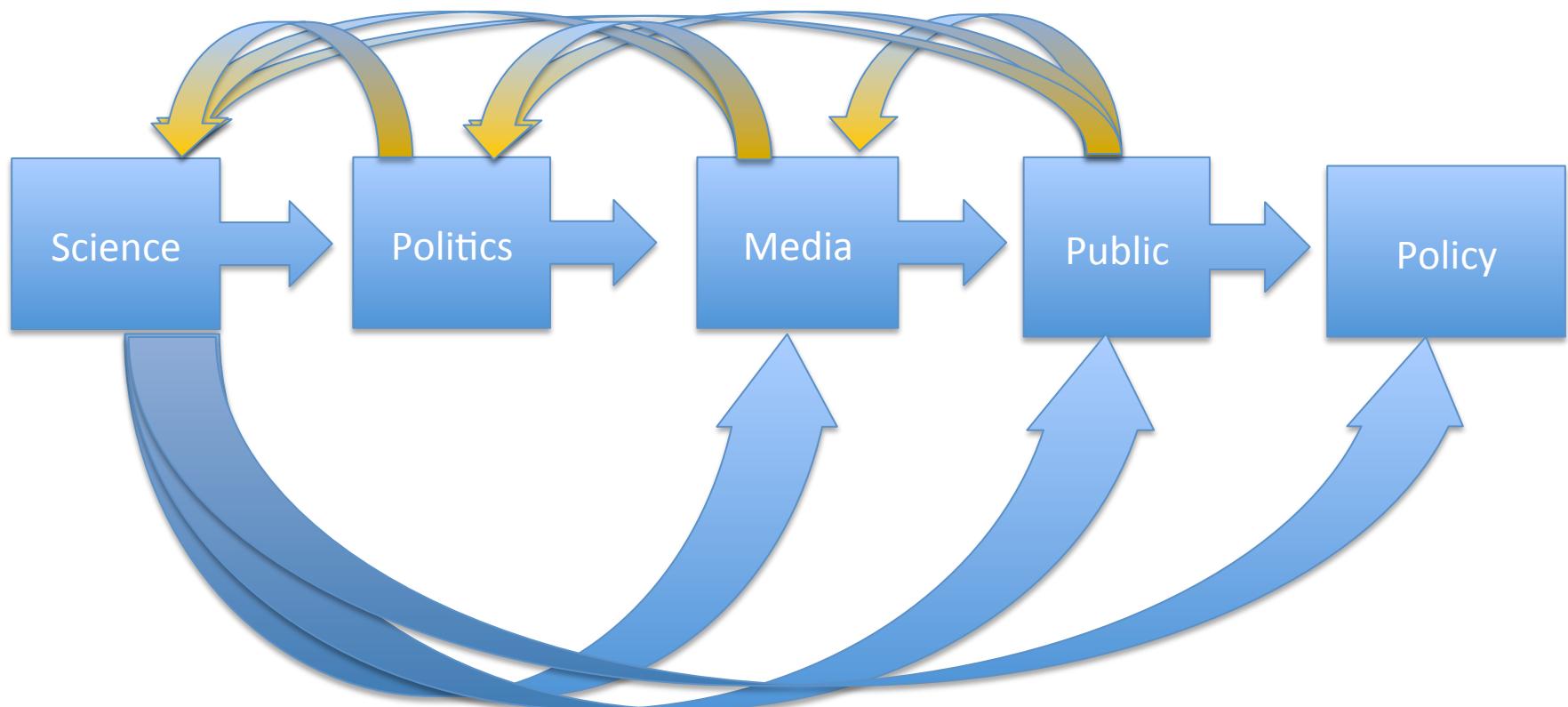
