

MEDIA REPRESENTATIONS OF CLIMATE CHANGE POLITICS AT COP21: THE END OF THE BEGINNING

Edited by Michael Brüggemann



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INDEX

Introduction	4
Chapter 1: Expectations for Paris Summit 2015.....	6
Chapter 2: Time to Move on	9
Chapter 3: Paris rises after attacks while some pacific islands are going under	11
Chapter 4: A new chance for common sense and common action?	14
Chapter 5: Was the “failure” of Copenhagen key to expected “success” in Paris?.....	17
Chapter 6: How data journalism is impacting the climate change debate.....	19
Chapter 7: Do the mainstream media tell the full story?	22
Chapter 8: Security measures and civil action	25
Chapter 9: Ulysses in Paris	31
Chapter 10: Degrees and vulnerability	35
Chapter 11: Why there needs to be more public debate on climate change.....	39
Chapter 12: Climate coverage across cultures.....	42
Chapter 13: Climate justice activism under the ‘state of emergency’	49
Chapter 14: Giving climate change a local connection	53
Chapter 15: Public meanings in Paris.....	55
Chapter 16: Seven Days of Climate Change on Reddit	59
Chapter 17: What’s the hold up? The slow transition to renewable energy.....	66
Chapter 18: A change in mind.....	71
Chapter 19: Bridging the gap	77
Chapter 20: A climate of change in media coverage?	81
Chapter 21: Exxon vs The People.....	85
Chapter 22: Momentum for carbon pricing is growing	87
Chapter 23: Lost on the Road to Paris?	91
Chapter 24: Civil Society Actors in the #Climatechange debate.....	93
Chapter 25: Reflections from Paris	96
Chapter 26: Two weeks on Twitter	100
Chapter 27: What can Google Trends tell us about COP21?	107
Chapter 28: Journalism at the frontlines of civic action	110
About the authors.....	114

INTRODUCTION

*"Now this is not the end. It is not even the beginning of the end.
But it is, perhaps, the end of the beginning." Winston Churchill*

Quite a few commentators of the results of the UN Climate Change Conference in Paris (November/December 2015) have evoked this quote from Winston Churchill. It seems that, indeed, Paris marks the end of the beginning of debating anthropogenic climate change. The world's political leaders have acknowledged the depth and breadth of the problem and have pledged to act. It will be crucial to hold them accountable of their promises: This is a challenge primarily for journalism and civil society. It will also be a challenge for social scientists to observe and analyze this process. Yet, in our role as citizens we may not only describe and explain but also comment on this process.

The idea of the *Media Watch Blog* was to provide space for both: presenting an analytical view of the media coverage and the debates surrounding COP 21 through the lens of academic observers from social and climate sciences and allowing for comments in our role as citizens that we would not include in our academic publications. The point of the blog is not to bash the media: Covering climate change is a demanding challenge for journalists and we do not pretend that we could do better than journalists do. Yet, as outside observers of the debate, we hope to add new perspectives to a debate that deserves humanity's most alert attention.

The blog is hosted by my team at the University of Hamburg. Going beyond Hamburg, its authors are climate researchers, social scientists and also some journalists from a range of different backgrounds united by an interest in the interdisciplinary study of climate change.

I would like to thank everyone who has contributed to the blog for the great work that generated interesting insights into the debate around COP-21. This booklet preserves the contributions as they appeared (and as they are still available at www.climatematters.hamburg).

At this point in the history of climate politics, it is important not to forget what has been said and promised in Paris.

Hamburg, January 15th 2016, Michael Brüggemann

Expectations for Paris Summit 2015 – What's at stake?

Feilidh O'Dwyer
November 27 2015

The 21st United Nations Conference on Climate Change in Paris (COP21) is almost upon us. As you read this leaders and government representatives from almost 200 nations are converging on France's capital amid unprecedented security. With the current iteration of the Kyoto protocol set to expire in 2020, leaders will negotiate and potentially sign a new climate change agreement.

Any such agreement will commit nations to targets for reducing greenhouse gas emissions, in an effort to cap global temperature rises to 2°C from preindustrial times. Anything above that is considered the “danger zone” where temperature rises will become uncontrollable. Unfortunately, recent scientific estimates show earth is already half way towards this limit.

Is this summit any different from all the others?

Many people might be skeptical as to whether world leaders will make meaningful progress in Paris, given a long history of inaction or half-measures on climate change. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 – and has since met 20 times. Each time a climate summit rolls around, media outlets and public figures loudly proclaim that *this year* is earth's last opportunity to change. Prior to the Bonn summit in 2001 that year's *Time* article was titled “A Global Warming Treaty's Last Chance.” And yet 14 years on – global temperatures in October were the highest average ever in 136 years on record.

Evidently much more needs to be done. In September French President Francois Hollande, in keeping with a tradition of doomsday platitudes, said that if there was no decision in Paris, it would be “too late for the world.” Is he right?

The good news and the bad

There are a few positive indicators we are making progress towards combating climate change: 2014 was the first time in 40 years the global economy

grew but carbon emissions stayed flat. Two of the biggest carbon emitters, the US and China, are maybe, just maybe starting to get their acts together. This year Obama passed the Clean Energy Act – which commits to reducing national electricity sector emissions 30 percent below 2005 levels by 2030. Last year Chinese President Xi Jinping, faced with his country's enormous air pollution problem, led the world in investing in clean energy spending US \$89.5 billion. Another positive omen is the mobilization of climate protestors. In the last days, hundreds of thousands of people around the globe hit the streets to urge governments to urgently take meaningful action on climate change. Even the Pope has spoken up. During his recent visit to America said climate change “can no longer be left to a future generation.”

Despite some good signs, there is still plenty to be concerned about. This month the level of carbon dioxide in the atmosphere again surpassed 400 parts per million, an emission level 43 percent higher than pre-industrial times. Dr. Erika Podest, a NASA Carbon and water cycle research scientist was quoted as saying:

“CO2 concentrations haven't been this high in millions of years. Even more alarming is the rate of increase in the last five decades and the fact that CO2 stays in the atmosphere for hundreds or thousands of years. This milestone is a wake up call that our actions in response to climate change need to match the persistent rise in CO2. Climate change is a threat to life on Earth and we can no longer afford to be spectators.”

In short, every person is a stakeholder when it comes to decisions around climate change.

Media Coverage of climate change

Only a media hermit could miss the perilous predictions scientists have made for the planet's future should we fail to take decisive action on climate change. Sea-level rises, droughts and extensive loss of biodiversity are just some of the grim effects that could result from the earth's climate rising by several degrees.

Despite climate change existing in the public sphere for at least two decades, it hasn't always been publicly accepted. Traditional Western news media's

emphasis on objectivity meant that in climate change debates, climate skeptics were given equal coverage/legitimacy to climate *scientists*. To the undiscerning news consumer, this may convey the impression that both points of view were equally valid. However, as John Oliver brilliantly summarized earlier this year in *Last Week Tonight*, more than 97 percent of world climate scientists agree that the world is warming as a result of an excess of human-produced carbon dioxide in earth's atmosphere.

Some major issues up for debate

- *Limits* – Under the Kyoto protocol, developing countries had no cap on their emissions. Now that China is the world's largest polluter – will developing countries accept some limit, even if it's smaller than that of developed nations?
- *Accountability and enforcement* -- Who will hold countries to the targets they commit to in Paris? What penalties might a nation face if they fail to reduce their emissions?
- *Ambition* -- Current commitments made by nations will be insufficient to reduce global emissions enough to limit warming to just 2°C. A potential mechanism may be implemented to bring nations back to the negotiating table at regular intervals to increase their contributions.

Time to Move on: The Paris Summit as Opportunity to Develop New Narratives on Climate Change

Michael Brüggemann
November 28, 2015

The debate about climate change is almost thirty years old. Endless time and energy has already been spent in unproductive ways: discussing whether climate change actually exists, whether humans contribute to global warming, whether the risks that come with global warming are real and then whether we need to cut down on emissions.

These questions are settled, but many important questions remain to be open for discussion in climate science and climate politics. The upcoming summit in Paris draws our attention towards tackling the challenges associated with climate change in the present, rather than repeating discussions from the past. Part of this is to reclaim the attribute of being “skeptical” as an essential feature of good science. Yet, wise scientists will attempt to direct their skepticism to hypotheses, which are not properly grounded in empirical evidence. Continuing the old debate is only in the interest of those actors who feel they need to protect their vested interests in oil, coal and gas and the attached industries with the aim of blocking effective limits to our carbon emissions.

There is no use to trying to persuade professional lobbyists. As Upton Sinclair put it: “It is difficult to get a man to understand something, when his salary depends on his not understanding it.” Journalists have been prone to report climate change within the frame of “skeptics” vs. “warners”. Journalism research has identified two reasons why journalists do so: The first reason is a misguided application of the norm of journalistic balance. The second reason is that the story line provides for conflict and news value and serves as a simple and entertaining way to talk about climate change. It is true that the excesses of climate denial provide for excellent entertainment: A great example of an entertaining way to tell this story is the recent National Geographic production starring Bill Nye and Arnold Schwarzenegger. Yet,

while it is important to keep one's good humor even in the face of severe problems, journalism also needs to seek out new ways to talk about climate change.

Journalists are among those people who are at the forefront to raise the relevant questions about climate policy and come up with new narratives to be told about climate change. The keep-it-in-the-ground-campaign of the Guardian about raising awareness for the issue of divestment is a good example of such an attempt. The summit in Paris is another prime opportunity to develop new stories about climate change.

Paris rises after attacks while some pacific islands are going under

Elisabeth Eide

November 20, 2015

The Paris climate protests on Sunday 30 November were largely silent. After the 13 November terror attacks and the state of emergency introduced by President Hollande, demonstrations are banned.

At Place de la République, where the monument is still surrounded by messages of grief and the scent of roses, activists gathered in the morning. Several thousand pairs of shoes were placed to draw attention to the ban on demonstrations. A few hours later, some people tried to march, but were stopped by a massive contingent of police who barred all the roads exiting the place.

A few kilometers away, at Bataclan, where «Eagles of Black Metal» posters still hang promoting the “next performing artists”, representatives of indigenous and small island states gathered in the mass of candles and flowers to show their compassion. From there they joined the long human chain which snaked its way from Nation to République.



Participants from the human chain formed from République to Nation, via Bataclan. Credit: Elisabeth Eide

Not two degrees, 1.5!

One of the participants at Bataclan was the poet Kathy Jetnil Kijiner from the Marshall Islands. This island state with 71 000 citizens has sent forty representatives to the COP to fight for the 1,5 degree target, which *might* secure the survival of itself and other island states. In her blog, Kijiner writes about a CNN reporter who asked her to write a poem about the two degree target. She accepted, but changed the target to 1.5, since two degrees warming would mean the end for many of the island states in the Pacific and elsewhere. The Marshall Islands experienced a major flood in 2008, which caused extensive damages in the capital Majuro. Unfortunately, natural disaster again struck in 2013 when they were hit by a serious drought, which caused a precarious water shortage.

Among wreaths and numerous messages for the victims from November 13th at Bataclan, Kijiner expresses her hopes that more people will listen this time, when island state leaders speak. She is an official delegate at the conference. For the second time this year she has crossed continents to speak about the vulnerable situation of her home country. The first time she was invited to speak was at the UN summit in September. There, she recited a poem she had written for her 21 month old daughter. Unfortunately, Obama arrived too late, but a large number of state leaders were present.

A question that remains for people like Kijiner is “Will activists from island states find support for the 1,5 degree target?”

“Well, the alliance between islanders and indigenous people of the world is strengthened. And after the last elections in Canada, we have received support from prime minister Trudeau. President Obama has also given some positive signals, but the congress is not very supportive,” Kijiner said.

The Marshall Islands have recently encountered much more extreme weather than they had in previous years. According to Kijiner they even lost one island, Ellakan. This island used to be a place where people would go to gather fruit and other products but had “died” during the last ten years. More islands could die in a

country where large areas, including the capital, are less than four feet above sea level.

“Just before I left I met with women organizing a chicken barbecue, to raise funds for their sea wall, which had been destroyed. Such ruining of protective walls happen more frequently than before,” she said.

What does climate justice mean for you? Some G77-states, such as India, have argued that historical justice implies that the ones who have contributed the most to global warming should have to contribute more than the rest.

“We have friends in India who think differently. The historical responsibility is important, but not decisive. In our alliance now, we think that all states have to act to save the climate.”

Evacuate?

The manifestation at Bataclan is silent and respectful. Kijiner says that the French grief is also theirs to share.

“Lives were lost here, lives are lost at our islands, in a sense, all of our struggles are connected. And when we stand together, we emphasize this connection.”

“At home people do their share to save the climate. Many of our islands are solar powered. We try to promote cycling instead of driving, and we work for a cleaner sea transportation.”

The Marshall Islands have a special relation to the U.S, going back to the nuclear testing at the Bikini atoll in the 1940s and 1950s. The country is independent, but has a friendly association with the U.S.

With the current threats to their livelihoods, do many Marshall Islanders think of leaving?

Some do, but our mentality is rather that we should not need to evacuate. We still think it is possible to avoid this”, says Kathy Kininer.

The poem read by Kathy Kijiner at the UN conference in September.

[1] Opplesningen på denne lenken.

COP21: A new chance for common sense and common action?

Brigitte Nerlich

November 30, 2015

The 2015 United Nations Climate Change Conference opens in Paris today. This is the 21st ‘Conference of the Parties’ or COP since the United Nations Framework Convention on Climate Change (UNFCCC) was adopted at the Rio Earth Summit in 1992.

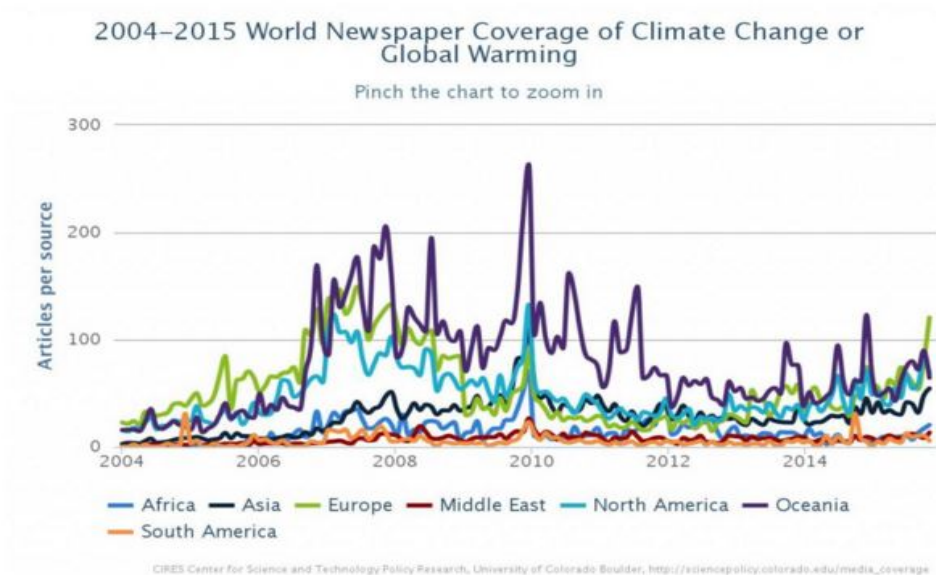
Since then each year, without fail, governments have discussed when, where and how much to cut greenhouse gas emissions and to engage in the mitigation of and, increasingly, adaptation to the impacts of climate change.

Gradually, but indeed rather slowly, discussions have moved forward. But there has also been a set-back: in COP15 the 2009 Copenhagen summit – things “turned sour”. Between 2006 and 2009 climate science had become increasingly confident in diagnosing that there is a problem called climate change (or rather a complex bundle of such problems) and this diagnosis had increasingly begun to influence political and public thinking. It had almost become a matter of common sense to think that climate change poses problems to the global and local governance of the planet we live on.

However, at the end of November 2009, six years ago, private emails between climate scientists were made public without their authors’ consent, and they were mined for quotes that could cast doubt on the credibility of climate scientists and climate science. The emerging climate change common sense was shaken and indeed fractured for a while after what became known as the ‘climategate’ affair.

Since then there “has been a significant shift in understanding of the scale of the climate challenge by scientists, politicians and the public”, and while efforts are still being made to cast doubt on the credibility and integrity of climate scientists, most recently by US Rep. Lamar Smith (R-TX), such efforts seem no longer able to undermine an emerging global sense of urgency any more, at least in the United

States. A recent survey by the Center for Climate Change Communication at Mason University in the United States has found that the majority of Americans think it is important to reach an agreement in Paris this year to limit global warming.



Credit.: Luedecke, G., McAllister, L., Nacu-Schmidt, A., Andrews, K., Boykoff, M., Daly, M., and Gifford, L. (2016). World Newspaper Coverage of Climate Change or Global Warming, 2004-2015. Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Accessed Nov 30, 2015. http://sciencepolicy.colorado.edu/media_coverage.

This means that despite world carbon emissions falling for a variety of reasons, a low-carbon world is not yet around the corner. Although it seems that politicians worldwide have begun to accept that scientists have done their job and that it's now their turn to do theirs, their thinking and planning is still governed by political rather than scientific pressures, by short-term rather than long-term visions. Why else would the UK government, for example, axe a £1bn grant for developing new carbon capture and storage (CCS) technology and why would the Department for Energy and Climate Change downgrade "its expectations for each of the main low-carbon sources of electricity". Such political decisions are just what they are: political.

However, there are other factors, which contribute to public support declining for a tough climate deal. In some countries around the world, worries about the economy and terrorism are stronger than worries about climate change. There is

nothing scientists, whether natural or social, can 'do' in this context, unless they are invited into the process of decision making on realistic terms. Once invited in, scientists should no longer be expected to (endlessly) demonstrate that climate change is a problem; rather they should be allowed to use their energy and expertise to explore ranges of context-sensitive solutions. There are signs that such collaborations are happening or at least being called for.

In the 2015 context of a world faced with multiple crises, political actions intent on undermining the credibility and integrity of climate scientists, based on allegations that their work is politically or financially motivated, might almost seem frivolous. However, there is a larger problem, namely that thinking, yet again, about climate change might also seem almost frivolous. To talk about climate change in this new world of political and economic tensions is fraught with difficulties. As Hugo Rifkind expressed so well: "the overall vibe is one of weary angels dancing on a pinhead." It would probably not take much to topple those angles.

While there are still advocates for non-action and while politicians might still decide that for whatever reasons of political exigency non-action is the best way forward in the short-term, such thinking and acting is being increasingly challenged. There is some chance then that common sense might return to these political negotiations in Paris and the weary angels might be able to continue dancing on a pinhead.

One can only hope that freed up from having to prove that climate change is a problem, climate scientists, together with social, cultural and communication scientists, can be involved with politicians and citizens in talking about and, in particular, sketching out possible solutions or solution scenarios. How wide or narrow the scope for such solutions is, depends entirely on politics and publics, not on science.

Was the “failure” of the Copenhagen climate summit key to expected “success” in Paris?

Hans von Storch
December 1st, 2015

Recently, a journalist asked me in passing – which was the best COP so far, which the worst?

Honestly, I have not been a good observer of these meetings. All I know there were many and the next is #21. There was Copenhagen, sometimes labelled Hopenhagen by enthusiasts. It was COP15 and the year was 2009. Copenhagen, the last exit, it was called, the last chance for instituting a binding policy, which would make “us” limit global anthropogenic (human-caused) climate change to a stable 2 degrees in 2100.

The 2 degree goal is an old one. It was discussed by the now mostly forgotten German climate researcher Wilfrid Bach in an interview with Spiegel in 1988. The idea was that the agreement must take the form of a legally binding treaty; that the sum of these promised reductions of emissions must lead to the 2 degree reduction in the long term, and that in the short term definite plans needed to be set up for the change of trend before 2020.

None of this came to pass in Copenhagen. What the partners could agree on was that the 2 degree goal should continue as a reference for the rest of the century. Apart from that, the international community could not agree on anything definite and left home empty handed. That was it; the famous meeting of the leaders of the western nations, including Obama, came to an end. Somewhat surprisingly, after this Obama was seen in the room negotiating with other leaders, the BRIC (Brazil, Russia, India, China) countries. They had arrived at the conclusion of Copenhagen and a meeting with the then new US President was seen as a recognition in the important part these countries could play in climate change deals.

