible' countries

USA, India, Russia, Japan, Germany, Canada, Iran, UK, and South Korea; according to United Nations Statistics Division (2013)). 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)). 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)).		All (n = 199)	$ \begin{array}{r} 1957 - 1989 \\ (n = 30) \end{array} $	$ \begin{array}{r} 1990 - 1999 \\ (n = 66) \end{array} $	2000-201 (n = 155)
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The research field ...

- ... has expanded over time
- ... diversified itself in terms of the analysed countries, media
- ... but gaps & analytical challenges remain TV is under-researched, there is a ,Western' bias and a focus on ,responsible' countries, but not ,vulnerable' ones

	All All (n = 199)	1957–1989 1957–1989 (n = 30)	1990–1999 1990–1999 (n = 66)	2000-2010 $2000-2010$ $(n = 155)$
Table 5. What types of country	ries have been a	nalyzed?		
				%
Responsibility Ten countries with the largest USA, India, Russia, Japan, O	Germany, Canad			
United Nations Statistics Dir All 38 Annex-B countries to the Belgium, Bulgaria, Canada, G Germany, Greece, Hungary, Luxemburg, Monaco, Nether Russia, Slovakia, Slovenia, Sp to United Nations Framewood Vulnerability	ne Kyoto protoc Croatia, Czech I Iceland, Italy, I rlands, New Zea pain, Sweden, Sv	Republic, Denmark reland, Japan, Latv Iland, Norway, Pol witzerland, UK, Ul	r, Estonia, Finland, ria, Liechtenstein, I land, Portugal, Ror kraine, and USA; a	, France, Lithuania, mania, according
All 31 countries acutely threated Armenia, Bolivia, Bosnia and Gambia, Georgia, Greece, Gomorocco, Mozambique, Nan Spain, Tajikistan, Uruguay, Monitor (2013)).	d Herzegovina, uyana, Hungary nibia, Nicaragua	Cambodia, China, , Iran, Lithuania, I , Peru, Portugal, F	Croatia, Cuba, El Mauritius, Moldov Romania, South Af	Salvador, a, Trica,
Ten countries most affected by (in order of risk from higher Haiti, Vietnam, DPR Korea, Climate Risk Index, see Har	st to lowest: Ho Pakistan, Thail	nduras, Myanmar, and, and Dominic	Nicaragua, Bangla an Republic; accor	adesh,
Others	1.8	(),()	2.3	2.1





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 ENGLANCE

Der Spiegel 33/1986

ORGANIZED CLIMATE CHANGE DENIAL

RILEY E. DUNLAP AND AARON M. McCRIGHT

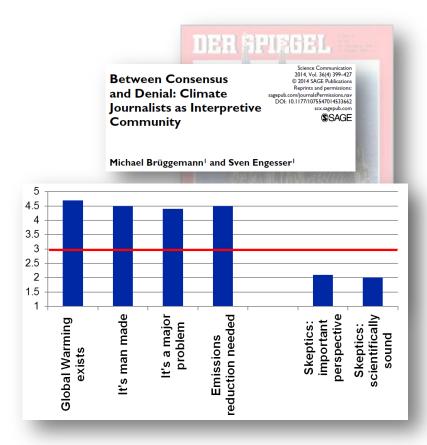
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professionalization of "climate journalists" who mostly share IPCC positions



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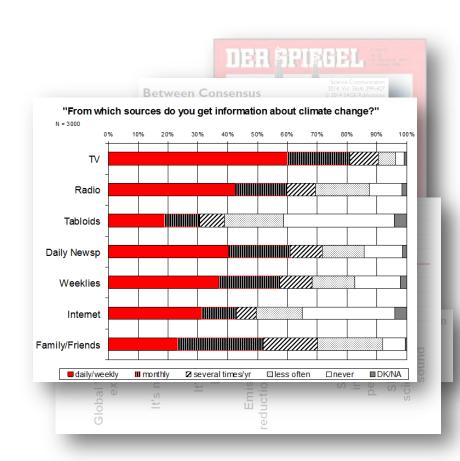
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 media as important & trustworthy sources of information about climate change