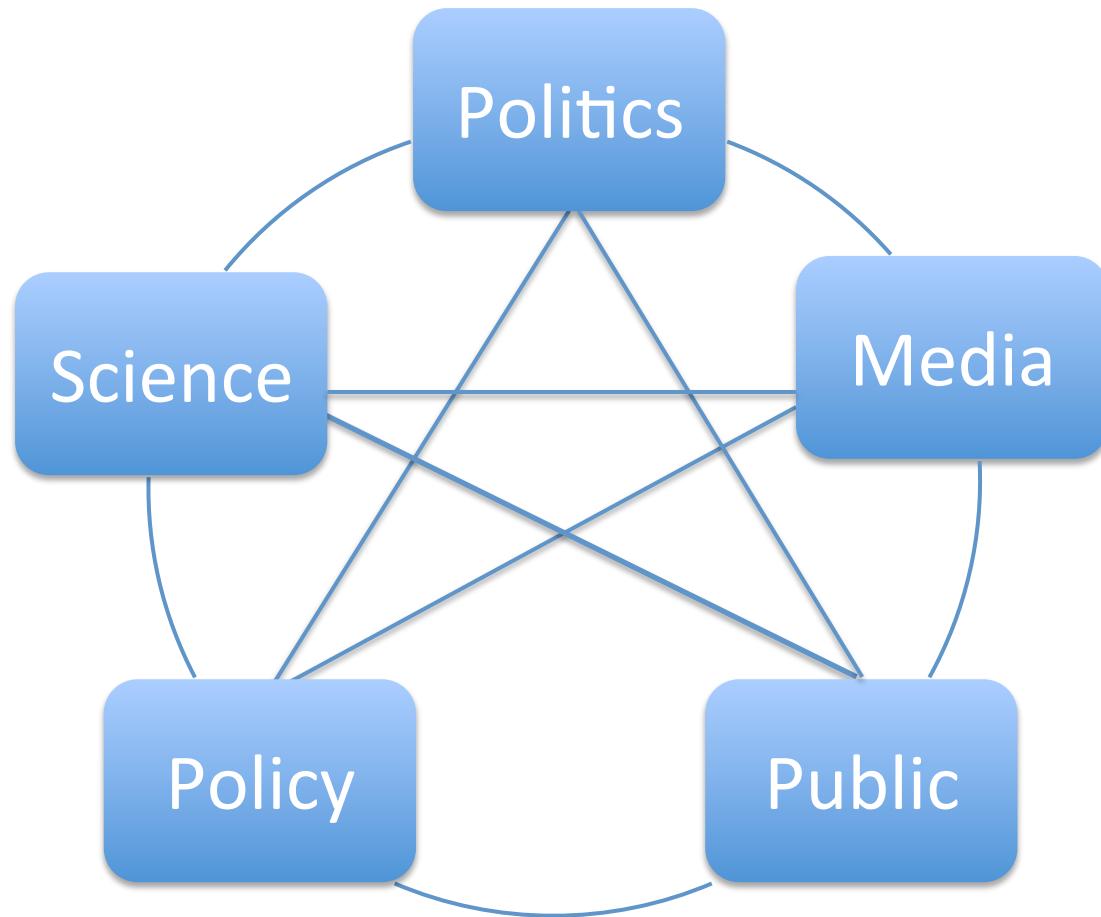