Activists were devastated; the last exit has not been used, and six years after Copenhagen we continue on our high-speed train into the abyss. Gradually, the process of tackling climate change resumed. After COP20 in Lima we could read again the first optimistic assessment about possible future developments. The rhetoric seemed to have changed; it was no longer the drama of the last exit, but more the coalition of the willing, a concept which George W Bush had also applied to the climate issue, arguing that there needed to be cooperation among the big players (emitters). Now, in Paris, COP21, we are still on this track, and I sense an optimism based on the voluntary list of all-too-small “Intended National Determined Contributions.”

Something has changed between Copenhagen, Lima and now Paris. I suggest that the first important change happened in Copenhagen, namely the destroying of the overly naïve and “world-leader” attitude of the western countries, which seemingly had hoped that the old colonial division of labor would do it. We (the west) had sinned, indeed, and we have to rectify that. But any such a rectification has to consider our superiority in technology, importance of issues and even diplomacy. We lead, you follow. But Obama had moved into the other room. The spell of western superiority was broken, and that is why I answered the original question of the “best” COP eventually with: Copenhagen.

Now, we seem to be on a reasonable path; not a really good one; certainly not a path of perfect justice. We still have a very high chance of not meeting the goal. But we are underway in reducing emissions. It’s very likely not enough for what the econometric calculation indicates are needed to stay below the 2 degrees warming. However, we are improving. While the previous COPs were confronted with the choices “all or nothing” – and chose mostly “nothing” – we can now say – what? About 47.2%? What a wonderful progress. Let “us” achieve what is achievable, while not forgetting that maybe other issues of significance may emerge. I expect that the numbers will improve over time.

How data journalism is impacting the climate change debate

Fenja Schmidt
December 2nd, 2015

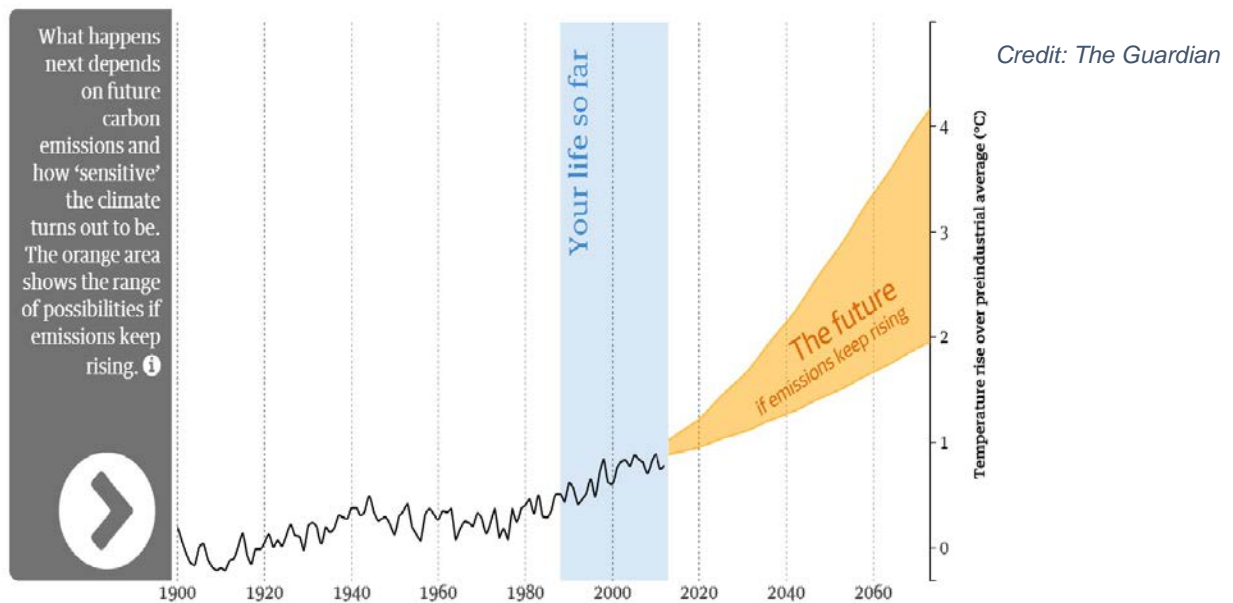
Climate conferences serve multiple purposes. Besides being important political events, they are also global media spectacles, which push the topic of climate change to the top of political, scientific and public agendas.

Scientific data is always at the heart of the way climate change is discussed. Whether it be weather records, measurement of greenhouse gasses in the atmosphere or the PH-value of the oceans.

Aside from data derived from the natural sciences, there are many other sources. One such example is the database our *Online Media Monitor*. It is creating data about media coverage on climate change around the world. Climate data is not only interesting for scientists – it can also be a tool for journalists. Data journalists find stories hidden behind the numbers to help readers understand something which otherwise might be impenetrable and complex.

My research shows that data journalists increasingly use personalized coverage to counter the abstractness of the data. Personalized visualizations or news apps allow readers “to find their own narratives amongst the data points” (Yale Climate Connections 2014). The first projects allowing personalized coverage related to climate change were personalised carbon footprint calculators, as shown in this [early example from 2009](#).

In the meantime, these calculators include more detail and are available in many languages. An example is the German “[CO2-Rechner](#)” by the *WWF* Germany. Below I’ve posted other examples that I’ve collected over the past years



The Guardian published an interactive called “Climate change: how hot will it get in my lifetime?” It shows the user a personalized view of the latest temperature projections that were published in 2013. With this visualization, readers can easily see what climate change might mean for their own, but also their children’s future.

This infographic from 2014 illustrates how high the sea levels will rise, if the meltdown of the polar ice continues: “When Sea Levels Attack”. Another *Guardian interactive*, accompanying the last climate conference in Lima (Peru), showed how the global carbon emissions have evolved since the beginning of the industrial revolution: “Carbon emissions: past, present and future.”

A more recent example of an interactive feature dealing with climate data is the “Climate Change Calculator” by the Financial Times. It shows how the global temperature will evolve in different scenarios, depending on how much the world’s nations reduce their carbon dioxide emissions. The intention behind the project is “to show the effectiveness of nations’ pledges in advance of the COP21 climate summit to prevent dangerous climate change” (Hay 2015). The calculator is easy to use and helps to visualize the pledges different nations have made.

These are just a few examples of how climate change is covered by data journalism but more projects are regularly released. As climate change is a very complicated and multi-layered topic, data journalism tries to make a contribution

towards helping people understand this important issue and its relevance to everyday folk.

Sources

Hay, Nick: "Will data journalism unravel the climate spiral of silence?" Climate-KIC Blog, 27 October 2015. <http://www.climate-kic.org/blog/will-data-journalism-unravel-the-climate-spiral-of-silence/>

Loosen, Wiebke/Reimer, Julius/Schmidt, Fenja: "When Data Become News. A Content Analysis of Data Journalism Pieces." Future of Journalism Conference, Cardiff, 11 September 2015.

http://www.researchgate.net/publication/281581852_When_Data_Become_News_-_A_content_analysis_of_data_journalism_pieces

Yale Climate Connections: "Data Journalism: Do the Numbers Add Up to Climate Action?" On Journalism, 23 April 2014.

<http://www.yaleclimateconnections.org/2014/04/data-journalism-do-the-numbers-add-up-to-climate-action/>

Do the mainstream media tell the full story? A critical account of coverage at COP21

Max Boykoff
December 3, 2015

Do you need a ticket to COP21 in order to get the full story of what goes on? A week ago in Bilbao Spain, this provocative question was posed by Dr. Unai Pascual to a discussion group at the Basque Center for Climate Change. Unai's question is an open one I've pondered in the lead up to the Paris round of negotiations and something I ask you to consider now.

Attending talks, observing negotiations, meeting with co-workers, researching and learning about new topics are all important dimensions of COP21 participation. However for those who aren't attending COP21, media outlets are usually the way to go. From Europe alone, media actors from *BBC* to *France24* to *The Guardian* and *El Mundo* – seemingly populate every part of the sprawling venue in Le Bourget. See Chris Russell's good commentary of media resources 'on the ground' at Paris COP21

Relying on your trusted sources in mainstream media can help sate your appetite for understanding big issues. Layer on good resources like IISD Reporting Services Earth Negotiations Bulletins the climate change policy & practice listserv and Climate Action Network Media Briefings and you've got a substantial entrée to main actions and attractions unfolding. Going further, following tweets from inside and around the summit, you may start to feel quite full as the first two weeks of December pass.

This is only a start: you can add toppings of Facebook posts from *Associated Press*, *New York Times*, *Democracy Now*, *Deutsche Welle*, *EuroNews*, *Reuters* until you're overstuffed.

A clear advantage as we attend to our daily demands and responsibilities in these December days – is that media actors are working hard to help us all make sense of the complexities of the climate.



The entrance to the United Nations conference on climate change (COP21). Do you need to go to get the full story?

Credit: Max Boykoff / 2 Degrees National Data Coverage

Journalists can unpack concepts such as “mitigation”, “adaptation”, “Green Climate Funds”, “loss and damage,” “REDD+” and more. They investigate so you don’t have to. However, while these media representations link us to these critical issues being negotiated in Paris, we can still recognize the mainstream media’s limits.

The media, by their nature, inevitably privilege certain story lines over others. Through decisions made at various levels of the media hierarchy, media actors – journalists, publishers, editors, bloggers etc. – shape narratives on climate change. This occurs through the application of journalistic norms and values within a larger landscape of political, economic, environmental, and cultural pressures.

With so much occurring at any one time at the Paris Summit: a large and potentially world-changing event, media consumers can generally only access ‘climate stories’ media actors select from the steady stream of events. As such, television and radio broadcasts, print stories and online posts do not simply inform, they help the public make sense about what are today’s (and tomorrow’s) climate challenges.

Which stories are selected and which are excluded has consequences. Local Parisian philosopher Jacques Derrida once talked of how one must critically examine

how portrayals not only gain traction in discourses, but also how those who are absent become effectively marginalized and silenced. There are an estimated 40,000-45,000 participants here in Paris. That is approximately the capacity of Hamburger SV's Imtech Arena. Yet, instead of this being a venue of spectators watching a few dozen athletes perform (and make the news on the pitch), this is a place filled with content producers, story-makers and tellers.

Talking this morning with colleague Phaedra Pezzullo, she noted how the pace of events here easily can outpace the speed of reporting, even in this hyper-fast new and social-media dominated age. You can read [Phaedra's blog posts](#) on COP21 here. There are many more stories at COP21 than capacities to report them. Media at COP21 seek to provide first drafts of history in these privileged spaces of Paris. In that context, we need to all be critically engaged as we learn from as well as question these media accounts; our collective future depends on such critical engagement.

Security measures and civil action: an analysis of media coverage at #COP21

Alan Ouakrat
December 4, 2015

The day after the Paris attacks, a state of emergency was declared in France.

As a result, civil liberties were restrained and exceptional police powers were dedicated to regulating the movement and residence of the public. The state of emergency was promulgated by the French Assembly for a period of three months beginning on November 26, 2015. Demonstrations planned in Paris for COP21, such as the November 29 climate march, were banned. In this constrained context, what demonstrations by civil society related to COP21 were covered by media?

Our brief case study analyzed media coverage from six online players which are *Vice*, *Buzzfeed*, *Huffington Post*, *Le Monde*, *Le Figaro* and *Reporterre*, so respectively three 'new players' of online news, two mainstream legacy media and one specialized in environmental questions. Our period of analysis ran from Wednesday 25 November until Wednesday 2 December and we gathered articles relating to climate change and COP21. 272 articles were collected in total.

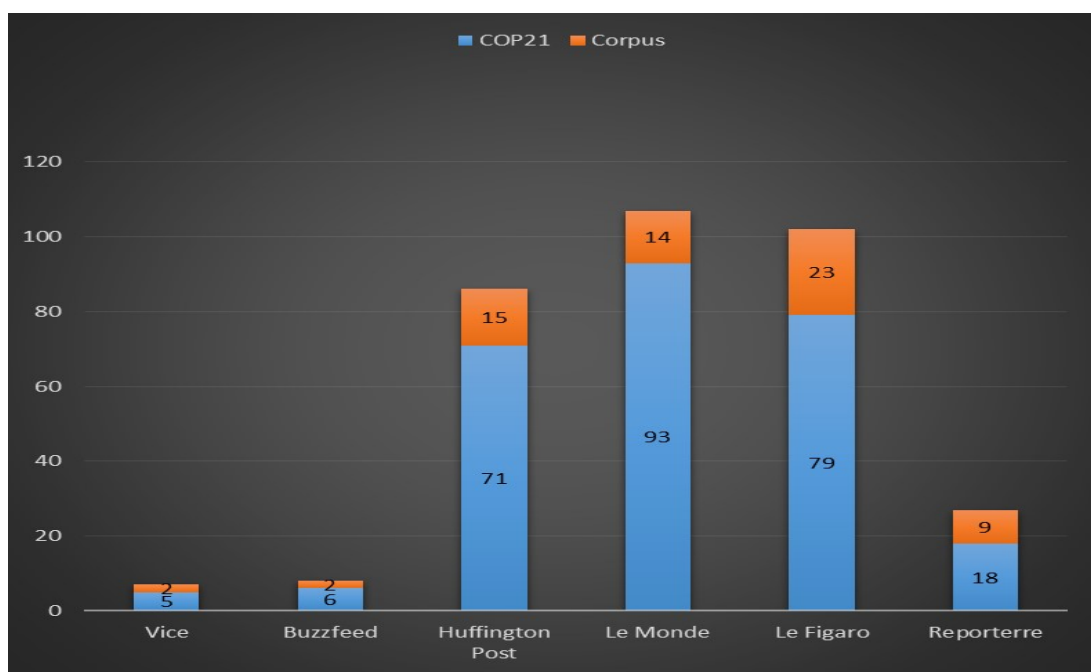


Chart 1. Articles selected compared to COP21 media coverage

Among those, a corpus of 65 pieces of news (24%) were captured because their content was either referring to security measures around the COP21 (34 articles) or civil society actions (31).

If we take a look at the distribution of the articles produced, we clearly see that *Le Monde*, *Le Figaro* and the *Huffington Post* produced most of the coverage. Altogether, they represent 80% of the media coverage of our sample. Part of this is related to their size since the two legacy mainstream media rely on large teams of journalists. Meanwhile, *Huffington Post* content is written by personalities and composed of a large number of blog/opinions pieces (a third of its content). To get a glimpse at types of journalistic production, we can label the content by the signature or absence of it in the article (see chart 2). This way, we divided our corpus in four categories: journalist, personality, press-agency and unsigned content.

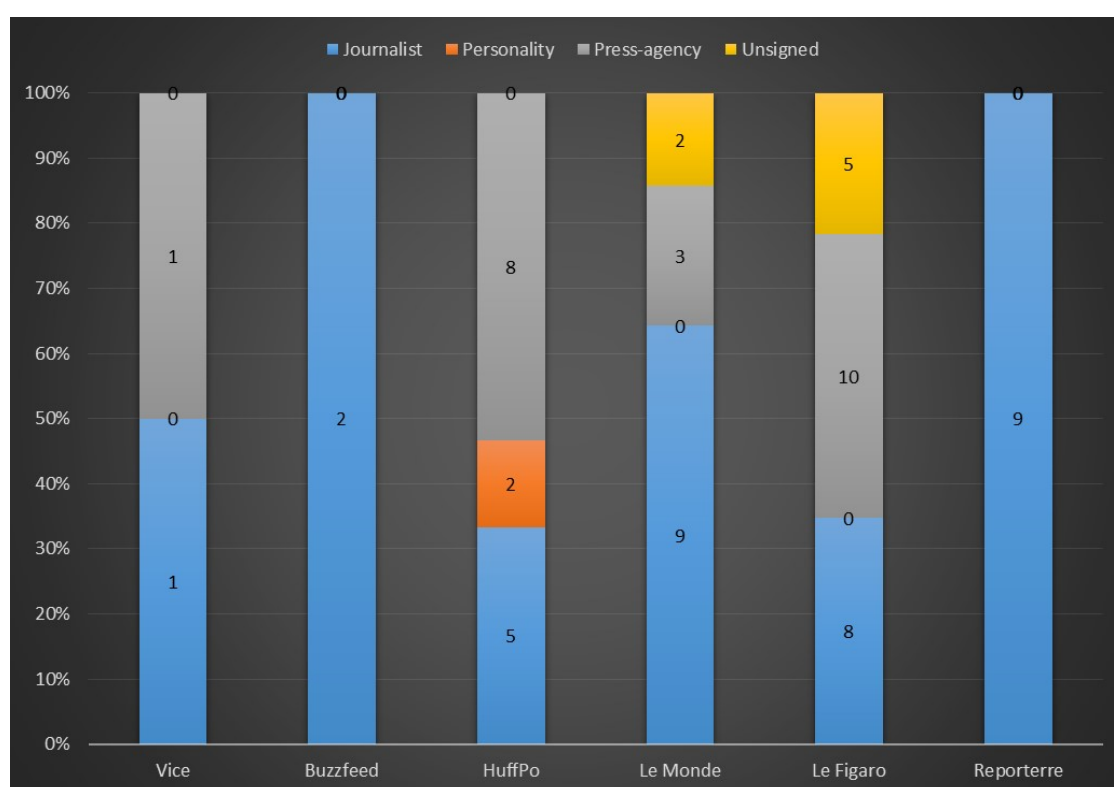


Chart 2. Type of production

Going back to the re-partition of content produced in our corpus, we distinguished two main categories: civil society actions and security measures (see chart 3). The idea is to highlight the proportion of media coverage per media. As we can see, two of the ‘new players’ of the news online industry, *Vice* and *Buzzfeed*, have a coverage strictly focus on the security measures. They do not seem really interested in civil society actions. Also, this type of content dominate the coverage of *Le Figaro*, since more than two third of their content is interested in this matter. It could be an effect related to the quantity of press-agency articles (re-hash) contained in our sample for this title. As we can observe in chart 2, 15 of the 23 articles selected are either press-agency re-hash or unsigned.

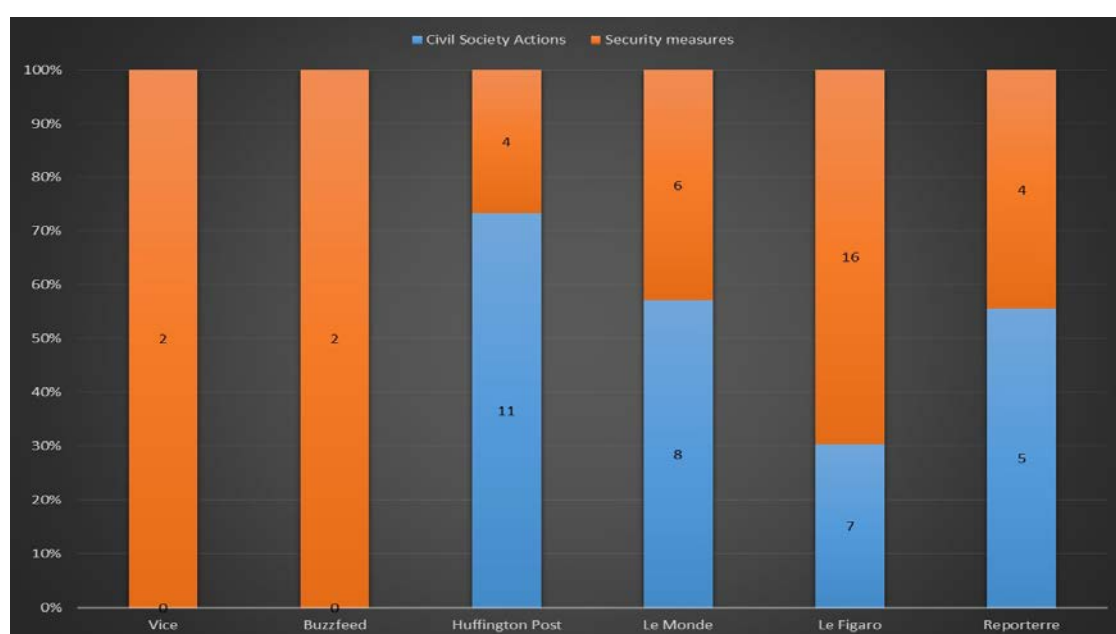


Chart 3. Proportion of media coverage between civil society actions and security measures around the COP21

Each of the two main categories “Civil society actions” and “Security measures” can be split in two to have a clearer picture of their precise topic. For security measures, we aggregate articles about the security measures around the COP (controls at the borders, restriction of traffic, policeman effective deployed, etc.) and articles about violence either anticipated regarding the November 29 march or debriefing what happened during and after the march. The category “Civil society actions” refers to articles on counter-actions organized by civil society around the COP or advocacy for the actions of civil society.