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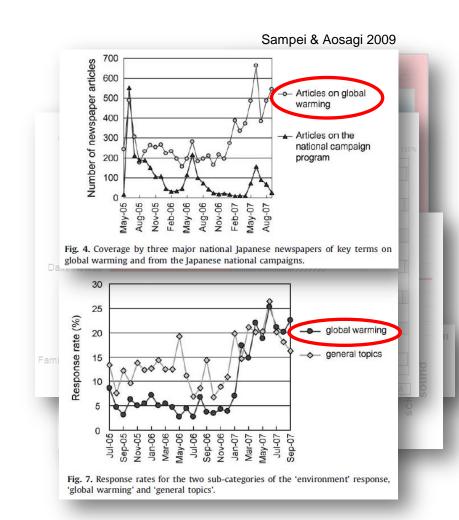
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The Audience: Use and Effects

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

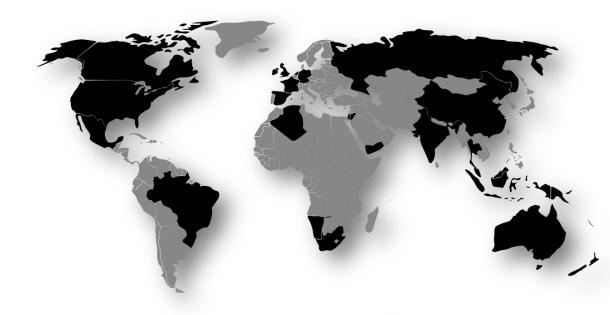




CC is a relevant media issue around the world

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

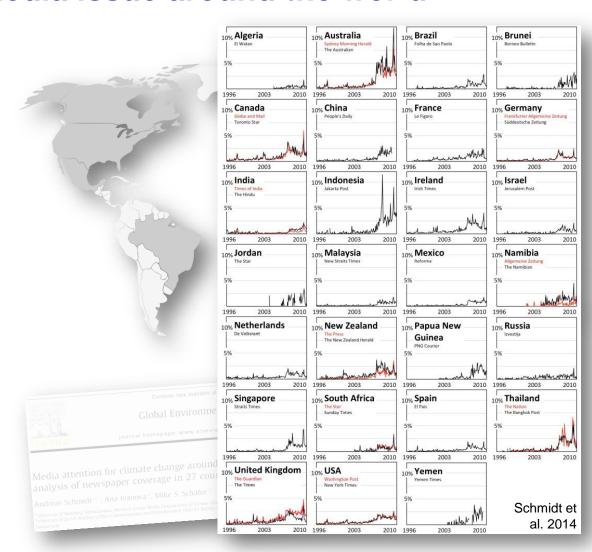




CC is a relevant media issue around the world

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





Media coverage is triggered mainly by socio-politics







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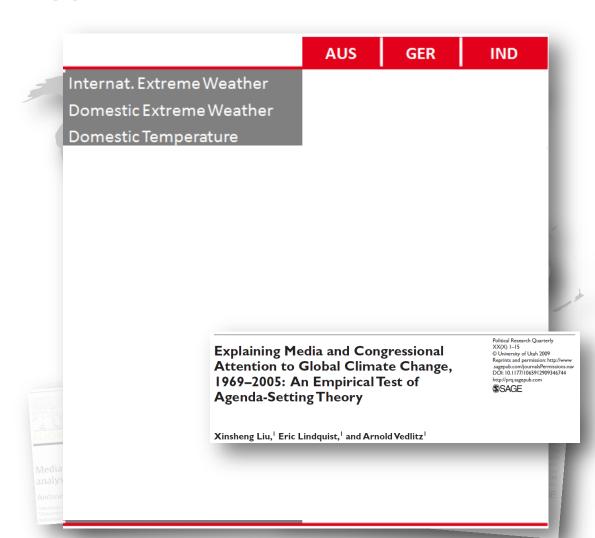
- time series regression models explaining amount of issue attention
- for Australia, Germany, India