Media coverage of climate change in a comparative perspective

Talk at CSTPR
University of Colorado Boulder
9 March 2016
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The context





The global and the national

- Despite the authoritative IPCC reports national climate policies vary
 - From embracing to rejection
 - Media reporting in several countries seems aligned with government policy (Grundmann 2007)
- Despite its global visibility climate skepticism it is not affecting all countries equally
 - Jasanoff (2012)

Research questions

- “Lack of political progress is in large part due to the miscommunication of the issue through the media”
- How are news stories produced?
- How influential is news?
 - Cultural interpretations
- How do people gather news?
 - Through peer contact, from opinion leaders, or directly through media reports (Nisbet and Kotcher 2009)?
- How does news impact on politics?
- **What does news tell us about climate change, in different countries?**

The need for comparative research

- Lack of institutional incentive structure
- Climate change is a global process which is addressed by international institutions but receives different responses in different countries
- Countries differ, economically, politically, culturally
- Focus on France, Germany, UK, and US

Theories and method

Corpus Linguistics

- Computer based analysis of large data sets
- Highlight patterns that manual analysis could not achieve in practice

Claims makers and frames (Trumbo 1996)

Full text database

LexisNexis, 2000-2010

top 10 newspapers in four countries

WordSmith tools

concordance lines

collocations

word clusters

key words



Building the corpus

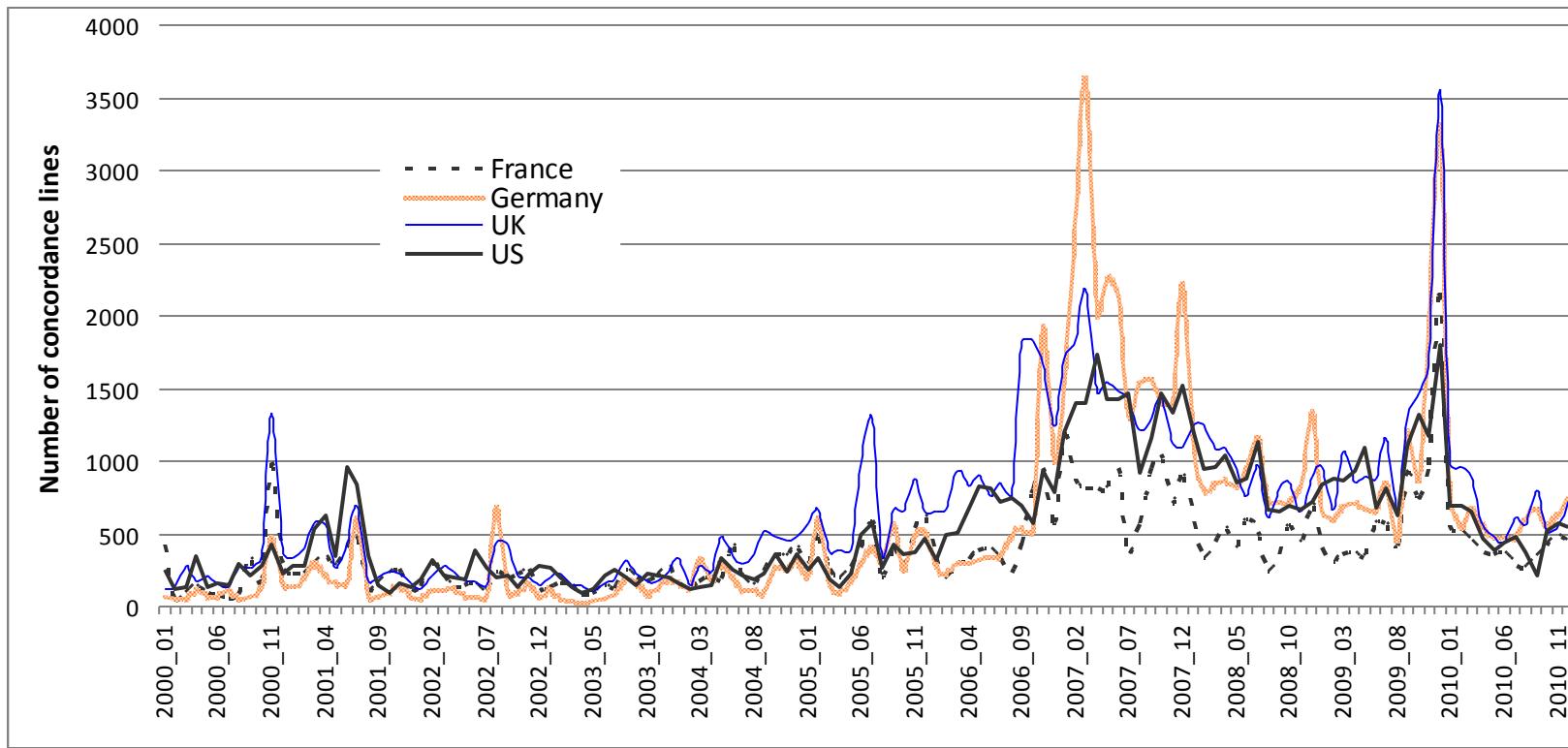
- LexisNexis: over representation of Anglophone news sources
- Creation of a corpus that is similar in size for all countries
 - only newspapers that had reported on climate change in every year from 2000 to 2010.
 - selecting top 10 newspapers in each country, measured by the number of news stories on the topic
 - Excluding newswires and nearly all duplicates
- 106.5 million words for all four countries.
- Total no. of news stories:
 - 45,000 (USA) 61,000 (UK); France and Germany in between
- Total circulation of the newspapers
 - 2.3 m (France), 5.7 million (UK).
- Month-by-month corpora were built, one for each national set, using all the relevant search phrases.

The corpus

	freq.	Circulation	Articles 2000-2010
Le Monde	daily	393000	10194
Le Figaro	daily	361000	8450
Libération	daily	135000	8289
Les Echos	daily	140000	7210
Sud Ouest	daily	345000	5884
La Tribune	daily	92000	6192
Le Temps (Geneve)	daily	50000	4826
La Croix	daily	123000	4543
Le Point	weekly	369776	1161
Sud Ouest Dimanche	daily	300000	516
Total		2308776	57265
GERMANY	freq.	Circulation	Articles 2000-2010
taz, die tageszeitung	daily	57000	10257
Frankfurter Rundschau	daily	130000	10070
DIE WELT	daily	703000	9622
Hamburger Abendblatt	daily	221000	7908
Berliner Zeitung	daily	144000	5498
Berliner Morgenpost	daily	130000	5349
Welt am Sonntag	daily	112000	2259
Financial Times Deutschland	daily	102000	1853
Der Spiegel	weekly	976000	1523
Focus Magazin	weekly	620000	1281
Total		3195000	55620