As we can see on the chart 4, the coverage is really unbalanced between the different news players. Globally, security measures and counter-actions appear to be the main sub-categories, since approximately a third of our corpus is represented by each one of them. “Violence” is just behind totalizing 15 articles and “advocacy for the actions of civil society” is the last sub-category with 11 articles.

What is interesting here is to take into consideration each media. Vice focuses exclusively on violence, even if there is only 2 of their articles in our corpus. *Buzzfeed* is a mixture between security measures and violence, with 2 articles as well. The four other players have different weighting between the sub-categories: the *Huffington Post* seems mainly interested in advocacy for the actions of civil society and counter-actions organized and less than the others by violence and security measures (only 25% of their coverage). The least interested in violence seems to be *Le Monde* (only 1 article), followed by *Reporterre* which gives a large place to counter-actions of civil society (44% of its coverage). *Le Monde* appears to devote the majority of its coverage to civil society actions as well, with not less than 6 articles dedicated to the counter-actions organized by civil society. *Le Figaro* has a coverage more oriented towards security measures, since it represents approximately 40% of its coverage in our corpus. We can draw the hypothesis that it might be linked with its political orientation and readers, who does not really seem particularly fond of environmental activists.

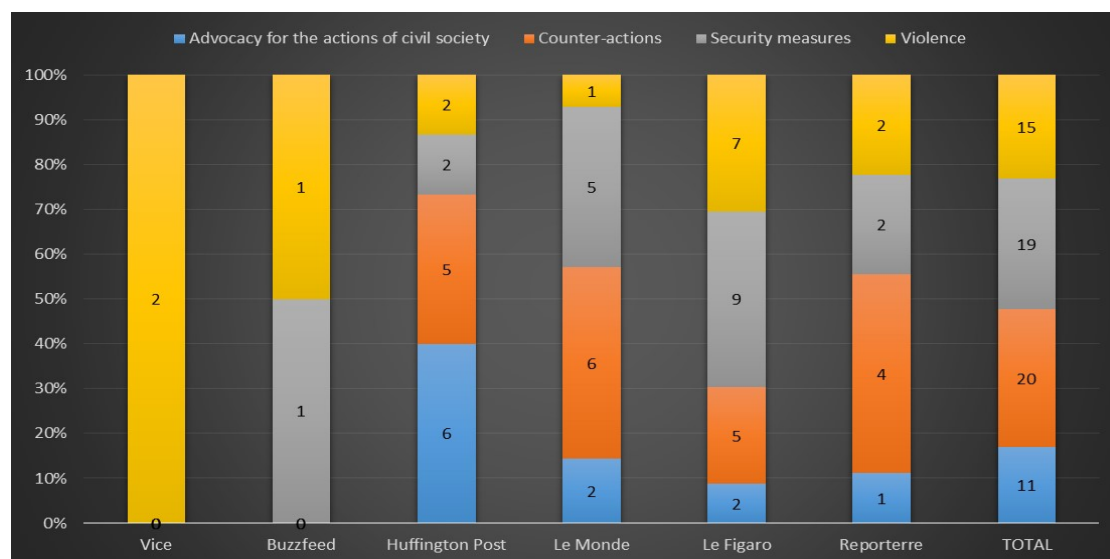


Chart 4. Proportion of coverage per media and per category

If we look now at the temporal dynamic of the media coverage, we can see how it evolved from a topic to another. The main thematic was security measures before the forbidden march of November 29th then it focuses on violence. Counter-actions seem less appealing to the media although they make good photos and videos to illustrate what is happening around the COP21. Another aspect not taken into account here is the format which could have maybe demonstrated this point. In this short period of a week, we can observe different media moments in a very condensed way (see chart 5).

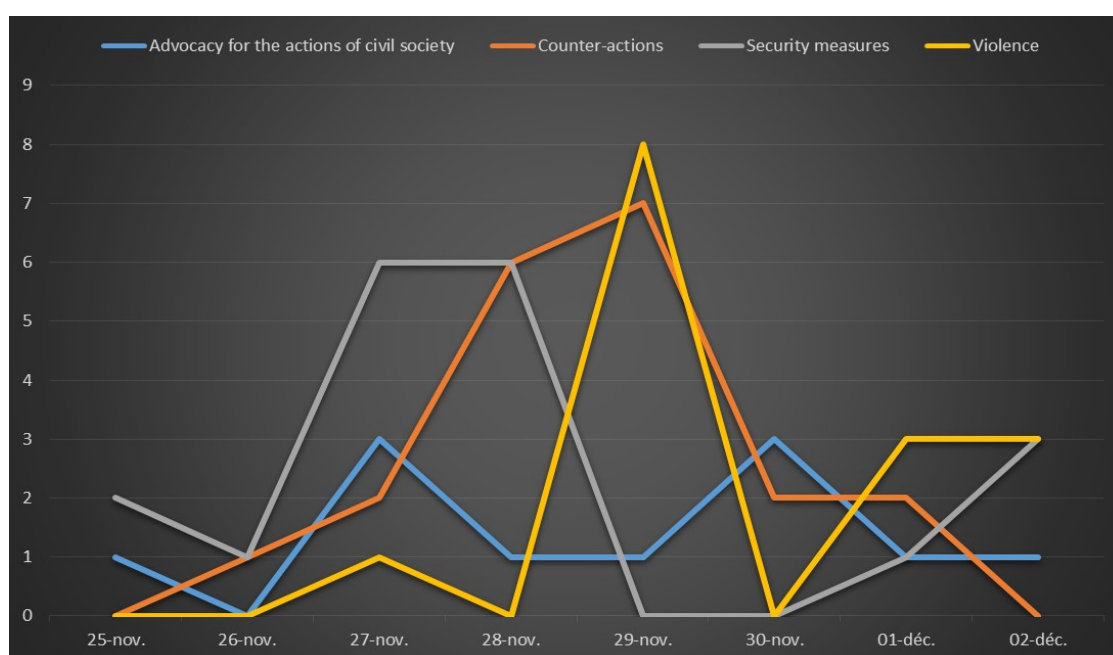


Chart 5. Temporal dynamic of media coverage

Of course, the approach developed here is very limited but it leads to many questions which can be dealt with in-depth. If we open what is a black-box for this (quick) quantitative analysis and do a more qualitative one, political stances might appear more clearly. For instance, *Reporterre* covers the violence and security measures but gives a voice to activists and relates police brutality with a critical lens, whereas it is less apparent – to say the least – in the other media. This example shows us what we miss with this kind of quantitative-only analysis. To go further, a carefully reading of each news piece is needed in order to find context elements about the history of the title and its position in the news field.

At first glance, *Le Monde* and *Le Figaro* seem to favor a stance of passing on government instructions on the ban of the march on November 29 and the necessity

of respecting the state of emergency rather than detailing the motivations of civil society against the COP21. *Vice* and *Buzzfeed*, which are considered as 'new players' and digital natives' actors do not differ that much from the other news players. However, naturally their tone of coverage is different. The component of original media material in the coverage, especially for *Buzzfeed*, is also very light. They are focusing on violence, which can be linked to their business model, which only relies on advertising. This could be a first explanation: they are chasing clicks and trying to maximize their page views with more visual content. In that regard *Huffington Post* might be the most surprising in its coverage: it offers a lot of opinions pieces and also a more nuanced coverage than elsewhere.

This quick analysis raises more questions than it brings answers, nevertheless, if we refuse shortcuts in the interpretation, it might be useful to draw a first (raw) picture of media coverage about civil society actions and security measures.

Ulysses in Paris – Climate narratives and avoiding the siren’s song

Reiner Grundmann
December 5, 2015

In the ancient mythical saga *Ulysses*, sirens were beautiful creatures with enchanting voices who would lure sailors to shipwreck on the rocky coast of their island with their sweet intoxicating music.

Ulysses, curious to hear the siren’s song, ordered his men to bind him to the mast. He implored the crew, who had their ears plugged with wax, to leave him tied tightly to the mast, no matter how much he would beg. Upon hearing the sirens’ beautiful melody, Ulysses urged the sailors to untie him but they instead bound him tighter. The ship then navigated the narrow channel to safety: Ulysses actions had saved the lives of himself and the crew.



Odysseus and the Sirens

by Herbert James Draper, c.
1909

This ancient tale gives us a very appropriate notion of “self-binding” agreements. If we compare this myth to the Paris Summit: Who is Ulysses? What is the sirens’ song, and who should ignore their singing? Plenty of interpretations seem possible but here is my take on it. Ulysses and the crew can be seen as nations and leaders. The ropes that bind Ulysses and the wax in the sailors’ ears can be seen as a new course of action (or agreement) on climate change. The ship is the future of planet

Earth and the song of the sirens is the status quo (existing climate deals and ineffective action). The status quo is something that initially sounds sweet but were we to follow it, our ship would end up dashed against the rocks and sinking beneath the sea (uncontrollable climate change).

So in what ways should, or could, a climate treaty be self-binding? How will nations and the planet avoid the siren's song and the dangerous rocks on the horizon?

'The scientists have spoken, now it is time for the politicians to act.'

The above statement was heard often after the publication of the last IPCC report and during the preparation for the Paris summit, but what does it mean? Does it imply that the IPCC set targets for the international negotiations, thus assuming the role of Ulysses? Surely not. The IPCC is supposed to be policy relevant, yet policy neutral.

There are currently a legitimate and wide variety of policy proposals available to the planet. These are packaged into narratives that we can easily remember. There is, for example, the admonition that Earth's climate future is currently "five minutes to midnight" and the summit is our last opportunity to save the planet. Even Pope Francis recently added his voice to this narrative.

Then there is the hope that if only the political will could be mustered, we could achieve really ambitious targets, such as staying below the 2° C warming limit, or even limiting warming to 1.5C. Linked to that is the belief that we do have the technologies to decarbonize our societies, and that all that is needed is for them to be scaled up.

These narratives have proven ineffective. They are either apocalyptic and therefore paralyzing, or based on wishful thinking and therefore delusional. Curiously, both tend to combine, inspiring desperate activism and deep frustration over current government policies. The message is that we are already in shallow water and should expect havoc soon.

Other narratives have surfaced and some look quite promising. There is, first of all, the acknowledgement that a top down, globally binding treaty based on emission targets and timetables will not work. This is mainly due to a fact of

international politics that can be expressed as: ‘Negotiators can only sign on abroad to what they can sell at home’. The USA may be the most visible nation which exemplifies this fact, but others are no exception.

Hence the bottom up approach to collect pledges from single countries, via intended nationally defined contributions (INDCs). However, there is the problem of putting these pledges into practice: a fact of political life summed up by this expression: ‘The test of each policy lies in its implementation’. The record, even of leading countries on climate policy, does not look promising. Little real progress has been made to date, and based on existing technologies, it is impossible that this will change in the near future.

The pledges made before Paris may not be enough to reach the goals of avoiding 2 degrees of warming. So the temptation arises to make the pledges more ambitious in order to pacify climate activists or the 44 countries demanding a new lower limit of 1.5 degrees. While one can imagine pledges that would on paper meet the demands of such a goal, this approach is in severe danger of losing credibility. It would be regarded as ‘cheap talk’– promises without corresponding action. Ulysses (nations and leaders) would not be bound by such ties.

There is now an emerging narrative which addresses the need for dramatic efforts in terms of RD&D in order to obtain cheap, zero carbon energy. The Global Apollo programme is an example, even if the video clip on its website leaves the impression that it is mainly about extending solar and wind energy.

Existing innovations in energy technology are conservative. They will not be enough to achieve what is needed. Radical innovations are called for, but it is unclear where they will come from. Innovation is an unpredictable process. What is clear though, is that it needs resources and long-term commitment through public funding. Private companies have proven woefully inadequate in this respect. Ulysses does not have a ship that will get him out of trouble.

As co-author of the Hartwell Paper which was published in 2010, I see both the pragmatic bottom up, and the research development and demonstration (RD&D) narratives in a positive light. Countries making pledges based on credible actions at

home would be a good start. And recognizing the need to mount a global RD&D effort would be a sign of realism for the conference of the parties.

Too much has been invested in old technologies and old narratives, and they have acquired a momentum of their own. It will be difficult to push them back. The song of the sirens is everywhere, also on board the ship.

Perhaps the Paris summit will produce a document that contains pledges, commitments and is more pragmatic. It will be a symbolic statement that could become self-binding on nations, provided it contains practical ways forward, and does not restrict itself to 'cheap talk'. As no one assumes that COP 21 will solve the problem of climate change once and for all, it is moot to speculate if it could be seen a success. Officials will see the mere continuation of the process as success, no matter what it will deliver in reality. I will see COP21 as success if it spells out the challenges in a realistic way and manages to create a self-binding dynamic that leads to real solutions.

Degrees and vulnerability – A personal account of climate activists at COP21

Elisabeth Eide
December 5, 2015

Monday morning the climate summit started with scores of state leaders arriving in their black cars, delegates and press mostly in hybrid shuttle buses.

But *Espace Générations Climat* – the forum for all the non-accredited NGOs and activists, remained closed. They were not allowed to open until Tuesday, evidently for security reasons. The amount one has to pay to be there is rather steep. A woman representing a small NGO said they had to pay 1700 Euro for just 9m2.

The only demonstrators the delegates would see as they entered the accredited grounds of COP21 on Monday morning were seven angels with posters promoting climate justice and scorning fossil energy. The angels are Australian, and have travelled widely with their message already. “Who would arrest angels?” – an Australian professor from Melbourne commented. After noticing how they navigated through police blocks at Place de la République on Sunday, when the going got tough, we were convinced. As the days have passed, small groups of demonstrators

have made their mark inside the official Cop (the *blue zone*) also, applauded by passers-by.



*A few people were allowed to demonstrate inside the COP.
Credit: Elisabeth Eide*

Justice and island states

Climate justice? Yes, but where to draw the line? Before this conference, it was taken for granted that the conference was going to be about the two degree target, the aim that everyone spoke about, where the world, in a best case scenario, was heading. So far the pledges would keep global warming just below three degrees. Then again, pledges and practices are not identical entities. As the conference develops it has become increasingly clear that the Least Developed Countries (LDC's) and G77 will not agree to a final document unless the rich nations increase their commitment to financing adaptation substantially.

A growing coalition of indigenous people, island state representatives and large parts of civil society are now insisting on one and a half degree increase, maximum. This call seems to have been heard by politicians at the opening ceremony. Both Francois Hollande and Angela Merkel emphasized the island state vulnerability. Utopian as it may seem, the lower one and a half degree target was mentioned by some western leaders. Hollande even said he wanted to lend his voice to the island states. President Obama met the island leaders Tuesday. However, as a seasoned COP-participant uttered: "The politicians sound generous, the negotiators will be less so."



Climate vulnerable forum: marking the 1,5 degree target. Credit: Elisabeth Eide

Case-ification of the poor ...

Another rhetorical feature is the way in which some leaders promote special 'cases' of the vulnerable. French minister of Foreign Affairs Laurent Fabius, who chairs COP21, spoke of an elderly woman he had met in Bangladesh. Due to climate change, she had shifted home nine times and had asked him if the COP would do anything to change her circumstance. We do not think he had an answer ready at hand. President Obama emphasized his own experiences from drastic changes in Alaska, and also mentioned a young Indonesian lady in Malaysia who had challenged him to take action. The president of Honduras mentioned Maria, who, like 70 percent of his population, cooked over open fire, but was helped to cook more environment-friendly. But do these narratives bring the global leaders closer to the realities on the ground?

The state leaders, due to time constraints, held their introductory speeches in parallel sessions. President Obama and the Norwegian Prime minister Erna Solberg spoke simultaneously. So did Vladimir Putin and Brazilian Dilma Rouseff. While these speeches entered our ears, press releases kept pouring into email boxes, while some printed versions still land on your desk. In the press room, reporters risked fragmented experiences, a permanent peril to anyone trying to report from this global event. Every journalist has to make hard choices.

Growth?

Can we really believe that global leaders have grasped the situation now? Competing diagnoses still exist in this forum. The president of Paraguay, Horacio Cartes has warned against unlimited growth and repeated the claim for an international court mechanism dealing with crimes against the environment. Evo Morales from Bolivia reiterated that capitalism has steered Mother Earth towards the abyss. On the other hand, many western leaders, not least Obama (Monday) and Michael Bloomberg (Friday), are increasingly enthusiastic about 'green growth' and the ability businesses have to save the system as well as the planet.

A row of initiatives were launched to convince the conference that we are heading in the right direction, pledging funding for positive development as well as a

quota system and new market mechanisms. But few of these initiators bothered to visit the Climate Vulnerability Forum, assembled Monday. More than thirty leaders from the most vulnerable nations were there to defend the one and a half degree target. The strongest appeal came from young José Sixto Gonzales from the Philippines who told that his archipelago experiences around 22 typhoons a year. While he admitted he would rather be at home, he said he represented his new-born daughter – and all other children. He said the one and a half degree target is at the core of these negotiations. Further, he said that his countrymen, who had survived typhoon Haiyan, are in a sense experts on climate change and deserve being listened to.

José is active on social media and had gathered mountains of responses. “Please listen to all these voices. Tell us that it is about now!” The forum applauded. The UN climate leader Christina Figueres offered her advice to the forum and asked them to let their voices be even louder, and to exploit the positive rhetoric of western leaders to the full.

With one week nearly done, next week we’ll see if rhetoric translates into action.

Why there needs to be more public debate on climate change

Felix Schreyer
December 6, 2015

Everybody's eyes are on Paris at the moment. For one week the climate summit has already filled many headlines, columns and articles in the media world.

It is a typical pattern. In fact, media researchers know that the conferences are rare times for climate change to get public attention. Paris is probably a new dimension – the biggest and most ambitious event ever, covered all around the world. Thus, a good time to think about what climate journalists should keep an eye on.

There are many story lines on climate change you can pick from these days. You could point to the conflict between the developed and the developing world, analyse the positions of the top-emitting countries, reports from the submerging Marshall-Islands, ponder on the sense or nonsense of protests or write one of the many overview articles. Nevertheless, when it comes to opinion the picture is less diverse. There is a lot of the familiar “We-need-to-act-now” rhetoric. In European discourses, there are virtually no contentious debates on where we should be heading with the climate. Why is that?

Unlike homosexual marriage, the refugee crisis or gun ownership the climate change seems hardly suitable for controversial debate. Rather, it would need at least two distinct camps, arguing from different normative perspectives. The climate denial debate does not count. It is about whether scientists get their facts right. By now, this is a mere placeholder for saying you just do not care at all about climate change. However, the majority of media voices are merely restating the claim that efforts to stop climate change must become more ambitious. There are no serious objections to that. On a moral basis the issue seems to be clear. It is only a problem of policy implementation. Policy-makers appear either ignorant or incapable of overcoming diplomatic deadlocks. There is nothing morally controversial about this.

This is partly understandable, considering that the current climate policy seems to lag behind public expectations a lot. In this situation media voices either focus on mobilization or policy analysis. However, there is a problem with this. It is something that has accompanied the climate debate ever since it started in the 1980s: The public becomes dulled by the permanent gap between claims and actions. It loses interest in the topic and is more likely to fall back into political disillusionment. Thereby, they can even become more inert on climate action because they are not challenged to check arguments on either side anymore. The problem seems to be with the policy-makers, not with the public.

Journalists could stimulate the debate by framing questions on climate action as questions of justice. Questions such as: What would you want us to do, if you did not know when and where you were born in the centuries to come? Would you be willing to sacrifice your living standard to, for example, prevent Bangladesh from shrinking by almost a quarter from sea-level rise? Certainly, you would not mind having ten euros more on the electricity bill. However, you would probably not accept stopping plane travel for the rest of your life. For many people, it must be something in between. These questions are hypothetical. They do not take into account what is politically realistic at the moment. But, they may provoke a debate that reveals step by step how far we are actually willing to go.

Now, what would journalists need to do to initiate a bigger debate of this kind? Here are some ideas: First, the public must know more about the differences between a 1.5C, 2C or 3C-world. The Guardian recently made a start. Despite the scientific uncertainties, more graspable images need to be created to see what is at stake.