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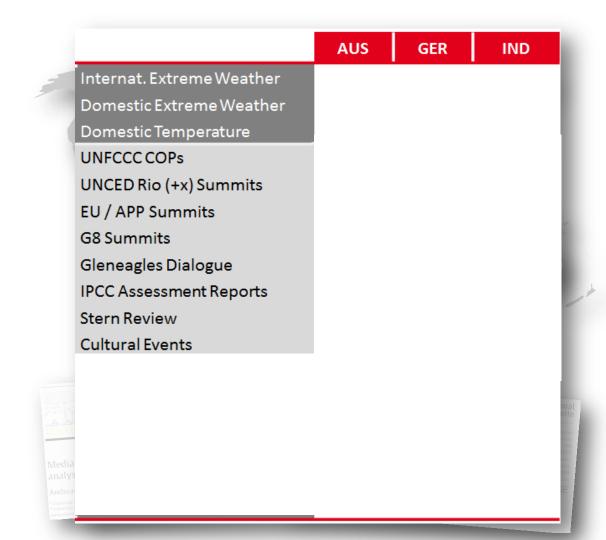
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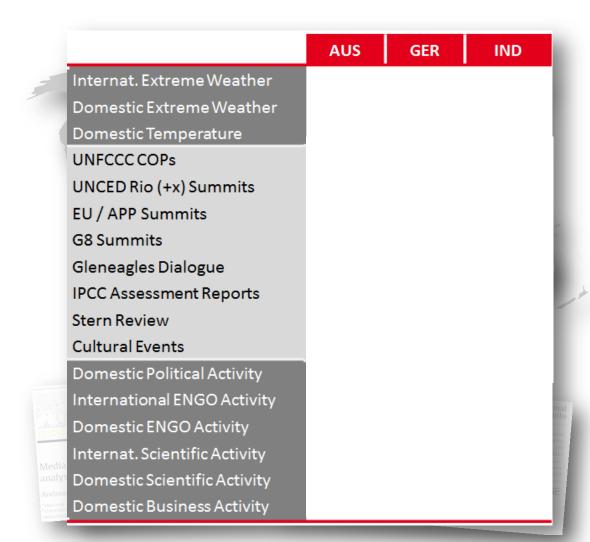
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Media coverage is triggered mainly by socio-politics