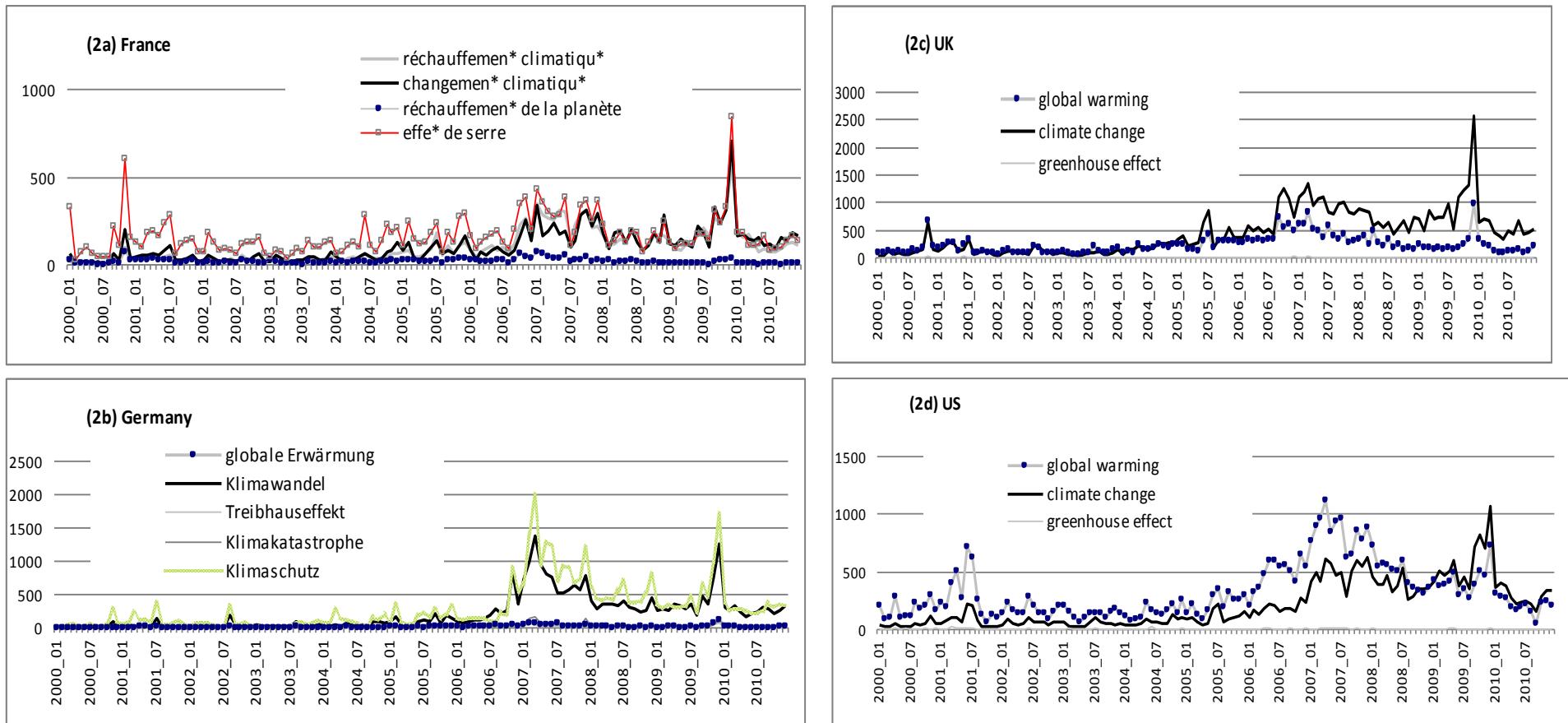
UK	freq.	Circulation	Articles 2000-2010
The Independent (London)	daily	185000	11264
The Times (London)	daily	508000	12659
Daily Mail (London)	daily	2010000	5572
Birmingham Post	daily	28000	5228
The Herald (Glasgow)	daily	120000	4259
The Scotsman	daily	45000	4590
The Express	daily	674000	4928
The Evening Standard, London	daily	601000	4445
Aberdeen Press and Journal	daily	330000	4316
The Mirror	daily	1200000	3867
Total		5701000	61128
US	freq.	Circulation	Articles 2000-2010
The New York Times	daily	916000	11227
The Washington Post	daily	550000	8825
San Jose Mercury News	daily	577000	4941
The San Diego Union-Tribune	daily	224000	3210
St. Louis Post-Dispatch	daily	207000	2494
The Star-Ledger	daily	223000	3611
Pittsburgh Post-Gazette	daily	181000	3093
St. Petersburg Times (Florida)	daily	292000	2309
The Houston Chronicle	daily	587000	2786
USA TODAY	daily	1829099	2378
Total		5586099	44874