Second, there needs to be a better picture on the costs of an ambitious mitigation policy. For example, the IPCC economists estimated that the 2C-target would cost the global economy 4 to 6 percent compared to no climate mitigation at all. This is an amount equivalent to the expected world growth within a couple of years. However, there is always the problem of translating such figures. People like to know what this mean for their lifestyle.

Third, the public needs to have stories in mind of what could happen. Why not mobilize writers for drawing pictures of people living in the 22nd century? Neither as a utopia, nor dystopia, but as a more or less likely scenario. What about composing fictional encounters between different generations? What would they say to each other? There could be many ways for authors to provide powerful visions of a future world.

Although rather sketchy, I think that this could help to bring some motion into the climate debate. Certainly, it is quite a challenge for media producers. More controversial debates could not only give people a better picture of the problem. It would also be more catchy. This could finally give climate change the public attention it deserves – even beyond COPs.

Climate coverage across cultures: 9 types of media narratives at COP21

Sara Nofri

December 7, 2015

Before dealing with environmental news reporting academically, I was involved in the environmental movement personally, since back in the 90s.

I was, for instance, at the World Social Forum, which took place during the now sadly famous G8 summit in Genoa in July 2001. I was volunteering as a translator and spent several days actively participating. While there, I had the chance to attend and listen to workshops hosting prominent figures of the so called anti-globalisation movement. Within the movement, at that time, concepts, issues and stakeholders of the sustainability question were defined for an increasingly broad public – an internet-connected public. The discussion was especially relevant for a development-critical, possibly de-growth-oriented perspective. The international and Italian media coverage of that summit in particular, and the discrepancy with my own experience of the events that took place, was one of my journalistic biggest lessons so far.

During that Social Forum I thought: “Environmental awareness, sustainability, climate change... whatever the talk, the kinds and patterns of stories told are still the same old ones: take the canonical narrative schema; substitute a couple of details; use the multi-syllabled neologisms of the moment; choose high fog-factor, when in doubt; and your climate news story is ready!

However, the question of humans and how they deal with their planet is no ordinary ‘story’. I wondered why this was so, and whether different ways of tackling the question and discussing it or reporting about it exist – beyond tackling it with bare facts, which is what really matters. Some time later, I investigated environmental associations and movements in Sweden and, carried out an in-depth multilingual comparison of environmental news reporting in different cultures. I found out that

reporting was highly culturally mediated. Being as I am, immersed in my own culture, I assumed there had to be ways of looking at environmental and climate issues that I was not yet aware of.

I did not know enough of cultures or languages spoken in regions of the world very different from my own. I also didn't have the possibility to live as nomadically and multilingually as I did in my youth. So I moved on to examine environmental documentaries and started to compare those. What interested me – was the ways the story was told: I wanted to find some ways that were new, at least to me.

So far for COP21, I've read random news on the web over the last week from at least a dozen Western countries (mostly Sweden, Iceland, UK and US, France, Canada, Germany and especially Italy). Remembering what I learnt about Greimas, Propp and Russian tales back at university, I have observed that media coverage tends to adopt a limited number of main narrative approaches to climate change. I qualitatively grasped this idea, but did not quantify nor investigate it thoroughly. Many climate stories follow the classic story pattern of a situation that encounters opposition; action follows; sanctions may occur; a new situation is obtained.

The stories don't always follow this pattern however. Below I name 9 (for the moment) types of storytelling in the western media I observed. I have opted for humorous categories naming and filmic associations. Hence: allow me to share with you my proto-typology on climate stories:

Type 1: the 'famous', or The Apocalyptic.

There are several scientific studies investigating this particular way of telling the story. Its biblical influences have been pointed out already. Stress is put upon the disasters occurring, the details of those, and how more or less subliminally the factor "guilt" plays a role. For humans being "guilty" of what is happening, global warming surely is anthropogenic (caused by humans). Risk communication is often influenced by apocalyptic storytelling. Newsworthiness itself can depend on the extent to which events can be presented as exceptionally destructive. The approach is usable in many other kinds of stories and in other kinds of media texts. Sci-fi film directors love it.

Type 2: the ‘seller’, or The Last Chance:

This narrative approach draws from traditional selling tactics by insisting in the now-or-never side of e.g. a reaction to global warming, a specific negotiation, a certain summit; it is wonderfully applicable to other subjects and relies on the extent to which an addressee can be manipulated into their being aware of an urgency. This way of telling a story is particularly privileged by romantic comedies. As a happy ending (after the movie/summit is over) is not guaranteed neither for couples nor for climate agreements, the Last Chance approach is usually used in the coverage during the first part of, in this case, COP21. Its counterpart tends to be the bitter Could-Have-Been narrative approach, which typically ensues.

Type 3: the ‘wholistic’, or Humans play God:

This climate change storytelling style sounds at times arrogant, however it tries to focus on the forest and not just on the individual trees. News stories showing the connections between desertification and wars, resources distribution and lack of democracy or even terrorism, interconnections between companies’ interest and environmental problems belong to this type. The perspective is often that of the anti-globalisation movement approach “from-below”, and is often used in documentary movies that target internet audiences and aim at going viral. The tone may be sober, striving for – and in the worst cases being absolutely sure to obtain – superhuman objectivity.

Type 4: the ‘gamer’, or Sports News

Especially adopted by climate change stories in traditional Western style, it takes for granted the deployment of teams and shows power relationships and interest groupings among the stakeholders involved, often according a dichotomy of good-and-bad(-and ugly, in exceptional cases). This dichotomy can be explicitly mentioned, covert, or just implied (North vs. South of the world; industrialised vs. developing countries; companies vs. politicians; demonstrators vs. police; journalists vs. lobbies; science vs. all; etc.). If a clear-cutting delineation of good vs. bad is not possible, sometimes frustration occurs due to sudden lack of orientation: “Now, who is the bad guy?” The case of India and the reporting on its positions over the last

days is a clear example. On the one hand they appear as 'evil' ("So many emissions! They do not want to cut them! They claim that now it is their turn to pollute!") and on the other hand 'good' ("...exploited for so many years and now hosting over a billion inhabitants with a ridiculously low amount of CO2 emission pro capita compared to us, of course they have the right to get their share of the cake!"). No need to say that Western movies à la Sergio Leone best represent this storytelling approach.

Type 5: the 'hopeless capitalist', or the Emperor's new clothes

Lobbies and companies mostly feed on, and subvention, this particular kind of storytelling: technologically optimistic in their core, climate stories presenting new inventions, production ideas or sustainability best practices rely on the fact that a strong emphasis on environmental friendliness will overshadow the consumption, pollution, product life-cycle and resource distribution aspects that often are not considered in enough detail. A bright future awaits us if we buy electric cars; if we buy organic food; if we decarbonise our societies ('decarbonise' meaning both 1. Decouple emissions from our energy consumption, e.g. use nuclear power or renewables AND 2. Change the relationship between emissions and a country's GDP in time); if X, then Y. Y= everything's gonna be alright. No media text expresses this approach better than TV advertisements. Ah, the everlasting charm of novelty.

Type 6: the 'exotic', or the Sigmund Freud

Have you ever noticed the schizophrenia behind some apparently awareness-raising stories? It reminds me of the principle according to which: the widest the green areas sacrificed to urban projects of no relevance to the local public sphere, but of great relevance to the local corporate avidity, the more non-grassroots environmental associations are likely to stress questions affecting a place/habitat/ecosystem geographically distant from the aforementioned project.

Questions whose decision-making process structures they are not likely to have direct influence on! Talk about the Galapagos turtles having their first babies again, ignore the fourth new gas station built on your way to work. Interview the inhabitants of Kiribati to get their opinion on climate change, but please do not dare ask a

Nigerian immigrant who jumped off a boat and made it to Europe because he could no longer drink the polluted water our cars deprive him of – the latter is somehow less conscience-relieving.

Type 7: the ‘Franciscan’, or Mr. Terzani

Religion can choose another storytelling path. A few months ago during his second encyclical, Pope Francis highlighted a lesser known narrative approach to climate change. This approach was highlighted in Italy by late *Der Spiegel* Asia correspondent Tiziano Terzani during the last years of his life in the late 90s and early 2000s. Such an approach can be described as ascetic, more-is-less, essentialist and de-growth-oriented perspective. This perspective is much underrepresented in all kinds of journalistic storytelling about climate change, because its main assumption is that too much consumption is wrong and substantial de-growth is necessary. However nobody profits from this perspective – at least in the traditional, short-term-oriented meaning of “profit”. The media and news production industry is based on profit and soaked in the pursuit of growth like any other economy sector of most industries on the planet. The media as a whole cannot just promote non-consumption: it would result in an erosion of its own foundations. In short: you can’t promote fasting if you own a pastry shop.

Type 8: the ‘creationist’, or the Balanced

As I am not writing academically here, I refuse to make an effort and mention news stories types still insisting on giving the floor to the global warming negationists. To these eight types, thanks to the climate changed documentaries I watched and analysed, I was able to add another type:

Type 9: the ‘poet’, or More Than Words

Experimental cinema, as well as some more visionary kind of journalism, try to explain the problems, the debate and the causes-and-consequences correlations by nonlinear means. For instance, by asking children’s opinion without piloting their answers and interactions. Or by not privileging climactic approaches and asking open questions instead. Or even by showing sides to the stories that really provide a new perspective of thinking about it. An article I read on *Il Fatto Quotidiano* in Italy,

for instance, pointed out very interestingly and innovatively the different ways we react to predictions and figures concerning climate and forecasts regarding the developments of the financial markets. The former are much more exact than the second. However, the latter one concern us more, are reported much, much more on, and affects our actions much more. The author suggests questions, rather than providing answers, still the focus is on an innovative point of view.

As for my initial question: are there climate change narratives I am not aware of, yet? In my recent impressions and past scientific investigations, I came to think that the more distance between a culture's way of life and nature there is, the more anthropocentric a storytelling perspective is adopted. This may affect news, storytelling, media texts in general.

Western cultures have features that are peculiar to them and that they have tended to export to the rest of the world: the need for an evil/good dichotomy of monotheistic origin, which is much less present in Asian cultures, for instance, is an example. Anglo-Saxon cultures especially tend to privilege verbal messages, according to the purest Lutheran tradition of sola scriptura – I may jokingly add – and rely on the power of subtitles, titles, written messages in general.

Mediterranean cultures, instead, are more visual and prosody oriented and seem to adopt a more dramatic (in the theatrical sense of the word) perspective. For instance, a documentary film from Iran called Lady Urmia (2012) let the Urmia lake itself, located in the North of Iran and currently disappearing, 'speak' about the environmental problems affecting it – through a feminine voice. Humans were just background cast members. The spontaneity of this approach from a culture probably much less anthropocentric than mine really impressed me.

Last, but not least: science itself is immersed in its culture-specific narratives of climate change (incidentally, 'climate change' and 'greenhouse gases' originated from a deliberate, US-Republican 'nicer' wordings than the scary, more accurate 'global warming'). The types mentioned above cover some of the narrative options available. Researchers have absorbed during their lives, investigations and journeys, specific ways of presenting stories and stakeholders, and have reflected (hopefully)

on their more or less conscious ways of ascribing them values and relationships. Hundreds of thousands of members of the academic community, as a consequence, travel around the world from conference to symposium, back and forth, weekly or even daily, to talk about old and new inconvenient truths on climate change.

I think it is time for the academic community to take an inconvenient stand: there is no point in choosing to study climate change and at the same time choosing not to reflect it in any personal life choice, apart from the occasional organic food caterer for the next meeting.

So which typology to adopt?

I wish my typology was less humorous and more scientifically accurate. Observing the media reporting on COP21 until the end will help, and cooperation among researchers from different backgrounds and cultures may boost its – if ever there will be any – validity. For the moment, I already consciously adopted type 7 within the narrative style of my own article here. As I implied, we members of the scientific community should act locally and eco-friendly and perform global online-networking, instead of flying about the place, busy in, or only telling ourselves that we are, saving the planet.

Climate justice activism under the ‘state of emergency’

Joost de Moor
December 8, 2015

During the two years before COP21, a large group of French and international NGOs, unions, social movement organizations, and grassroots groups united in the Coalition Climat 21 (and beyond) to develop and coordinate a range of actions to demand climate action and to act for climate justice. The result of this process was a call for action covering the two weeks of the COP.

These plans changed dramatically, however, after the attacks of November 13. While the climate change movement has long faced an uphill battle at COPs, since the terror attacks of November 13, its path has become extra steep.

Immediately after the attacks, it became clear that the mobilization would be strongly affected by this new situation – in particular by the ‘state of emergency’ that was installed in reaction to the terror threat. On the Wednesday after the attacks it was declared that all planned mass mobilizations during the first and last weekend of the COP were forbidden. The movement had about ten days to come up with new action plans.

How has the movement reacted to this situation?

On the Thursday after the bans were announced, organizers came together in Paris to start developing new ideas that would still allow them to voice their concerns about climate change. As certain groups in the coalition insisted on respecting the ban on demonstrations, the coalition decided to cancel the global climate march that was planned in Paris on November 29. The idea of the human chain was introduced to replace it: a chain of individuals standing next to each other on the sidewalk provided a means to show the movement’s message along the march’s original trajectory, while being likely to be tolerated by the police. But also the plans for civil

disobedience actions had to be adjusted. Even though they were essentially illegal in the first place, organizers had to take into account a context with increased police repression, and the accommodating increased risks.



Protest at Place de la République. Credit: Elisabeth Eide

Yet the state of emergency not only affected the actions of the movement – it also changed its message in at least two ways. Firstly, soon after the attacks, many organizers realized that in order to pay tribute to the severity of the attacks, they needed to address the question of terror. They decided to do so by highlighting the interrelatedness of the climate struggle and questions of peace: climate change is already disrupting areas leading to conflict, and a future of climate chaos will only increase this situation. As such, the new situation, and the broadening of the movement's topic could even bring unusual suspects into the movement. Secondly, not so much the attacks themselves, but in particular the state of emergency has brought in another new topic to the movement: that of civil liberties and the right to freedom of expression. Climate activists and civil liberty campaigners have found

each other in a struggle to claim the right to express concerns, this time specifically about climate change.

Finally, the state of emergency affected organizers' and activists' perceived chances of success. While the situation may be a source of despair to some activists, others have pronounced that the repression they are facing is an indication that they are now considered a force to be reckoned with, and that they might even be winning. Director of Greenpeace International, Kumi Naidoo, used the words of Gandhi when he said "First they ignore you, then they laugh at you, then they fight you, and then you win. They are fighting us, so we must be winning."

How does this change the field of action?

While there is still an important degree of optimism, in the streets, the climate movement is facing severe police repression whenever they try to cross any of the boundaries set by the state of emergency. In fact, the level of repression became already clear before the COP, and before any action even started. 24 activists, including a member of the movement's legal team, were put under house arrest. Moreover, a number of squats where activists were staying to prepare actions were raided by dozens of policemen.

In the streets, the activists face high levels of protest policing. On November 29, thousands of protesters defied the government's ban on protesting by gathering on the Place de la République at the time that the original march was planned. Their protest was met with enormous police presence. All eight exit streets off the square were blocked by riot police in order to prevent the activists from leaving the square and march, as some of them had planned to do. When the situation escalated, the activists could not leave the square and a large group of them was 'kettled' in one corner, after which about 300 of them were taken into custody.

Actions of a smaller scale have met equally strict policing. On Friday December 4, a group of activists planned to disrupt the opening of the 'solutions

COP21', by giving 'toxic tours' to highlight 'corporate greenwashing' to the audience and the press. On the outside of the event, hundreds of riot cops were present to control the streets and access to the venue. Inside, dozens of plain clothes police were ready to intervene once the 'toxic tours' started. Both activists and journalists were dragged out of the building because they spoke up for what they considered to be wrong. The small protest that emerged as a result on the outside was soon dispersed by a police force that may have actually outnumbered the protesters.

The police is not everywhere

During the past weekend, Coalition Climat 21 held the Citizens' Climate Summit – one of the few actions that have not been banned by the government. It combined a peasants market, a 'village of alternatives', a climate forum with lectures, discussions and workshops, and even a parade – with more than two people, and a political message, thereby violating the ban on protesting (!). During this event, the police were hardly visible. For the first time in my life, I experienced how relaxing it can be when there is not a large contingent of police at a protest who have their tear gas and pepper spray ready at all times.

During the second week of the COP, more actions are planned, some of which legal, other disobedient. Let me conclude by saying that I honestly hope that during these actions, climate activists will be allowed to voice their concerns in a more peaceful and dignified way. Given the severity of the climate crisis we are facing, their message deserves to be heard.

Giving climate change a local connection

Bienvenido León
December 8, 2015

From the beginning of journalism, proximity has worked as one of the main news values or criteria for selecting interesting events. This principle was later formulated in the classic handbook written by Karl Warren, for whom the most interesting thing for any human being is himself/ herself and, afterwards, what is closest – e.g. family, friends, home or work.

However, the media have often represented climate change as a remote process, with little or no influence on people's lives. It may come as no surprise that many European citizens think that it is currently affecting only some remote regions of the planet, like the poles -“Okay, ice is melting, but this is not going to change my life in the near future.”

Academic research indicates that the images that are used to represent climate change are of vital importance. But, again, the most frequent icons – polar bears, melting glaciers -, are culturally and geographically distant for most people.



Photo credit: Bienvenido León

In many European countries, media coverage is closely related to news hooks, like international climate summits. These events are often represented as distant events that are illustrated with pictures of foreign politicians and complex negotiations.

However, something may be different this time: when informing the public about COP21, some media seem to be finally connecting the global issue to local problems. Relatively extensive coverage of the summit has included some examples of links to local effects of climate change that are already affecting local people.

Among them, news pieces that relate climate change to health issues could be especially effective. The truth is that Europeans are already suffering some health-related consequences from climate change, like the spread of tropical diseases carried by invading species like the tiger mosquito.

In a lighter vein, some local authorities have also celebrated COP21 and tried to establish a local connection. In Pamplona – a small Spanish town 90 km from the sea-shore -, the City Hall and a group of Greenpeace activists have created a “beach” in a central square, in an attempt to raise awareness on the local implications of global warming. As the presenter stated: “It’s not about polar bears, it’s about us”.

COP21 may be the tipping point in many aspects of climate change. Hopefully it will also be remembered as the tipping point for the local connection in media representation of climate change. We need it.

Public meanings in Paris: Analysing Twitter hashtag trends from COP21

Warren Pearce
December 9, 2015

Anyone with a passing interest in climate change will know how intractably difficult international negotiations have proved in the past, reaching a low-point at Copenhagen.

Whatever the outcome this week in Paris, the preponderance of ‘square brackets’ in the latest draft document (signifying those issues still to be resolved) indicates that the task remains troublesome. While a scientific consensus on the basics of climate change has been established, a political consensus has been less forthcoming^{1,2}. One reason for this is that climate change is not a uniquely scientific issue, but a public issue *involving* science³. We need to explore the public meanings of climate change, and allow these meanings to inform the debate around political responses to climate change. I suggest that one way to scratch the surface of such meanings is through the vibrant use of Twitter around the COP21 event⁴.

In this post, I look at tweets containing the string ‘COP21’ collected by my colleagues [Kim Holmberg](#) and [Timothy D Bowman](#) between October 3rd and December 3rd, focusing on the hashtags used within these tweets in order to get a glimpse of the public meanings to be found ‘under the hood’ of climate change.

Following our analysis of Twitter usage around the publication of an IPCC report in 2013⁵, we can identify two broad ways in which hashtags are being used. Firstly: to highlight public meanings of climate change in an attempt to mobilise public support. Secondly: as a means of bringing climate change to the attention of pre-existing publics with broader concerns. Many of these hashtags express familiar, enduring meanings of climate change, such as #science #environment #energy

#renewables and #CO2. But here I will focus some less familiar meanings that say something about the knot of social issues that underpin climate change.

First, #KillerPalm (10,872 mentions in conjunction with 'COP21'), has been used to raise concerns over unsustainable palm oil production methods that have negative impacts on local environments. Such methods contribute to local deforestation as ground is cleared for oil palm plantations. While the case against such actions may appear straightforward when looking at carbon emissions, complex supply chains and a difficult balance between supporting smallholders and maintaining sustainability standards points to a complex intermingling of social, economic and environmental issues⁶. Indeed, some commentators may question why relatively poor farmers from the global south should stifle their own development when the global north has long since converted the bulk of its forests to other uses.