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

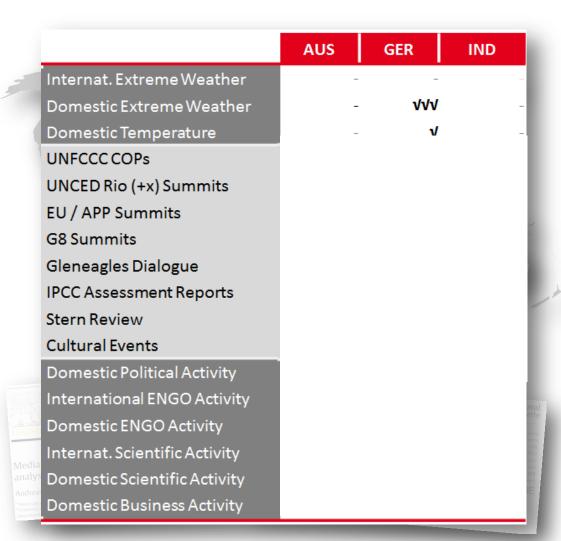




Media coverage is triggered mainly by socio-politics

Triggers of media attention for climate change

 showing low importance of climate/weather events





Media coverage is triggered mainly by socio-politics

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

		AUS	GER	IND
1	Internat. Extreme Weather	-	-	_
	Domestic Extreme Weather	-	√√√	-
	Domestic Temperature	-	٧	-
	UNFCCC COPs	VVV	√√√	√√√
	UNCED Rio (+x) Summits	√√	-	-
	EU / APP Summits	-	-	-
	G8 Summits	-	-	٧
	Gleneagles Dialogue		-	-
	IPCC Assessment Reports	-	٧	-
	Stern Review	-	-	-
	Cultural Events	٧		-
	Domestic Political Activity			
	International ENGO Activity			
	Domestic ENGO Activity			
Лedia	Internat. Scientific Activity			
	Domestic Scientific Activity			
University University Switzerland	Domestic Business Activity			



Media coverage is triggered mainly by socio-politics

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

	AUS	GER	IND
Internat. Extreme Weather	-	-	_
Domestic Extreme Weather	-	√√√	-
Domestic Temperature	-	٧	-
UNFCCC COPs	√√√	٧٧٧	۷√√
UNCED Rio (+x) Summits	٧٧	-	-
EU / APP Summits	-	-	-
G8 Summits	-	-	٧
Gleneagles Dialogue		-	
IPCC Assessment Reports	-	٧	-
Stern Review	-	-	-
Cultural Events	٧		-
Domestic Political Activity	٧٧	٧	-
International ENGO Activity	٧٧٧	۷۷۷	٧٧٧
Domestic ENGO Activity	-	-	-
Internat. Scientific Activity	-	-	-
Domestic Scientific Activity	-	-	-
Domestic Business Activity	-	-	-



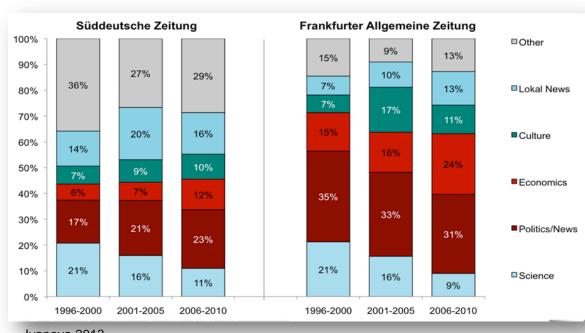
A "societal turn" in media coverage

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



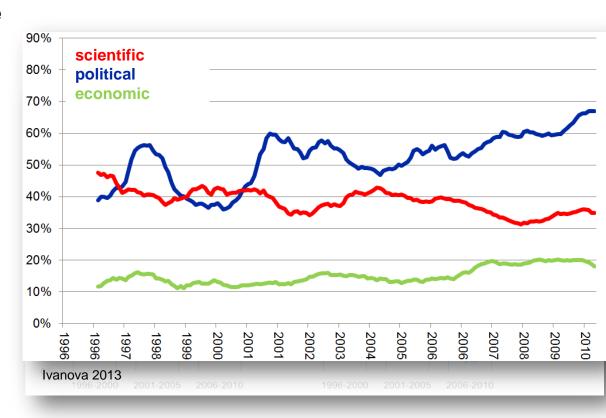
Ivanova 2013



A "societal turn" in media coverage

Trend towards societal issues in climate change reporting over time

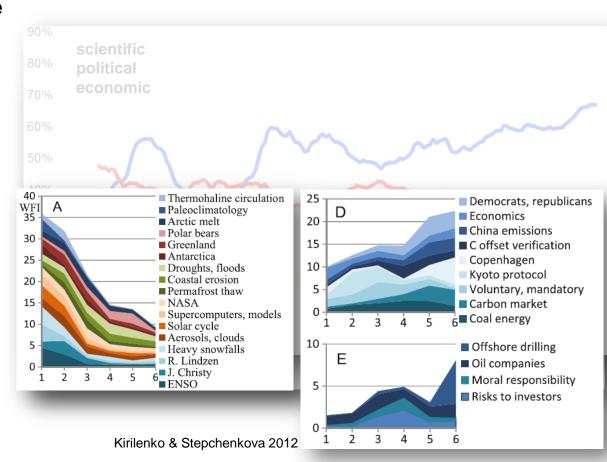
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But considerable differences remain