Attention levels



[Based on all search terms]

Climate change? Global warming?



Collocation analysis

What is in a word?

	France	Germany	UK	US
effet de serre	emission contre réduction lutte responsables			
changement climatique/ Klimawandel/ climate change	contre lutte(r) conséquences effets	Kampf gegen durch nicht	energy tackle global convention against	global panel energy legislations effects
Klimaschutz		Beitrag Thema Umwelt Wirtschaft		
global warming/ réchauffement climatique	contre lutte effets conséquences responsables		effects climate threat tackle against cause combat	emissions gases pollution effects energy Kyoto combat

Word clusters

	France	Germany
effet de serre	De gaz à effet de serre Émissions de gaz à Émissions de gaz à effet de serre	
changement climatique /Klimawandel	La lutte contre le changement climatique Des nations unies sur De lutte contre le changement climatique	Kampf gegen den Klimawandel Im Kampf gegen den Klimawandel Anpassung an den Klimawandel Den Kampf gegen den Klimawandel
Klimaschutz		Für den Klimaschutz Beitrag zum Klimaschutz leisten Einen Beitrag zum Klimaschutz Für den Klimaschutz tun Mehr für den Klimaschutz
	UK	US
global warming	The Effects of Global Warming The Fight against Global Warming A Result of Global Warming The Impact of Global Warming The Threat of Global Warming The Dangers of Global Warming	The Effects of Global Warming That Contribute to Global Warming The Threat of Global Warming The Fight against Global Warming Kyoto Protocol on Global Warming
climate change	Intergovernmental Panel on Climate Change The Effects of Climate Change The Impact of Climate Change The Fight against Climate Change	Intergovernmental Panel on Climate Change The Effects of Climate Change Pew Center on Global Climate Change The Impact of Climate Change The Issue of Climate Change

Who speaks for climate?

	France	Germany	UK	US
Al Gore	2,974	2,060	1,560	4,227
James Hansen	221	50	68	193
Kevin Trenberth	29	17	12	61
Stephen Schneider	6	24	15	37
Tom Wigley	14	8	13	16
Gavin Schmidt	68	3	3	33
Michael Mann	54	63	17	118
Robert Watson	45	25	44	16
Bert Bolin	24	1	7	6
Miliband	294	281	4,611	143
George Monbiot	28	11	121	13
John Houghton	8	4	46	11
Nicholas Stern	642	342	388	52
Stern Review	10	2	187	31
Sigmar Gabriel	220	3,353	11	20
Trittin	178	4,807	10	38
Schellnhuber	4	979	14	18
Rahmstorf	74	692	26	19
Töpfer /Toepfer/Topfer	132	1,566	64	32
Hervé Le Treut	551	0	0	0
Jean Jouzel	838	4	0	0
Corinne Lepage	532	0	1	0
Dominique Voynet	2,058	31	101	12
Nicolas Hulot	2,517	17	6	0
Total	11,521	14,340	7,325	5,096

	France	Germany	UK	US
Greenpeace	1,357	4,145	2,741	779
Nrdc	12	41	12	106
World Wide Fund For Nature	17	245	147	16
Wwf	921	2,379	1,745	68
Friends Of The Earth	921	2,379	2,985	192
Oxfam	150	268	619	100
Environmental Defense Fund	34	88	1	258
Alliance for Climate Protection	0	0	19	101
Climate Alliance	0		0	7
Climate Action Network	5		10	88
The Greens	1,755 les verts	16,827 grünen	1,252	109
Green Party	0		1,369	223
Total	5,172	26,372	10,900	2047

‘Advocates’