This points to a second public meaning being attached to COP21 on Twitter: #climatejustice (3629). Climate justice is one of the most persistent challenges to technocratic interpretations of climate change. Agarwal and Narain argued in 1991, that instead of merely counting carbon we should differentiate between the 'luxury emissions' of developed countries and the 'survival emissions' of developing countries⁷. Failing to do so lets developed countries off the hook for their share of the blame vis-à-vis climate change, a situation described by Agarwal and Narain as "environmental colonialism"⁷. Such arguments further complicate the task of international agreement, but continue to be raised within the tweets in our sample⁸ as well as maintaining a presence within the thicket of square brackets in Paris⁹.

#COP21 has also been used to introduce climate change to broader, pre-existing publics. Some of these are familiar from our IPCC study⁵: #cdnpoli (7273) and #auspol (6252) demonstrate how climate change continues to be a high profile political issue in Canada and Australia (perhaps related to their fossil fuel reserves) in a way it appears not to be in the UK. However, two new publics are visible within

our sample. The proximity of the #ParisAttacks (6326) to COP21 prompted tweeters to link the two in multiple ways; for example, to express climate talks as a means to greater peace, to describe COP21's continuation as an act of defiance, to highlight the constraints placed on climate change demonstrations in Paris after the attacks, or to argue that tackling terrorism should take priority over climate change. While these views are diverse, they share a recognition that climate change is indeed a public issue entwined with fundamental concerns over democracy.

Contrasting with #ParisAttacks, some tweeters chose to connect COP21 to #YearInSpace (3178), a hashtag used by astronaut Scott Kelly for photos of Earth taken from the International Space Station¹⁰. This echoes the role of the original 'blue marble' photos of the Earth in the rise of environmentalism^{11,12}, and ties in with the global view that often frames discussions of climate change¹³. While this perspective may distance us from many of climate change's public meanings, the photos provide a source of optimism both through their beauty and how they remind us of the possibility of advancement through science and technology.

Studying tweets does not easily provide us with a 'deep dive' into the public meanings of climate change, particularly in the brief commentary offered here. However, they do provide insight into how publics using social media interpret climate change, and a means of comparing these meanings to those expressed within the corridors of COP21.

REFERENCES

1 Machin, A. *Negotiating Climate Change: Radical Democracy and the Illusion of Consensus*. (Zed Books, 2013).

2 Pearce, W. Scientific data and its limits: rethinking the use of evidence in local climate change policy. *Evid. Policy J. Res. Debate Pract.* 10, 187–203 (2014).

3 Wynne, B. Further disorientation in the hall of mirrors. *Public Underst. Sci.* 23, 60–70 (2014).

4 Pearce, W., Brown, B., Nerlich, B. & Koteyko, N. Communicating climate change: conduits, content, and consensus. *Wiley Interdiscip. Rev. Clim. Change* 6, 613–626 (2015).

5 Pearce, W., Holmberg, K., Hellsten, I. & Nerlich, B. Climate Change on Twitter: Topics, Communities and Conversations about the 2013 IPCC Working Group 1 Report. *PLoS ONE* 9, e94785 (2014).

6 Coca, N. Making Zero-Deforestation Commitments Work. *Triple Pundit: People, Planet, Profit* (2015). at <<http://www.triplepundit.com/2015/12/making-zero-deforestation-commitments-work/>>

7 Agarwal, A. & Narain, S. *Global Warming in an Unequal World: A Case of Environmental Colonialism*. (Centre for Science and Environment, 1991).

8 teleSUR English. #COP21: Richest 10% guilty of 50% of carbon emissions #ClimateJustice <http://bit.ly/21vy4Uo> pic.twitter.com/dZlQuAjemW. @telesurenglish (2015). at <<https://twitter.com/telesurenglish/status/672194641916272640>>

9 Revkin, A. Article 3 (Mitigation), no surprise, is among the sections of the #COP21 final draft thickest with [brackets]. pic.twitter.com/BPpn8Qklbx. @Revkin (2015). at <<https://twitter.com/Revkin/status/673962717682786305>>

10 Kelly, S. Oceans on our #EarthRightNow. You are the blue in our big blue marble. #COP21 #YearInSpace pic.twitter.com/q4hpHebiBp. @StationCDRKelly (2015). at <<https://twitter.com/StationCDRKelly/status/672501614637359104>>

11 Poole, R. *Earthrise: How Man First Saw the Earth*. (Yale University Press, 2008). at <<http://yalepress.yale.edu/yupbooks/book.asp?isbn=9780300137668>>

12 McKibben, B. What NASA's Blue Marble Photo Reveals About Climate Change. *Mother Jones* (2012). at <<http://www.motherjones.com/environment/2012/02/bill-mckibben-nasa-blue-marble-photo-climate-change>>

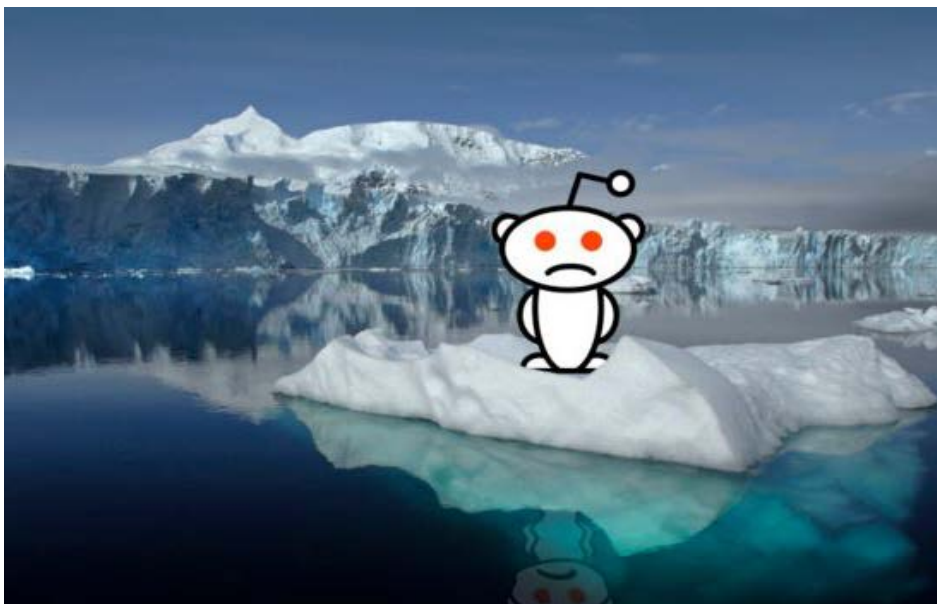
13 Miller, C. A. in *States of Knowledge: The Co-Production of Science and the Social Order* (ed. Jasanoff, S.) 46–66 (Routledge, 2004).

“I Can’t Believe I Still Have To Protest This Sh*t” Seven Days of Climate Change on Reddit

Jonas Kaiser
December 9, 2015

There’s always much to be said about climate change. During COP21, a critical and potentially future-determining event, there’s even more to be said. We have, for example, already read on this blog how journalists cover the conference, what different climate narratives exist or on how many layers climate change affects us.

What is often forgotten in the public discourse on climate change, however, is how regular people around the world make sense of what’s going on in Paris. The teenager in Newark, the student in Madrid or the businesswoman in Pune. It has often times been reiterated that climate change affects every one of us. In this analysis I will shed some light into how climate change is discussed on the “front page of the internet”: *Reddit*.



This picture originally appeared on Vocativ.com in a story about how Reddit’s science subreddit would no longer allow climate denial posts. Credit: Versha Sharma.

In terms of social media, *Reddit* is an old man among the likes of *Instagram*, *Snapchat*, *Yik Yak* or *Voat*. The social news/bookmarking site was founded in 2005 and is nowadays one of the most popular sites on the web (Alexa ranks Reddit as the 31st most visited site in the world). Ever wondered where your Facebook friends get their weird news stories or your news site the funny cat video? Well, there's a high chance *Reddit* was somehow involved. The site allows you to read and post links, pictures, videos, songs or your own story to specific thematically clustered forums (so called subreddits or subs and indicated by an */r/*). A picture of your puppy, for example, would be posted in */r/aww*. Additionally *Reddit* also allows you to comment on each of these links and discuss your puppy's cuteness with strangers all over the world, and like or dislike other user's pets or their comments (called upvotes and downvotes). This makes *Reddit* one of the most vibrant and diverse internet forums on the web.

For this blogpost I naturally didn't look at puppy pictures (well, that too) but rather how climate change was discussed in the seven days from November 30 to December 6 [1]. I scraped *Reddit* for all posts that had the terms "climate change", "global warming", "climate paris" and "cop21" in their title. This resulted in 2.020 unique submissions, i.e. news articles, videos, images or text posts. This stat alone shows how relevant climate change is for Reddit users. In a first step I looked at the amount of posts per search term and how that differed from each other.

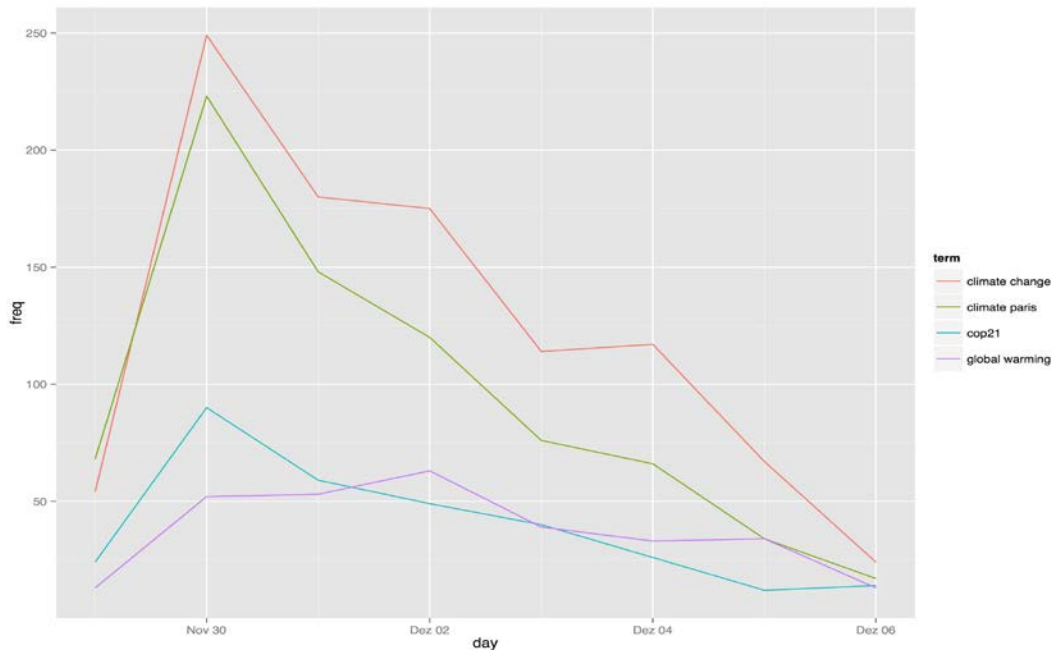


Fig. 1: Amount of posts per search term

We can see that “climate change” was the most used search term for the last week ($n=980$) and “global warming” the least ($n=300$). Unsurprisingly, on the first day there were the most posts on *Reddit*, with the amount of posts rapidly declining over the next few days. This is most likely closely connected to the media’s reporting on COP21 but, it may also relate to the tedious middle phase of the conference, where generally little progress is made and new developments are rare.

In a next step I looked at the most popular posts to see if there’s some kind of pattern. There were 8 posts that had over 1.000 upvotes (almost a guarantee for a spot on *Reddit*’s front page and thus to be seen by millions of people all over the world). [This picture](#) which also inspired the title of this post, has been viewed over 1.5 million times, received 5.794 upvotes[2] and 495 comments (the top comment says “I bet she uses that sign for everything.”). The second most upvoted link shows, however, that *Reddit* is not only about funny pictures. It can also be about politics: [this article by The New York Times](#) got posted in the politics subreddit and states that “Two-Thirds of Americans Want U.S. to Join Climate Change Pact”. It got 5.613 upvotes and 1.266 comments. The only topic that reached the front page twice was

also see that the majority of these subreddits are neither used frequently for posts about climate change nor get a lot of comments or upvotes. There may be two reasons for this: on the one hand many of these subreddits are not that popular and thus not very visible for other users. On the other hand, climate change may not be the most “engaging” issue for users.

Another aspect that supports these ideas is the difference between normal subreddits and the so called “default” ones (since there is no official list I used [this user generated one](#)). These are the subreddits which are mostly on the front page and to which a Reddit user is subscribed to by default and which are consequently the ones with the most subscribers and biggest reach. These default subreddits are the blue dots in Fig. 2. You can see the difference between funny (e.g. the old lady on the climate march), IAmA (e.g. Janos Pasztor’s AMA) and pics (e.g. the faux ads but also pictures of the protests in Paris which have been covered on this blog, too) and the rest. There are only few posts in these subreddits but those few had a lot of upvotes and comments and thus a wide reach and big engagement.

In stark contrast to these default subreddits stand the most active ones. There were, for example, 173 posts to /r/environment which dealt with all different kinds of topics (e.g. conference process, national politics or scientific studies) but which were barely commented upon or upvoted. This holds also true for other subreddits like /r/betternews or /r/climate. One default subreddit which is used actively for climate related news is /r/worldnews (n=94). Indeed, one of the Top 8 posts was submitted to this subreddit and dealt with the possibility of [Exxon having to pay billions](#) in a climate change lawsuit. But on the other side a lot of posts on /r/worldnews were not as successful, thus resulting in a comparatively low average upvote and comment score.

A last subreddit I want to draw your attention to is /r/climateskeptics. This “safe space” for skeptics has seen 79 submissions with an average of 12 upvotes

and 8 comments per post. Covered issues were, for example, the scientific consensus (the dreaded 97%), the supposed hiatus, a link between climate change and terrorism (this actually got discussed in several mostly conservative subreddits) or the fact that a French weatherman and skeptic got hired by the Kremlin. Additionally, /r/climateskeptics is one of the few subreddits which actively promotes the term “global warming” (n=25; only /r/environment used it more often with 27 posts) next to “climate change” (n=36; /r/environment with 101 posts) thus echoing a recent study by Jang and Hart to some extent.

For this blog post I set out to look at how *Reddit*’s users discussed climate change. With this small analysis, I was able to show that *Reddit* users greatly care about climate change. The political nature of COP21 influenced *Reddit*’s agenda strongly in this respect. Not only were the political subreddits among the most active and engaging but also news posts of Obama’s speech in Paris, *YouTube* videos of the faux ads or images of rioting protesters were prominently discussed all over *Reddit*. Additionally, climate change was discussed on all different kinds of levels: internationally, nationally but also locally. *Reddit* wouldn’t be true to its spirit, if there weren’t also a few posts that looked at climate change humorously (e.g. this idea to solve climate change submitted to /r/shittyaskscience), scientifically (e.g. this remarkable study) or suspecting a big conspiracy (/r/climateskeptics or /r/conspiracy) and thus emphasizing *Reddit*’s thematic and user diversity.

When looking at such a diverse and multi-faceted site as *Reddit* there are a few aspects which have to be neglected. Most notably, I chose to focus for this blogpost on the submitted posts and ignored the comments. This analysis is thus only able to give you a broad idea of how internet users from all over the world discuss climate change and the conference in Paris and its small and the big stories.

Note: I’d like to thank Stephan Schlögl and Adrian Rauchfleisch for their valuable tips, help and insight with R.

[1] The time on Fig. 1 shows that I also scraped some posts from Nov 29. As recommended by Reddit, I used [Epochconverter](#) to get all posts from Nov 30 00:00 to Dec 7 00:00. Naturally, this somehow skews the plot but the trend remains the same either way. If you have an idea how that happened, let me know!

[2] All upvote and comment numbers stem from the time of my scrape and do not necessarily still have to be the exact amount of votes or comments. Reddit is tricky that way.

What's the hold up? The slow transition to renewable energy

Feilidh O'Dwyer
December 10, 2015

As leaders remain gathered in Paris at COP21, apparently close to sealing some sort of deal to fight climate change, the future of energy production has been a hot issue.

A recent study at the Potsdam Institute for Climate Impact Research predicted that if we were to burn all remaining fossil fuel below ground, it would melt nearly all of Antarctica's ice leading to a 50 or 60 meter rise in sea levels. While the premise of Waterworld, (a terrible mid-90s film starring Kevin Costner with gills, in a world where the ice caps have melted submerging most land below water) might appeal to some people, I'm going to go out on a limb and say most people prefer living on land.

A key step in the fight against climate change is for nations to switch from "dirty" energy production such as burning coal and oil to clean renewable energy sources like wind, hydro and solar.

There are many countries that are now on board with this: in Paris, India unveiled an alliance of 120 countries committed to embracing solar power. Renewable energy technologies have existed for many decades and the environmental reasons for making the transition are extremely compelling. Yet some countries are very slow to make the shift. Why is that?

For both developed and developing nations alike, one of the major barriers to switching to renewables is, of course, money. The set-up costs for renewable infrastructure is often extremely high and the roll-out may take many years.

There's also the issue of generating capacity. It may take as many as 2077 2-megawatt wind generators to generate the same amount of power as a single

nuclear reactor. This is part of the reason, that despite strong public sentiment against nuclear power in Germany, the Government cannot simply switch off the eight remaining reactors (still generating 16 percent of the nation's power).

One of the sticking points in previous climate summits has been the amount of money developed nations contribute to developing nations to help them reduce their carbon footprint. While the transition for dirty energy to renewables may be slow and costly, one has to say, *it's totally worth it*.

Another reason for the slow transition to renewables is the power and influence of mighty oil and gas companies.

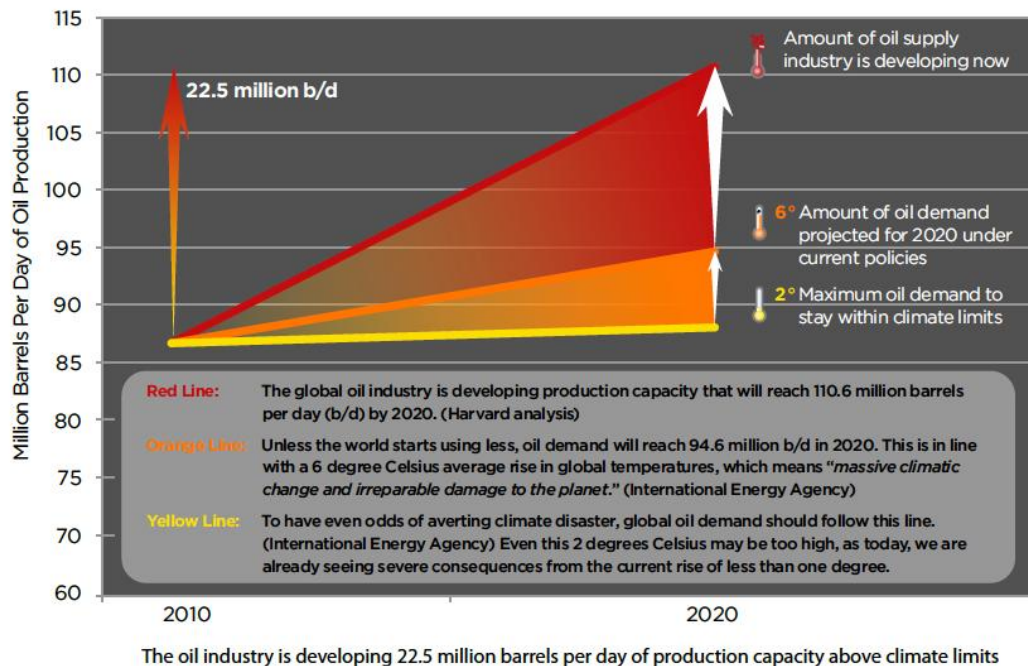
As it stands, the playing field between fossil-fuel and renewable energy companies is not even remotely level. In 2014 fossil fuels agencies received around \$550 billion in subsidies world-wide. Sustainable energy agencies, by comparison, received only \$120 billion.

The oil and gas industries are major employers. A 2011 report by the American Petroleum Institute (API) said there were 9.8 million full-time and part-time U.S. jobs in oil and gas that accounted for 8 percent of the U.S. economy. That kind of workforce gives an industry influence. Few rational people would argue that we all shut down the oil and gas industry overnight. After all, oil is used in vast numbers of consumer products most of us enjoy and changing to alternatives will take time. The argument is instead, that we need to be moving away from oil and gas at a faster rate (see graph below).