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

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 in the focus on science and the degree of climate change "skepticism"

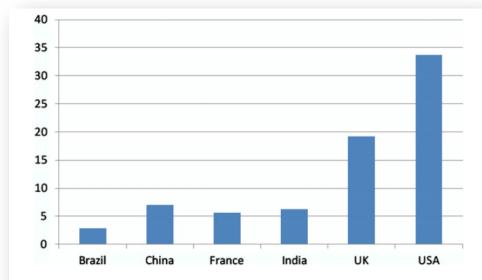


Figure 1. The number of articles containing sceptical voices as a % of the total number of articles covering climate change or global warming, 2009–10.

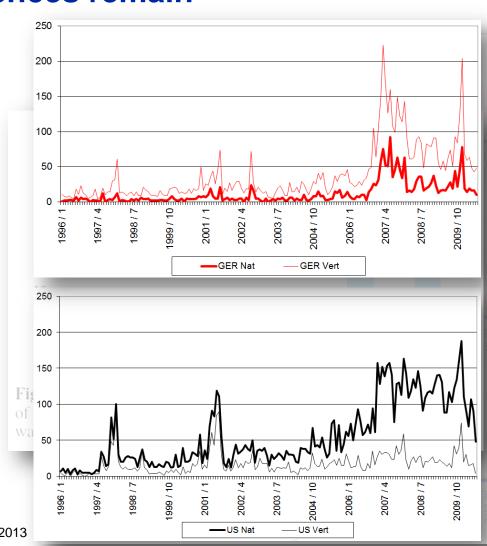
Painter & Ashe



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





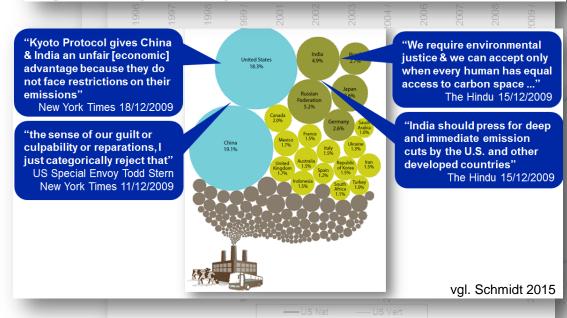
But considerable differences remain

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'



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.





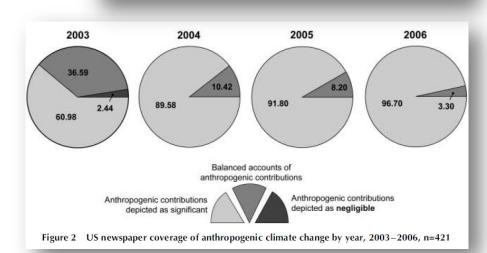


Where should we be headed?

Follow the "societal turn"! Focus on communication about sociopolitical implications more.

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

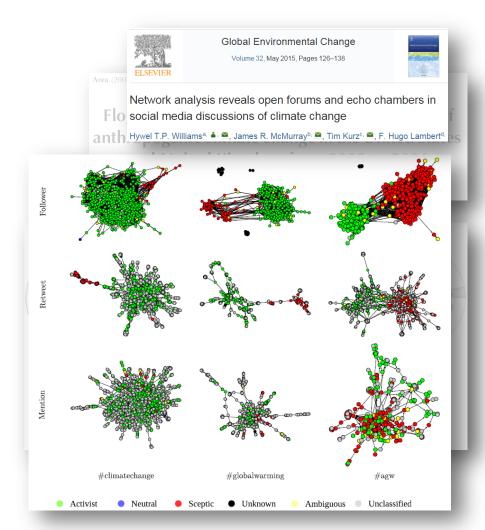
Maxwell T Boykoff



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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

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