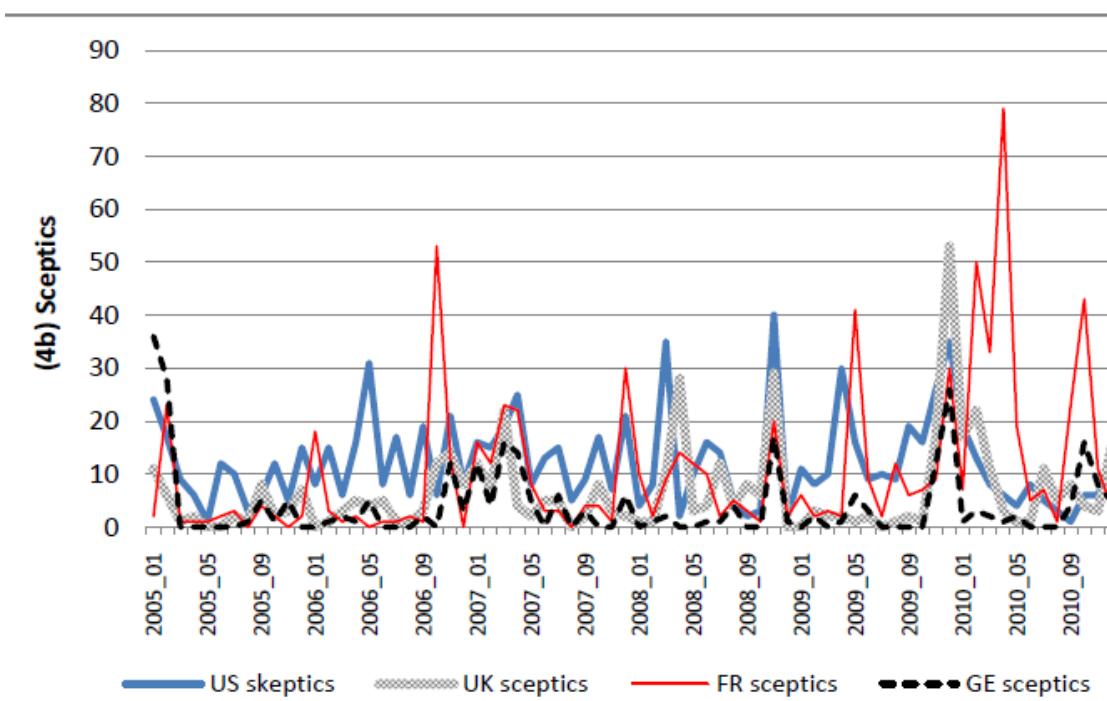
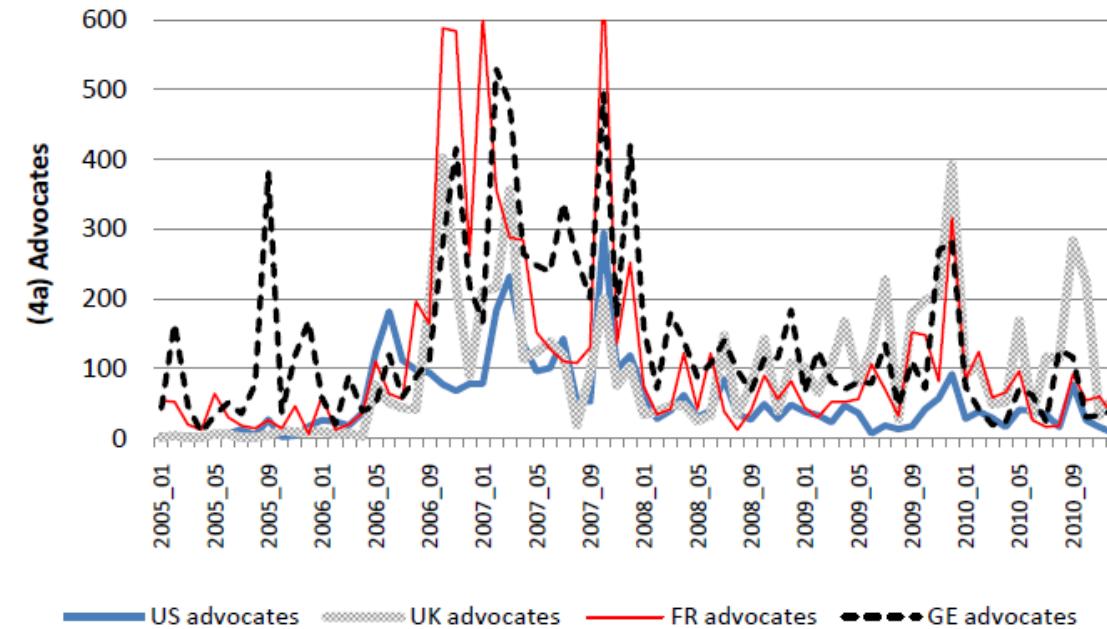
Who speaks for climate?