The oil and gas lobby have practically endless resources to lobby politicians particularly in the US (see here) and seem unlikely to kill the goose that lays the golden eggs while the money is still flowing, even if the price of oil has recently dropped significantly.

Oil Industry Blowing Past Climate Limits

New oil supplies locking in disaster



Note the difference between projected production levels and the level needed to stay beneath 2 degrees warming. Credit: Oil Change International, <http://priceofoil.org/2012/10/25/oils-new-supply-boom-is-a-bust-for-the-climate/>

By their nature, governments and politicians think primarily in the short-term and their next election. The International Energy Agency last year singled out the Middle East as a region where fossil fuel subsidies are hampering renewables. According to their report, every day 2 million barrels per day are burnt to generate power that could otherwise come from renewables, which would be competitive if oil wasn't subsidised. It takes bold political leadership for a nation to decide for several years of low or negative growth in order to switch to cleaner energy infrastructure. The real question is – in the long-term, can any nation afford not to make the change? Economic growth is a rather useless pursuit if large parts of Earth are to become uninhabitable.

Beijing for example, is now used to "code red" smog alerts where the streets are off-limits, factories closed down, cars taken off the road until the pollution clears. I experienced this myself on a visit to China last year. After only a few days in Beijing, my lungs became deeply congested. See this real time air pollution monitor

and note the cities around the world that have either red or dark red number above them.

Saving the environment and creating jobs and growth are not mutually exclusive. There are already countries that demonstrate achieving both simultaneously is possible. Who are they?

Well, Sweden and Germany for starters.

In the 4th edition of the Global Green Economy Index report, the two nations came up trumps. The report examined factors such as efficiency, markets and investment as well as climate leadership and the quality of nation's natural environments. It also included how green countries were perceived to be by experts (Germany was first, Sweden third) verses how well they performed in reality (Sweden first, Germany fourth). Sweden is so good at recycling its waste – it actually imports garbage. Germany proved how quickly a country can make the transition to renewable energy. Between 2000-2014 Germany went from just 6 percent to around a third of total energy coming from renewables.

So would a country like China – currently the world's biggest carbon emitter – consider slowing down or event halting its fantastic economic growth to transition to a greener economy? Right now, it seems highly unlikely. They have made some progressive moves such as spending more than any other nation investing in green technology last year but under current targets, they won't peak their carbon output until 2030.

Should we exchange temporary economic growth for the long-term health of the planet?

In this TED talk climate researcher Anna-Bows Larking cites her own study saying that in order for us to prevent exceeding Earth's climate budget: "economic growth needs to be exchanged, at least temporarily for a period of planned austerity in wealthy nations." She makes the point that carbon emissions tend to be

cumulative and can potentially remain in Earth's atmosphere for more than a century. This means if we don't undertake significant cuts in our carbon emissions now, we will have to make much more drastic cuts in the future.

In 2012 this paper about transitioning to a green economy was presented to the United Nations Conference on Sustainable Development. The conclusion of the report stated:

“Some sectors will feel the pain of transition, and countries that specialize in those sectors will be challenged accordingly. But while the individual losers are clearly important, it is also important to put the pain of adjustment into perspective. As noted above, it has been well documented that the costs of action are far less than the costs of inaction. *In the long run, perpetuating unsustainable livelihoods is not in anyone's interest.*”

A change in mind – Photo journalism project as a support for #EarthToParis

Anne Schmitz
December 10, 2015

“How can contemporary image makers promote new thinking and make a difference in the world?” (Fred Ritchin, Bending the frame)

Since the first day in my photo journalism class, taught by Sarah Schorr at Aarhus University, Ritchin’s quote has not lost its grip on me. How can a single photo in today’s digital media flow still contribute towards making a change? How can one create meaningful content through a photo project?

Questions, which constantly floated in my head. Thoughts permanently popped up and disappeared again.

As the United Nations climate conference in Paris came closer, and the related viral campaign #EarthToParis grew, the idea arose in class to contribute with a photo project which would raise awareness of climate issues. The results of the conference will set the course for our future and how we are going to live life on earth for the coming decades, but COP21 leaders don’t pull the strings with their hands alone. My hope is, that everyone can play their part and that even a single photo can become a catalyst for a shift in people’s mentality.

“Your favorite spot, your earth to Paris”

The final aim of my project was to make people think about their individual connection to the environment, as well as their personal association to the transience of nature. Therefore, I called for a blended picture, which combines a favorite spot or a momentous landscape with a self-portrait. Two elements of the planet – humans and nature – melted together to form a photograph in the style of a “double exposure”.

After spreading the word through an international network, the photo collection now consists of more than 40 pictures from 15 different countries, including landscapes from Austria, Bolivia, Canada, Denmark, France, Iran, Norway and Sweden. People from various nations participated with individual motives, but a united message: They don't want to lose their favorite spots on earth.

The selection shown here presents the variety of natural elements and their irreplaceable value, literally seen through the eyes of the participants. They all give us insight into their individual perception of nature, as well as shedding light onto what might inspire others to sharpen their view and turn their gaze to Paris.

1. "I chose that photo because I still remember walking to class that day in Sweden and being so amazed at the natural presence of the snails in the early morning, and remembering that we truly do share the earth with so many other creatures. So if we aren't saving it for ourselves, how about for the snails?" Emily Huse (23), USA – spot: Sweden



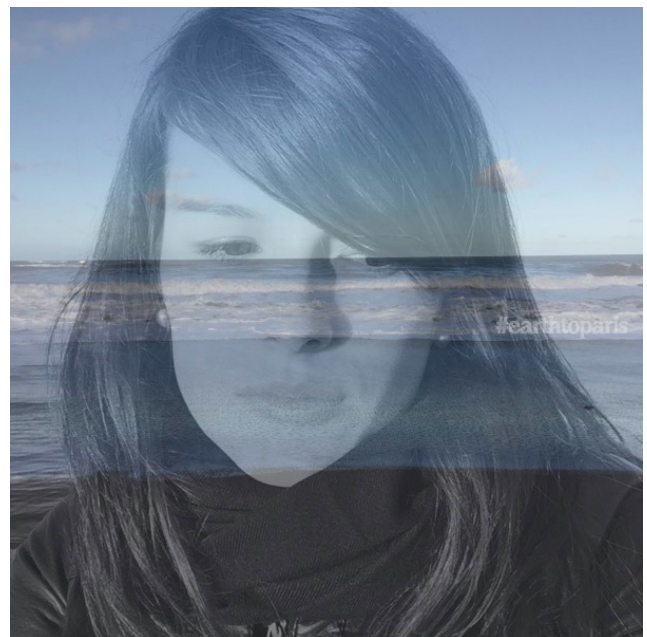
2. "This landscape is one of my first photographs with my dear camera. It was taken from my childhood bedroom in France. Every year when I go back I am disappointed that this 'ocean of forest' disappears to reveal more houses and even factories now. This landscape in the sunset represents many things for me, both the disappearance of the environment I grew up with and my childhood memories that are captured forever." Mathieu Bonnaric (23), France – spot: France





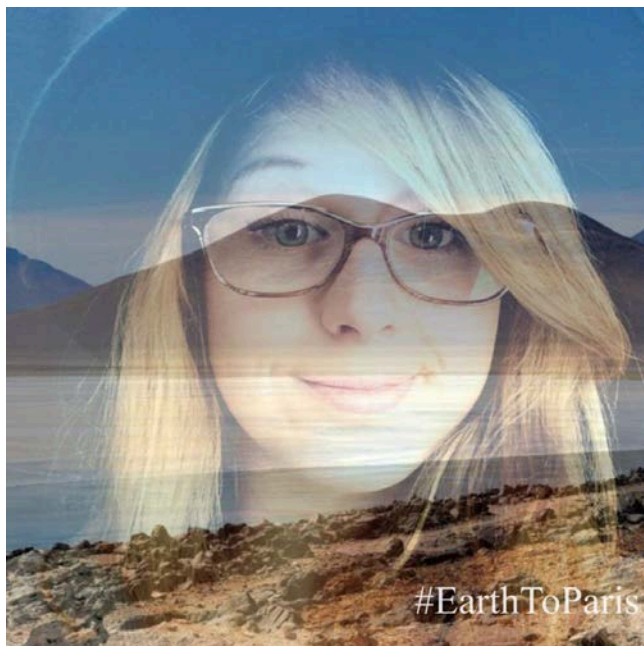
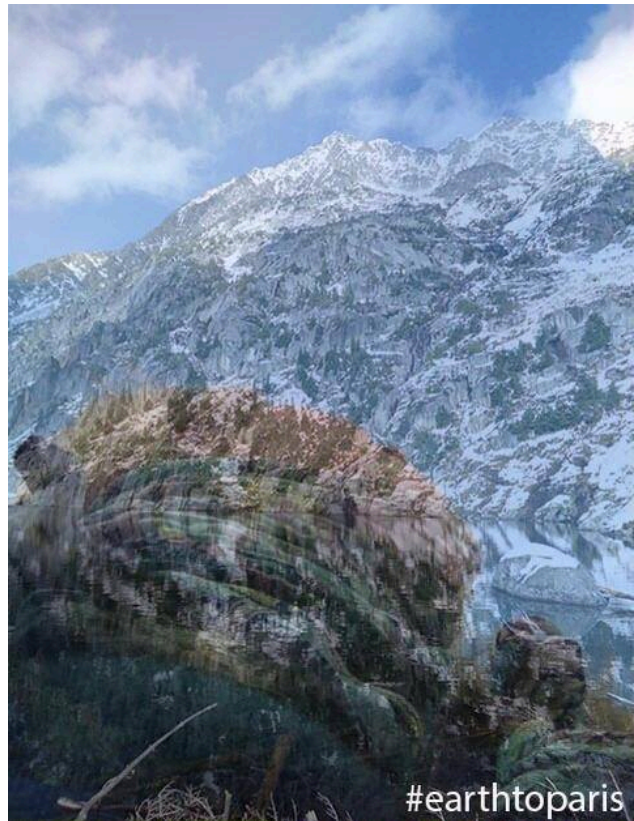
3. "This picture was taken in Gorgan, Iran while I was traveling there to discover my country. For me it shows the beauty of nature in my home country, which is too often forgotten. When I was on the top of the hill looking at the breath taking landscape I realized how wide the earth is and how small we are. This perfectly shaped desert created by time as well as the rest of the earth is in danger. We have the duty to protect our earth and limit climate changes in order to preserve these unique landscapes for future generations." Anais Amirifar-Bertschi (23), France/Iran – spot: Iran

4. "My picture is taken in the aftermath of a storm on the Danish west coast. I'd been bugging my family for hours to go outside with me, because I wanted to experience the storm, stand on the dunes and be literally blown away. For me it is ultimate freedom to feel nature in its extreme. With recent weather changes, we see that the shores in Denmark are being slowly eroded by the strong water. People are losing their homes, which are being washed away as the water slowly comes closer. I visited this place again in November – it was completely changed, and the path where we walked before, was now gone." Biljana Nikolina Celebija (23), Denmark– spot: Denmark



5. „Looking at the sky – the window to nature in a city – I often think about places like this in Nelson (Canada) that make me happy and show me the beauty of nature and the things that are really important. Instead of stones in forms of houses, stone in their natural surroundings.”

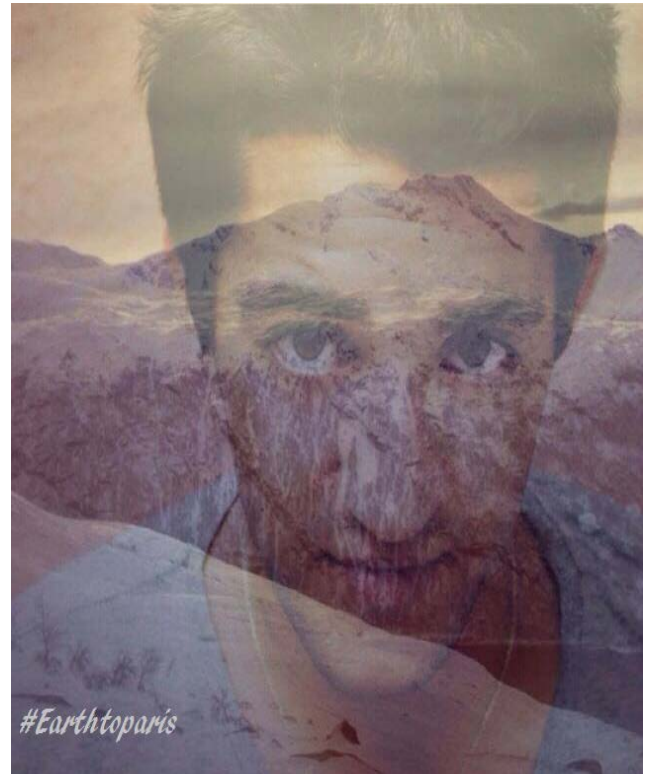
Ann-Carolin Obitz (25), Germany – spot: Canada



6. “This picture was taken in the Salt Flat in Uyuni Desert (Bolivia) – an incredible scenery: Silence and a white horizon, that’s all. At this place, you can really see that the earth is a giant globe, that makes you realize how small you are and that you have a great responsibility for this planet. I would like this place to remain the same, as pure as it is now, and this can only happen if we all make some efforts to combat climate changes.”

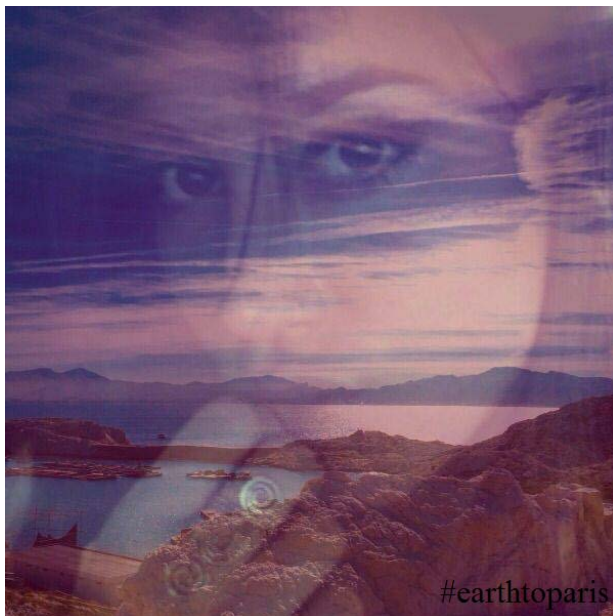
Claire Endberg-Bouteille (22), France – spot: Bolivia

7. "Oxygen and freedom. Finally!' My own thoughts when we arrived on the top of this mountain. I took this landscape picture on a holiday that might be the best adventure I have experienced so far – Lapland. Hundreds of kilometers with pure snow, a stunning white desert, coldness full of life, true silence, wild nature at its deepest meaning. Oxygen and freedom. What a paradox, leaving into the remotest corners of the world, running away from our polluted and oppressive society, in order to rediscover the natural senses our earth provides us since the dawn of time." Pierre Blaudeau (23), France – spot: Norway



8. "After a long and exhausting hiking tour we arrived at our destination, the Laserzsee in East Tyrol. The view on this beautiful turquoise lake surrounded by the mountains took my breath away. We should protect such wonderful places and be environmentally aware, because I want next generations to also have the possibility to enjoy such stunning moments I experienced in the Alps." Lena Schabernack (22), Austria – spot: Austria

9. "My landscape is taken in the woods of Marselis (Denmark). I have chosen a photo of myself where I am painted according to a Greenlandic myth about the 'qivitoq' – a person abandoned by society who seeks the wildness and gains the power of nature. I liked the idea of merging a picture of real nature with a picture of myself painted as a person gaining the power of nature." Anne Scherrebeck (26), Denmark – spot: Denmark



10. "The Frioul-Islands of Marseille in its tranquility and beauty. For me a symbol that combines the splendor and beauty of the nature and at the same time a warning, that humans are capable to threaten these places by their behaviour." Maria Einfeldt (28), German – spot: France

Bridging the gap: Under-representation and communication between groups at COP21

Rebecca Froese
December 11, 2015

I've never considered myself a radical youth, a hard-core feminist or any other kind of fundamental advocate. However, being at COP in Paris, I recognized power dynamics that I had for a long time considered things of the past.

I recognized people struggling with antiquated roles that are not visible or formulated but resonated everywhere. I saw women, youth and people from developing countries being marginalized (perhaps inadvertently) by the black-and-white masses of the “middle-aged-white-men wearing black”. I am sorry to dig out stereotypes, and my expressions might be a little exaggerated, but my point is, at COP, not all voices are equally heard and considered. Let me describe some of my observations that brought me to these conclusions:

Walking around the venue – on the surface there seemed to be both men and women and a diversity of races, cultures and ages represented. However, at the side events (speeches, presentations and panels) the uniformity in gender, age and cultural context among speakers was remarkable. Just for fun, at some of the side events I started taking statistics on the speakers' diversity. The results were as surprising as they were alarming. Bearing in mind the importance of diverse people from around the world having their unique voices and perspectives heard on climate change, the effect it has on communities and possible actions that could be taken, the lack of representation for many minority groups was very concerning. From all the panels I attended; of the usual seven to eight speakers on a typical panel, the most diversity I observed were two women and two non “white” people (oh, how I hate this categorization).



A group holding signs at COP21.
Credit: ZME Science.

Sometimes, these seemingly quota-filling individuals were merged into one person. When it came to youth – the seeming lack of representation was even more serious. While I didn’t ask everyone their age, from what I saw, I believe not a single speaker was under 40. The only exceptions to these statistics that I observed were the side events about:

- “Gender issues”: going to the other extreme, having very few men on the panel
- “Young innovators”: having a good mixture of youth and middle-aged men. Yes only men – which made it again, very one-sided
- “Africa Day”: Had only non-white people on the panel and fitting into the statistic of having two women from seven panelists
- “Human rights”: Had the best gender balance of any panel I saw with four women (with two none-white people among them) and three men

It seems to me, that everyone is doing his or her own thing, trying to rebel against existing preconceptions and always accusing “the other side”. Women ally with women to “fight” the male “predominance.” Why they should ally with men to address the issue seriously? Youth ally themselves with youth at special youth

events or in activists groups celebrating their creative and innovative ideas. Why should they speak up in the official meetings? You get the idea..

Please don't get me wrong – there is nothing wrong with forming alliances with people that share the same thoughts and opinions as you- but the actions move in the wrong direction when the alliances start to form blocks instead of broad coalitions. Without communicating these limitations (which is what this blog entry tries to do), a dialogue between the different positions cannot be facilitated and instead front lines harden further.

The conflict arising through the under-representation of women, youth, indigenous people and others further continues. It is not only about having faces be seen, but about having voices be heard. Voices, that do not accuse, blame or beg, but voices that tell the truth in an understandable and just way. When facing under-representation and marginalization, I have the feeling that these voices (with women being by far the largest minority in society, you know) feel the need to team up – which is good in the first place. However, in the way these groups communicate, they expose themselves to a situation of weakness and inability which is not needed. They feel the need to fight against prejudices and preconceptions that they assume exist in their audiences' heads. Let me give you some examples to illustrate what I mean:

- Each and every speaker at the “Africa Day” emphasized at least two times that they “are not here to beg” – assuming that everybody was expecting developing countries to be begging in Paris
- The youth speakers emphasized their need for more and better education, especially in situations like this – assuming that youth do not have any chance of making their point facing the high-level experiences of the older people

- Women speaking up and reinforcing the work and the efforts of many other women – assuming that the women's good work will otherwise not be recognized

We should be far beyond the point of having to justify what we do and why we do it. These issues have been recognized for a long time in the Declaration of Human Rights.

What is missing now is the implementation of these points in a way so no one feels underrepresented, marginalized and consequently feels the need to justify themselves. Establishing an equal and just way of communicating our thoughts and opinions, in an environment that enables a fair dialogue would relax communication and allow us to focus on the things that are actually important: like including human rights issues into the Paris agreement.

A climate of change in media coverage?

Gesa Luedecke
December 11, 2015

My twitter account has slowed down during the second week of COP21. Was it because no one had new stories to tell from Paris? Did my contacts all leave the conference? If so, with what feelings?

As person that hasn't been to the summit and therefore was unable to directly pick up the notion of the conference, I am going to write down my thoughts gathered from reading the news coverage and features during COP21. I have been overwhelmed with all the information coming from Le Bourget, through seemingly endless media channels – news, features, background stories, blogs, tweets and so on.

At this conference, the pressure on countries to act has increased. This time the media convey more than ever, that climate change is an issue and Paris an opportunity that requires more attention than in the past years. Almost a decade ago, I did an internship at the German Greenpeace headquarter. At the time some colleagues had started working on a climate refugee report, which back then, sounded like science fiction to me.

Unfortunately our world has changed a lot and we are now facing multiple major crises: climate change, refugee and terrorism intertwining into a perfect storm. For the first time at a COP, all countries seem to be ready to have a conversation about how to shape the future's energy production and consumption.

Rather than relying on national leaders however, civic engagement appears to be providing the more promising momentum among all international efforts to reach binding pledges below the 2 degrees Celsius warming limit. Earlier last week on this media watch blog, Professor Hans von Storch wrote, "Six years after Copenhagen

we continue on our high-speed train into the abyss.” I like this metaphor but have to add, if it only was a train and not an SUV running on fossil fuel, we would definitely be moving closer towards our climate pledges.



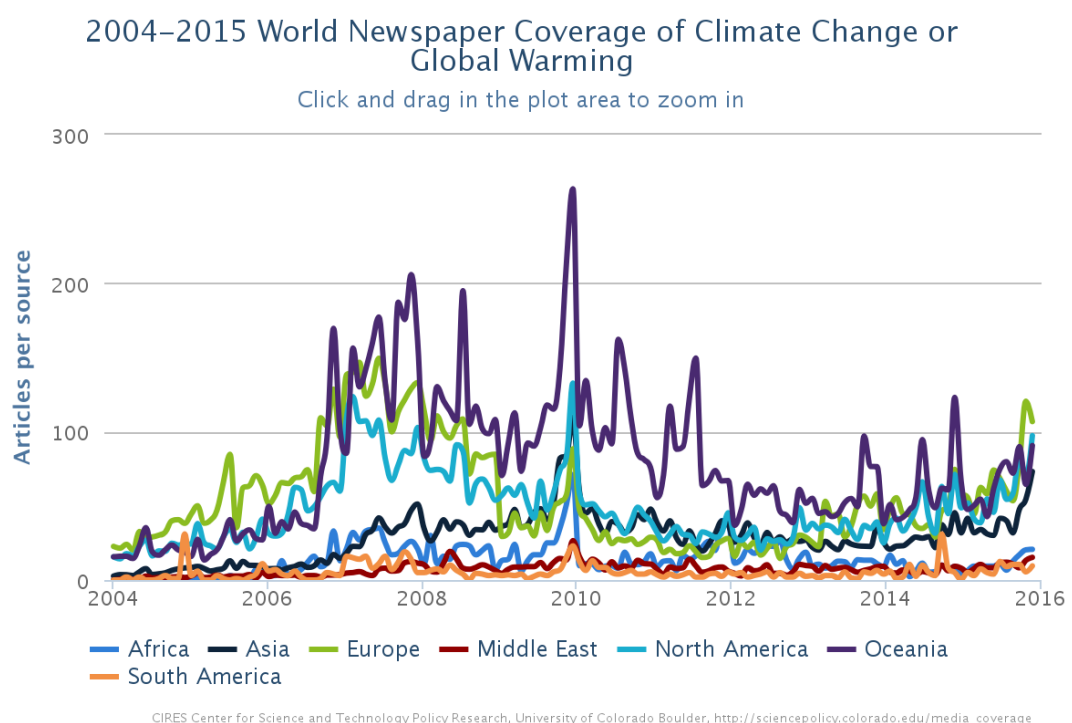
Photo from the streets surrounding COP21 in Paris. Credit: Mark Dixon

A lot has been written about media coverage of climate change during the conference on this blog and elsewhere in countless forums, tweets and opinion pages. I read some personal experiences from COP21 attendees that brought tears to my eyes because the way those people wrote about the urgency of what is at stake with climate change, how it will affect us, and in which way we as individuals have to start changing our behaviors toward more sustainable energy consumption really touched my heart.

Looking at the counts of our Media and Climate Change Observatory (MeCCO) project here at University of Colorado Boulder, we can clearly see that the attention for climate change has gone up and down over time but never came to a halt.

Some of the biggest events connected with climate change (such as the Stern report and Al Gore's *An Inconvenient Truth* in 2006/2007, the COP 15 in Copenhagen in 2009, the US-China agreement on climate change in 2014, etc.)

show the largest spikes in coverage. We will be excited to see if the spike will be continuing throughout the month of December (our next update will be in early January 2016). MeCCO and other climate change communication observatories are a good start to monitor how much we actually communicate about the biggest challenge of our time. However, this only tells us the amount of media coverage of climate change, but not how or if media pursue a certain goal in their communication in terms of meaningful communication that speaks to people's values. This is something I would be really excited about to systematically investigate in the future.



Credit: Luedecke, G., McAllister, L., Nacu-Schmidt, A., Andrews, K., Boykoff, M., Daly, M., and Gifford, L. (2016). World Newspaper Coverage of Climate Change or Global Warming, 2004-2015. Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Accessed Nov 30, 2015. http://sciencepolicy.colorado.edu/media_coverage.

All of us that professionally deal with climate change on a daily basis (as scientist, politician, representative of civil society, etc.) cannot imagine the difficulty for laypeople to start with the big picture of climate change and zoom in to see how they can translate this knowledge into action. I have been researching psychological motivations behind individual climate engagement connected with media use for quite a while now. What I learned is that we need to see more than just information

in the message (even though we all know about the text between the lines, we haven't internalized this knowledge enough). It's highly important that aspects such as emotions, rational arguments, social norms and directives for engagement are brought into media coverage. The latter two are especially important as aspects that influence our opinion-forming and decision-making.

This is why we need communication that is meaningful to people through accessible, emotional, reliable, informative, inspiring, creative and individually sense-making coverage. We therefore need to focus more closely on qualitative analyses of media communication of climate change to learn how information can make a difference on every level.

Exxon vs The People

Adrienne Russell and Risto Kunelius
December 12, 2015

On Saturday in Montreuil, the site of the “alternative village” set up at COP21, Bill McKibben and Naomi Klein took ExxonMobil to court at what they called “The People’s Climate Summit.” It was a mock trial that was also a significant public event.

The “trial” was organized by climate change activist organization 350.org in a community center and occasional concert hall packed with a crowd of few hundred. For two hours, witnesses from around the world testified to the havoc already wrought by carbon-based energy economies dominated by Exxon and other fossil fuel companies. They spoke of the deleterious effects on the climate that oil and gas produce and the great success such companies have enjoyed in pushing climate-change-denial science.

The trial was based on recent blockbuster news reports that internal research conducted by Exxon scientists decades ago confirmed the role played by fossil fuels in speeding up global warming.

Witnesses at the trial gave moving testimony, and prosecutors Klein and McKibben introduced a raft of evidence to make their case. They weaved together arguments about the ways climate change is impacting communities around the world, how it is linked to terrorism and mass migration, and the ways corporate disinformation campaigns and political corruption have exacerbated those effects and future threats.

As has been widely reported, climate activists are not being permitted to march or assemble in large numbers in a Paris still reeling from last month’s terror attacks. Even attempts to speak out against green washing have not ended well. It’s

through media events like the trial — events that levy serious messages with formal irony — that the messages of activists are reaching leaders in the exclusive “blue zone” of the summits and concerned publics around the world. Similar seriousness and irony fueled the spectacle of the shoes that did not march at the Place de la Republique as well as the “ad-busting” displays that have appeared strategically around the city.

Many activists have told me that it's hard not to see the security measures as a muzzle on free speech and as a dam blocking the flow of data and analysis we've become accustomed to in the networked information age. French government efforts to ban public wifi and the use of tools that ensure online privacy suggest that encroachments on civility liberties in France may yet intensify.

Follow the story on Twitter #ExxonKnew.

Risto Kunelius and Adrienne Russell are part of the MediaClimate research team (<http://mediacclimate.net/>) studying coverage of UN climate summits. Risto is a professor at University of Tampere, Finland and Adrienne is an associate professor at University of Denver.

Momentum for carbon pricing is growing (and the private sector is fueling it)

Cristina Belda Font
December 12, 2015

From the beginning of the Paris Climate Summit, the world has expected a global agreement to cut greenhouse gas emissions and tackle climate change. Carbon pricing is seen as part of the solution.

Carbon pricing is the cost applied to carbon pollution to encourage polluters to reduce the amount of greenhouse gas they emit into the atmosphere. While no global carbon pricing policy has yet been broadly agreed to, the private sector is doing their homework. The scene has so far been dominated by negotiations about government commitments to reduce their carbon emissions. But there are other actors that are seeking to play a bigger role in the green economy transition: multinationals.

Business, the game changers

Countries and companies are more and more aware of the fact that polluting is not (or it should not be) free. The Carbon Pricing Leadership Coalition at COP21 is evidence of that. In fact, according to the World Bank, around 40 national jurisdictions and over 20 cities, states and regions, have adopted carbon prices, covering about 12% of global greenhouse gas emissions. These carbon prices, which come mostly as taxes, have increased three-fold over the past decade. Now, even crucial actors like China are expected to launch a national carbon market within four years.

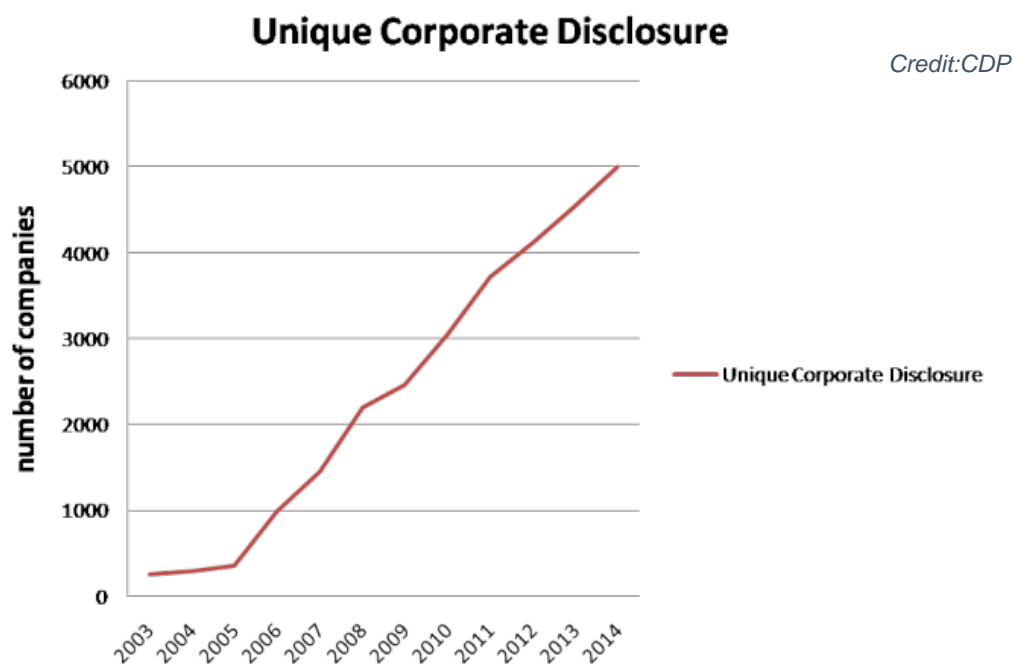
In this context, even it is yet unclear whether an agreement in a global carbon pricing will be agreed upon soon, preparations are already underway in several companies. What's more, corporations are incentivizing action on carbon reductions.

Last June, six leading oil and gas companies called energetically for a framework that encourages global carbon pricing, saying this would be the most effective way of cutting the emission of greenhouse gases.

Additionally, the 2014 Global Investor Statement on Climate Change, signed by more than 360 investors with more than \$24 trillion in assets, also included a call for “stable, reliable and economically meaningful carbon pricing.”

The Carbon Disclosure Project, a not-for-profit organization that works with 822 institutional investors with assets of US\$95 trillion, has been witnessing this trend for years. According to Kate Levick, director of policy and regulation, “An agreement in Paris which sets out a long term decarbonisation goal will inevitably lead to a greater interest in carbon pricing”. For her, the willingness is already there.

“Expectations of disclosure and transparency for companies have been growing steadily for more than a decade. This accountability and ability to measure/manage is one of the underlying trends which has led to the real paradigm shift – that we now see a tipping point of companies prepared to take ambitious action on climate change in preparation for the transition to a 2 degree world”.



The 2015 report on carbon pricing from CDP, showed that 437 companies reporting using internal carbon pricing to gauge their risks and costs. The number increased from 150 companies in 2014. Moreover, 638 companies report that they recognize that carbon regulation presents business opportunities.

The internal carbon price is voluntary but is used mostly as a financial planning tool. They can range from \$20 per ton in the US to \$150 per ton in Sweden. In some cases corporations use a much higher price than the one they currently have to pay in places with a government-mandated carbon pricing scheme, such as the EU's emissions trading system, the world's largest carbon market.

The benefits of environmental responsibility

There is no secret that more and more CEOs are buying the idea that proactive disclosure of impacts and steps to address them would raise the recognition and stature of companies in the eyes of consumers, governments and shareholders. As the Huffington Post article Carbon Pricing and Investor Momentum: Game Changing Convergence and a New International Financial Language recalled "as investors become more attuned to minimizing environmental risks, and put together more environmentally favourable portfolios and funds, carbon pricing will concomitantly become a new factor to help decision-making".

Mohan Kumar, lead researcher of Price Carbon Now!, a Canadian organization said: "Being socially responsible would lead to cost savings, innovation, brand differentiation, and customer and employee engagement". Also, it's estimated that, on average, companies that voluntarily report their carbon emissions can save \$1.5 million every year in interest repayments. In contrast, non-disclosure may result in penalties, loss of revenue and a tarnished reputation.

Companies generally tackle climate change in three ways: firstly, make emission reductions. Secondly, publicly disclose emissions reduction targets and finally invest in emissions reduction projects with positive returns. As Kumar

remarks, many industries have already supported and/or adopted a shadow carbon price, which is the voluntary use of a notional market price for carbon in internal corporate financial analysis and decision-making processes.

Others are calling for system of tradeable permits, known as cap and trade, this has had echos in Paris.

There is still a long way to progress in this field but the experts agree that the next step is governments providing a clear, stable, and long-term policy framework to encourage companies to keep reducing carbon emissions.

Lost on the Road to Paris? The Framing of 2 degree limit 2009-2014

Markus Rhomberg
December 12, 2015

As the climate negotiations in Paris near their final rounds, some might be surprised by rather contradictory developments, which relate to the much discussed 2 degree threshold.

This limit aims to keep warming within 2°C of the pre-industrial average. While the emissions reduction pledges put forward by the countries ahead of COP 21 in Paris were not sufficiently ambitious to keep within this limit, in the final phase of the negotiations many countries wish for an even lower limit: below 1.5 degrees.

This comes at a time when two separate new studies in Nature Geoscience and Nature Climate Change challenge the 2 degree threshold. Reto Knutti (ETH Zurich, Switzerland) and his colleagues argue, that “no scientific assessment has clearly justified or defended the 2 degree target as a safe level of warming, and indeed, this is not a problem that science alone can address.” The authors have in fact said, that 2 degrees was a “value judgement”.

The term *value judgement* indicates that the scientific evidence is not the only factor at play when deciding a warming limit. With this in mind, it might be interesting to look at some findings of a recent study conducted by our Centre for Political Communication at Zeppelin University on the Framing of 2 degree in German Media during and after the Copenhagen Summit in 2009 until 2014 .

Expectations to reach a global 2 degree agreement were very high in the run-up to Copenhagen. That made perceived *failure* of this summit even higher.

With a content analysis of the coverage of 10 German news outlets from 2009 until 2014, we detected almost a third of all 1189 articles were published during the

2009 Copenhagen summit. After this peak, coverage steadily declines, except for some small peaks during the following summits. After Copenhagen these conferences are no longer seen as effective instruments to deal with 2 degree limit. We also could detect that the original positive assessment of 2 degrees in the media vanishes. Negative ratings are stable, but indifference and *climate fatigué* spread. Politicians backed away from the 2 degree debate after the failure of Copenhagen. German political factions in the Bundestag rarely speak about the issue. A real German debate is missing, except for some advances by the Federal Ministry of Environment and the German Chancellor.

By looking at the framing of the debate we could spot that 2 degree is primarily interpreted as an issue of *achievability*. Other prominent frames deal with the *definition* of the 2 degree limit and *climate diplomacy*. Achievability is defined by measures to achieve, by the possibility to achieve and by the necessity to achieve. It is also being used most frequently over the time and is combined with the demand that in order to stay within the limit emission reductions are needed. The achievability frame is being used most frequently over the time and rises when the coverage on 2 degree increases. There's also no hierarchical change within the frame usage over the time; both politicians and scientists address the *achievability*. While politicians refer to the issue, its necessity and the measures that must be taken, scientists assess the possibility and evaluate it is as hardly achievable given the current policies we have in place.

Keeping these results in mind, it is quite remarkable, that some politicians came up with a goal that is even more ambitious. We are very interested to see not only the results from Paris but also from the findings of our Framing study on the coverage of the Paris summit.

Note: I'd like to thank my colleague Jonas Kaiser with whom I conducted this study.

Civil Society Actors in the #Climatechange Debate

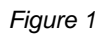
Stefanie Walter
December 13, 2015

During the past two weeks of the UN summit, we have read about the problems that civil society actors have faced in making their voices heard.

Following on from the November 13 Paris terror attacks protests and other public events were banned in the city. Under these circumstances, social media represent a means through which civil society organisations can stand up for what they believe in and receive public attention.

In this blog post, I want to take a look at the climate change debate taking place on twitter, and the actors participating in it. During the conference, I have collected tweets using Google Tags based on the hashtag #climatechange. The following preliminary analyses are based on tweets collected between 30th of November and 8th of December 2015.

The ten most active twitter users in the sample were: MercianRockyRex, BLUEdotRegister, ClimateWise2015, Denovo777, PlantsLoveCO2, NiliMajumder, ArBolivia1, neils_rt, EcoFashion2015, CircularEco. Among the most active users, the traditional big NGOs are not to be found. They nevertheless play an important role, when it comes to online conversations, i.e. being directly addressed, mentioned, and re-tweeted by other users. For the visual analyses below, I have taken a random sample of 10,000 tweets.



A word cloud visualization showing the relationship between various climate change related hashtags. The central and largest hashtag is #climatechange. Other prominent hashtags include #cop21, #actionclimate, #paris, #climatesummit, #globalwarming, #earthto paris, #obama, #tcot, #climateaction, #actionday, #gocop21, #climatemarch, and #climatechange. The background features faint green vine-like patterns.

Figure 2

Figure 2 shows the most popular hashtags used by the users in the network above. Of course, since the data was collected based on the #climatechange, it is

the predominant hashtag. Yet, hashtags calling for action, such as #climateaction, #actionday, and #climatemarch also play an important role in the debate.

Of course, it remains to be seen to what extent the social media activity of civil society actors has an impact on the outcome of the UN summit. However, during these last days of the conference, it has been civil society organisations, voicing the view, that the current options are insufficient.

As of last night Paris time, a deal was struck by nearly all nations represented at COP21 to limit warming to under 2C from preindustrial levels.

Reflections from Paris

James Painter

December 13, 2015

It has become accepted wisdom here that Paris 2015 is not Copenhagen 2009. This time, the US and China are on board; the price of renewables has dropped by more than half; the vast majority of countries have already pledged emission cuts and Paris is seen as a “staging post”, rather than a final destination.

But in one way at least, Paris 2015 is a re-run of 2009 Copenhagen. There are a staggering 3,700 ‘media representatives’ accredited in attendance, which is just short of the 4,000 (from 119 countries) present at Copenhagen.



COP21 Media centre 2015. Credit: Joe Smith

This makes these summits some of the most reported political events to take place globally. Some say that only the World Cup and Olympics attract more journalists.

The sheer volume of content which is produced on an array of platforms offers rich pickings for media scholars.

But the revolution – even since Copenhagen – in the way journalists (paid or otherwise) produce news, the content of that news, and how that news is consumed throws up significant research challenges.

Here are five issues I have been pondering while also following media reporting of the summit. Some of them have already been discussed in previous posts, and there are of course many more, nonetheless:

1. Changes in consumption: this year's Digital News Report from the Reuters Institute, based on interviews with 23,000 online users in 12 countries, clearly maps the rapid change in how people, and particularly those under 35, consume news. The smartphone has risen rapidly in most countries as the defining device for digital news with a disruptive impact on consumption, formats, and business models.