	FR	GE	UK	US
Fred Singer	7	20	18	42
Richard Lindzen	26	24	22	36
Frederick Seitz	1	0	5	18
Pat Michaels	6	13	8	37
James Inhofe	27	23	16	194
Steve McIntyre	1	2	7	4
Baliunas	3	4	5	27
Willie Soon	4	3	3	9
Philip Stott	0	0	58	0
Patrick Moore	13	14	32	45
Richard Lindzen	26	24	22	36
Pat Michaels	6	13	8	37
Nigel Calder	0	7	10	1
John Christy	6	9	13	16
Michael Crichton	68	127	94	175
Paul Reiter	9	3	5	9
Nigel Lawson	6	12	103	2
Piers Corbyn	0	0	28	0
Vincent Courtillot	94	0	0	1
Claude Allègre/ Allegre	499	1	0	1
Total	802	299	457	690

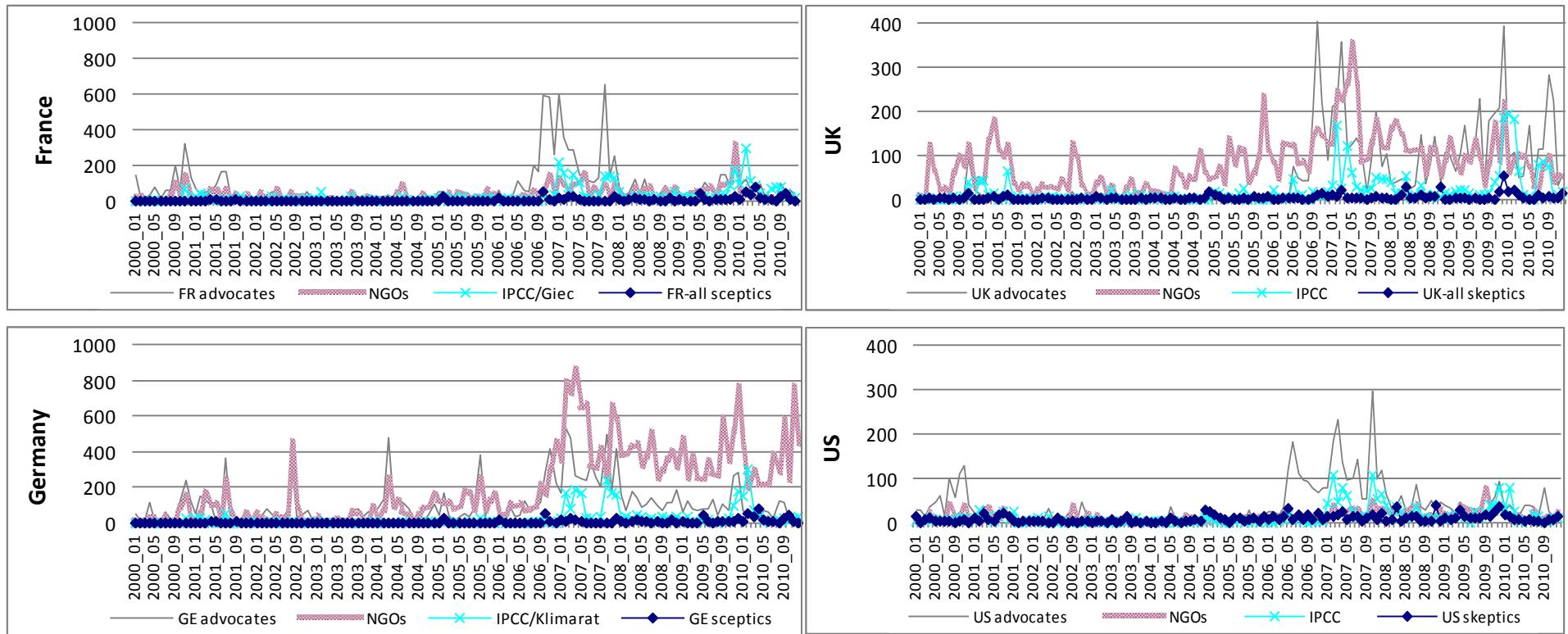
	FR	GE	UK	US
Heartland Institute	1	8	3	42
Cato Institute	8	5	11	168
George Marshall Institute	0	0	0	1
Heritage Foundation	8	7	23	183
International Policy Network	1	2	15	1
Global Climate Coalition	5	22	16	90
Greening Earth Society	0	4	0	13
Global Warming Policy Foundation	3	0	67	0
GWPF	0	0	7	0
Instituto Juan de Mariana	0	0	0	0
CEPOS	0	0	0	0
Institut Économique Molinari	5	0	0	0
Hayek Institute	0	0	0	0
CFACT Europe	0	1	0	0
Europäisches Institut für Klima und Energie	0	6	0	0
Total	31	55	142	498

‘Sceptics’

Who is visible, when?



Green groups, advocates, IPCC and sceptics



Note: NGOs include “Greens”, “Green Party”, etc.

Keyword analysis

	FR	GE	UK	US
2005	Blair, Gleneagles, Kyoto, Katrina, Montréal , Chirac, Londres, britannique, Ecosse, protocole	Katrina, Blair, Gleneagles , Kyoto-Protokoll, <i>Hurrikan, Montreal</i> , Schröder	Katrina, Blair, Gleneagles, Kyoto, Hurricane, Geldoff, Africa, aid, poverty	Katrina, Blair, Gleneagles, Kyoto, Hurricane , Bono, storms, Africa, aid, museum, paintings, collection
2006	Hulot, <i>Nairobi, film, Gore, Stern, Rhodia, dérange, présidentielle, énergétique, Sciencesmédecine</i>	Großbritannien, <i>Film, Nairobi, Russland, Originalfassung, Regisseur, Untertiteln</i>	Pounds, Cameron, <i>Stern, Blair, energy, water</i>	Francisco, Jose, SUN, FRI, <i>film, cinema, theatre,</i>
2007	Bali , Sarkozy, Royal, Nicolas, Merkel, Grenelle, Gore, Heiligendamm, Giec, allemande, Hulot, réchauffement	Russland, Großbritannien, Heiligendamm, Bali , Merkel, Außenminister, Kompromiss, Gabriel	Gore, Brown, Bali , Live, footprint, carbon, Merkel, flights	Gore, Schwarzenegger, Mercury, News, bulbs, ethanol, Bali, Edwards
2008	McCain , crise, présidence, réservés, Poznan, Tous, droits, <i>alimentaire</i> , paquet, Obama , <i>prix</i> , Sarkozy, financière, Pologne, Grenelle, européenne,	Russland, McCain , Großbritannien, Kompromiss, Preise , Biosprit, Außenminister, Obama	McCain, Obama, food, prices, biofuels , Boris, bags, crunch, Palin, runway	McCain, Obama, Palin, food, prices , presidential, candidates, green, energy, oil
2009	Copenhague, Obama, crise , Tous, carbone, taxe, sommet, pays, Chine, accord,	Kopenhagen, Obama , Vorbehalten, Russland, Kongress, Großbritannien, <i>Krise</i>	Copenhagen, Obama , recession, expenses, Journals, Miliband, Climate, summit	Obama, Copenhagen , climate, bill, stimulus, legislation, change, cap-and-trade, China
2010	Cancun, GIEC, Copenhague, Cancún, Allègre, <i>Tea</i> , Giec, <i>Party, Obama</i> , carbone, climato-sceptiques, Tunisie, taxe.	Russland, <i>Cancún, Röttgen, Außenminister, Westerwelle, Grünen</i>	services, Clegg, Huhne, coalition, <i>Cancun, Mexico</i> Miliband, Cameron	<i>Obama, spill, BP, China, Cuccinelli, Tea, Party, Republican, jobs, oil, climate, Senate</i>

Discussion & Lessons

- Nation specific climate discourses
 - Difference in preferred terms and their connotations;
 - Domestic policy issues prominent
- Climate advocates more visible than sceptics
 - Politicians more visible than scientists;
 - Very little cross national visibility (except Al Gore);
 - NGOs and green groups highly visible in UK and Germany (both countries have most ambitious climate policies).

Further research

- Update the corpus 2011-2015
- Link claims makers to frames
 - Named entity recognition
- Is climate change communication different to other media discourses?
 - Systematic comparisons needed
 - Austerity discourse shows near absence of science
- Journalistic norms
 - across countries/issues? (interviews)
- Content analysis tells us nothing about audience reception
 - How do people gather news and how do they use it? (interviews)
- New social media may operate in different ways
 - Trusted sources; echo chambers