Then you have to throw in the rapid rise of video content, the role of social media like Twitter and Facebook in finding, discussing and sharing news, and the decline of print, and we have a very different media world from that of Copenhagen just six years ago. Print is now the main source of news for only between 6% and 12% of those surveyed, depending on the age group. For how long should we bother with print?



COP21 Media centre 2015.

Credit: Joe Smith

2. The arrival of new(-ish) players: the Digital News Report also charts the rapid rise of 'digital natives', based on social and mobile distribution. In the English-speaking world at least, Huffington Post, BuzzFeed and Vice are now significant competitors to legacy media brands, particularly for younger age groups. And they are investing heavily in other languages and their news gathering capacity.

All three cover the environment and climate change extensively, but in different ways. HuffPo relies extensively on blogposts, Vice on 'personal narration' video, and BuzzFeed on a mix of listicles, quizzes, photo galleries and irreverent content.

One challenge for researchers is how to analyse their content, when all of it is sent out via social media and is difficult to pin down via traditional search engines. Another is to assess whether these new sites verge into campaigning or advocacy journalism.

3. The increase in niche sites: Another major development since Copenhagen is the proliferation of niche sites on the climate or green issues, which have a profound influence over legacy media as a source and agenda-setter.

The list is extensive, but in the UK there is Carbon Brief, Business Green, Climate Home, the Energy and Climate Change Intelligence Unit (ECIU), some of them lead by former mainstream journalists. There are several in the USA, and many other countries have their equivalents.

For the journalist, campaigner, and climate change *aficionado*, these are invaluable sources of information. The decline of specialist journalism in some countries' legacy media may in some sense have been compensated by the boom in such sites.

4. New narratives: Have the dominant narratives or frames around climate changed, and if so how? A very impressionistic take on coverage from Paris suggests that there are significantly more stories about renewables, new technologies, and business opportunities.

Such stories are one indication of how media narratives about climate change may be becoming more about hope and opportunity, and less about the more traditional doom and gloom.

In part, this may be due to a realization that the transition to a low-carbon economy is inevitable, even though the pace of it is uncertain.

But for some media organisations like the Guardian, more messages of hope form part of a deliberate editorial policy driven in part by readers' wishes.

5. Sceptics and polarization: An obsession of mine I know, but one trend I am interested in is whether we have seen a polarization in the media along political lines in their editorial approach to giving presence to sceptics. It is probably true in the UK, but it may be true of the USA and Australia too.

One interesting and frequent observation here is that in Paris the sceptics have become more marginal. That's in sharp contrast to Copenhagen, when the 'Climategate affair' received considerable coverage, offering plenty of traction to sceptics particularly in the UK and USA.

These and other issues will be addressed in a new project the Reuters Institute is coordinating in six countries about the way new players like BuzzFeed, Vice and Huffington Post are covering environmental news. This includes climate change and the Paris summit – and how these relative newcomers differ from legacy players.

It should provide some insight into the ways the media landscape at Paris 2015 is indeed not that of Copenhagen 2009.

Two weeks on Twitter: COP21, smoking heads and tweets from outer space

Adrian Rauchfleisch
December 14, 2015

When 196 nations met in Paris for COP21, the event naturally attracted global attention. It also fostered transnational debates on Twitter.

The Internet and more specifically social media enable many-to-many communication without the limitations of physically doing so, e.g. having to convene in one geographical location. I wanted to find out the extent to which COP21 had “gone global” on Twitter. Besides this rather specific question, I was also interested in the general impact of COP21 on Twitter.

Over the last two weeks, I tracked all tweets containing the keyword ‘COP21’ in their text. In total I captured 4’505’988. In terms of tweet volume it was a good start for the conference. On Monday the volume reached a first peak of more than 55’000 tweets in one hour (see Fig. 1)[1]. Twitter extra created new emojis for the Paris Climate Conference: Whenever a user used the hashtag #COP21 the logo was automatically shown in the tweet.



@twitter has created new emojis to mark the beginning of the UN Climate Conference in Paris. #COP21

.@twitter has created new emojis to mark the beginning of the UN Climate Conference in Paris. #COP21

Übersetzung anzeigen

#Cop21 🌱
#GoCop21 🌱
#Actionday 🌍
#Climatechange 🌍

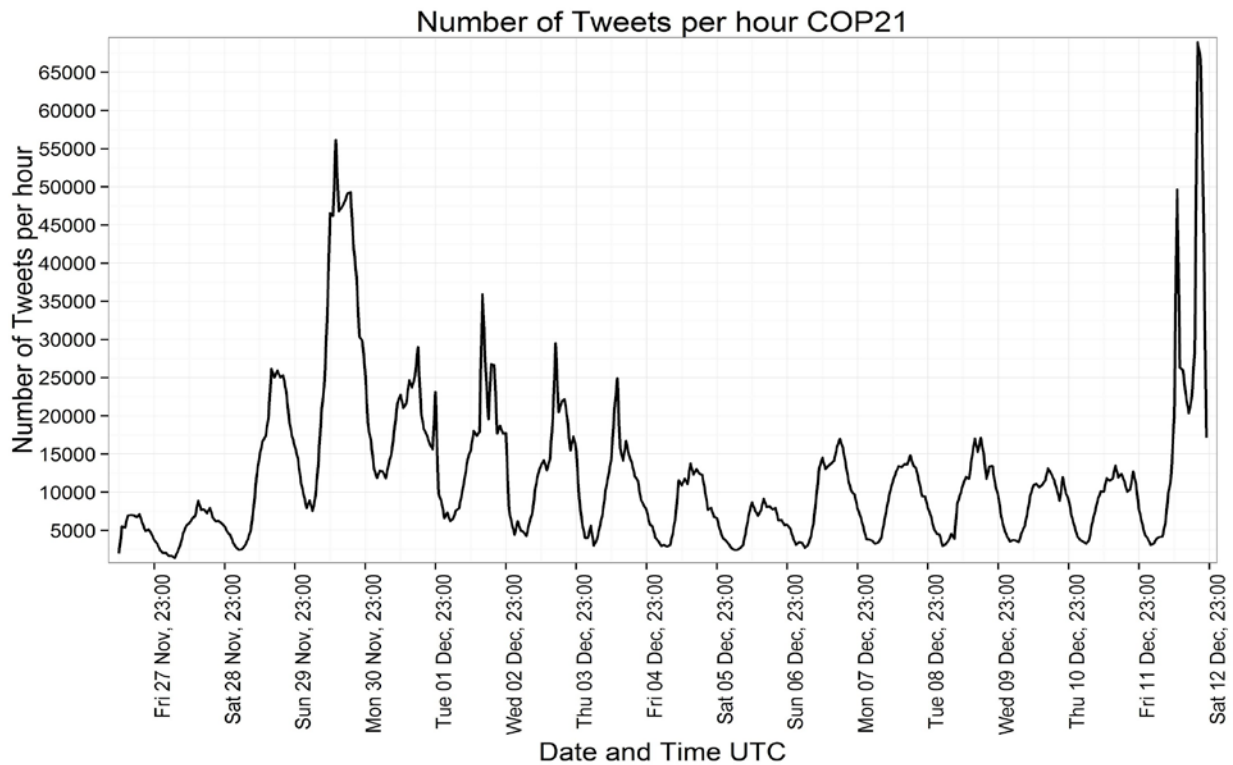


Fig. 1: Tweet volume per hour of tweets containing 'cop21'.

During the first week the tweet volume went down compared to prior to the conference. In the second week the tweet volume was almost as low as pre-conference levels. However, on Saturday with the announcement of the Paris agreement, Twitter exploded again more than 65'000 Tweets in one hour.

Two weeks between #climatemarch and #parisagreement

With such a large data set, many aspects can be analysed. As Warren Pearce has shown in his blog post, a typical analysis can focus on the hashtags being used in tweets. As a first step, I also focused on hashtags contained in tweets, but I was ranking them based on the number of unique users who used the hashtag. The number of times a hashtag appears in a tweet can sometimes be misleading, because a hashtag might be only used by a few bots (machine controlled accounts) that constantly tweet.[2] Not surprisingly #cop21 was the most used hashtag before #climatechange and #climate (see Fig. 2).

On the one hand the hashtag #climatemarch was popular on 29. November just one day before the start of the conference in Paris (see Fig. 3). On that day the NGO AVAAZ organized a global climate march in many cities around the world in order to put pressure on leaders before the start of the conference. Only on that day the hashtag was trending.

On the other hand #parisagreement was popular on 12 December when the first draft of the agreement was published and peaked after the announcement of the final agreement at the end of the conference.

Automatic replies from a bot

Overall most tweets were retweets (63.7%) followed by single tweets (29.7%) and replies (6.6%).[3] Only in the first week during specific hours replies had a higher volume than single tweets and retweets (see Fig. 4). On closer examination it becomes evident that most replies were sent from @COP21Direct an account extra created for a Twitter campaign: If enough users per day use #COP21 in their tweets a 3D printer in Paris would print the logo of COP21.

@COP21Direct sent automatic replies with a link to the video stream covering the printing process to all users that used the hashtag. Every day the printing process could be observed over a live stream.

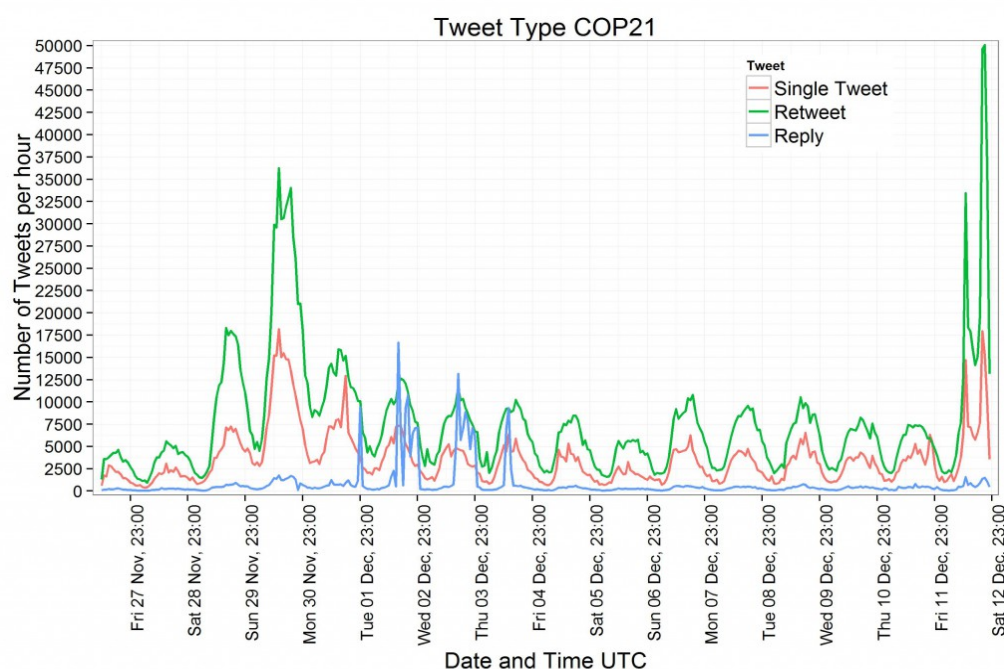


Fig. 4:
Tweet type
volume per
hour.

Tweets from outer space

Among the most retweeted users were the usual suspects such as Leonardo DiCaprio, the White House, Narendra Modi, the Dalai Lama and François Hollande. None of them were the most retweeted though – that honour went to Scott Kelly an astronaut who currently serves as Commander of the International Space Station.

The second most retweeted was from a Japanese journalist who took a picture of a public ad in Paris.

Some users quickly questioned if it is an official poster of www.solutionsCOP21.org, but the journalist thought it is a legit one, because it has the official logo of COP21 in the upper left corner. A user finally directs him to the webpage of Brandalism: artists in Paris used fake ads to protest against the corporate sponsorship of COP21.



Scott Kelly @StationCDRKelly · 30. Nov. 2015
From space we are privileged to see the beauty of Earth but also our impact on it's environment.
#COP21 #YearInSpace



Akiyoshi Komaki 駒木明義 @akomaki · 29. Nov. 2015
COP21が開かれるパリ北方の街頭に掲げられたポスター。



Thanks to Twitter this local protest even reached the Japanese Twitter sphere.

COP21 as global event on Twitter

The analysis of the retweets already exemplifies the potential of Twitter to connect users around the world. In a next step I focused on the geo location of the users. The location of a user can possibly be determined with geo tags, but only few users are using them. In my data set only 0.1% of all Tweets contained a geo tag. Still, the location field in user accounts can be used to identify the exact location of a user. Users can freely choose what text they want to enter in this field. For every unique user (937'613) in the data set text from the location field was compared with a data base of cities and countries.[4] For 34% of all users the coordinates could be identified with this method (See Fig 4.).

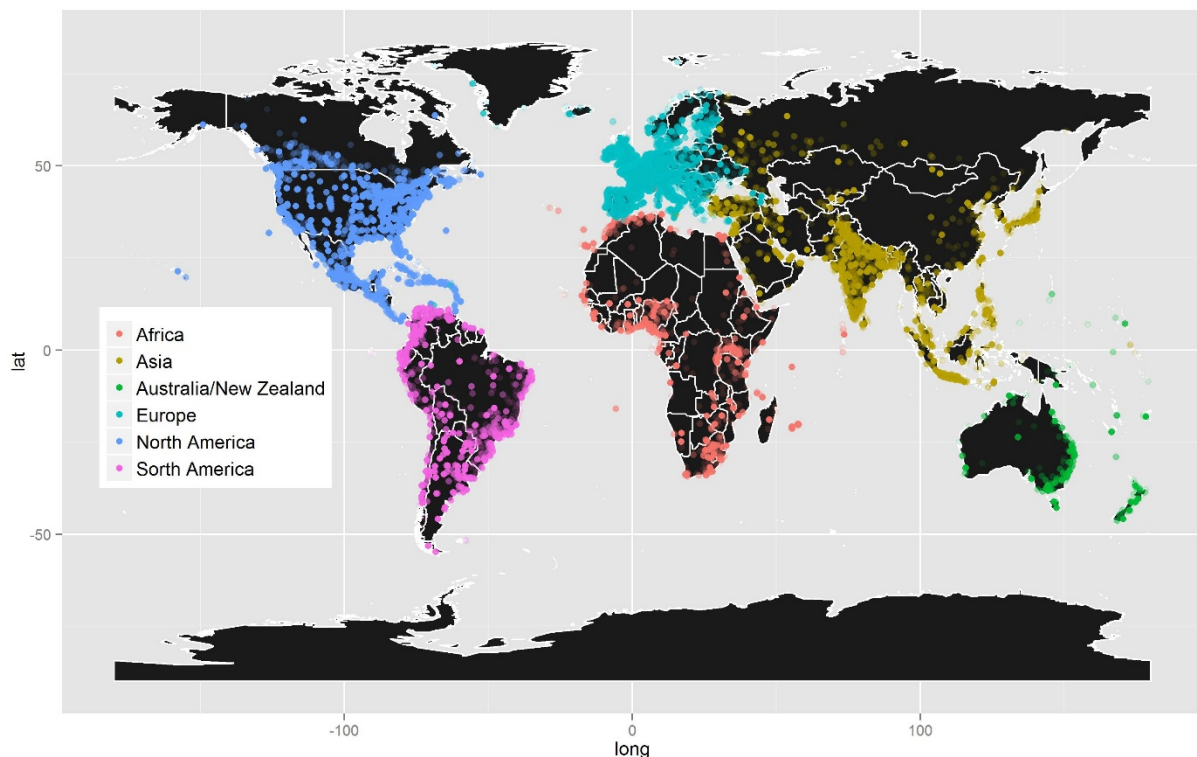


Fig. 5: The denser the colour, the more users are from the same city or country.

The analysis shows that users from all around the world tweeted about COP21. Around 16% of the users were identified from the USA, 15% from France and around 9% from the UK. Users from India (3%) were also well represented. Overall users from almost 200 different countries could be identified.

The same can be observed with the language of the tweets. Twitter automatically detects the language of a Tweet. Around 52% of Tweets are in English, 27% in French, 10% in Spanish and around 2% in Japanese.

Insights

First of all, Twitter typically reflects the real world events around COP21. The hashtags clearly indicated when the climate march took place and when the Paris agreement was finally reached. Secondly, during the event many different methods of digital campaigning were used such as live streams, flooding twitter with the help of bot accounts and online campaign pages asking users to send a tweet to leaders. [5] Thirdly, COP21 is also a global Twitter event: Users from all around the world were tweeting about COP21. Nowadays it is even possible to send Tweets from outer space back to earth.

[1] The data collection, analysis and visualization in this blog post were all done in R.

[2] In my data set this was the case with #sassousi, a hashtag in reference to the Congolese president Denis Sassou Nguesso. The hashtag has been used 56'206 times by only 319 users. A good example of such a bot account is @JeVoteNon.

[3] The low number of replies in the data set can be explained with the sampling process. Tweets about cop21 often attracted replies but users writing replies usually did not mention cop21 again in their replies because the topic of the conversation was already clear. The same holds true for hashtags. Users use less frequent hashtags in their replies than in single tweets.

[4] This analysis is based on a modified version of code from Jeff Leek: <http://biostat.jhsph.edu/~jleek/code/twitterMap.R>

[5] WWF Indonesia for example created a page that helps to automatically generate a tweet in which a user can address a global leader. Such a page might be used for a good cause but it is a questionable practice and falls into the category of digital astroturfing.

What can Google Trends tell us about COP21?

Bastian Kiessling
December 15, 2015

COP21 in Paris ended on Saturday night with a global pact to reduce emissions and keep global warming below two degrees.

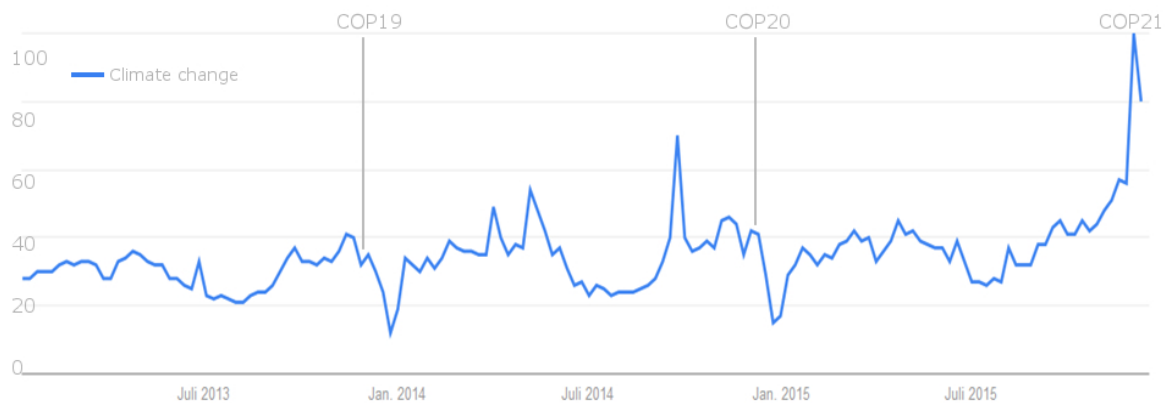
It was the first time that all 196 participating countries agreed on such a deal and as such now is a good time to reflect on the eventful two weeks.

While it is too early to be enthusiastic, from my perspective the Paris agreement is an important and essential step in the right direction. Many scientists see the agreement as a surprising success but they leave to us whether this “historic achievement” (Lord Stern) will be a binding contract for the future. For that to occur, at least 55 parties which produce over 55% of the world’s greenhouse gasses, must become party to the agreement.

This post will examine possible directions the debate will shift in the coming years. I will not analyse and reflect the media coverage from COP21. My focus is on public attention over time, based on data from Google Trends. Google Trends is a public web facility that provides information how often a specific search-term is entered into the Google search screen relative to total search-volume. The data is presented as a score between 0 and 100.

Google Trends cannot present an absolute number of queries but the search interest could be seen as an indicator for public attention on different topics or terms. However we should interpret the data carefully and should use the tool more like a starting point for research in the field of communication science.

Figure 1 (below) shows the search interest for the term *Climate change* over the past three years.



We can see some ups and down in 2013 and 2014 but overall the attention stays at a low level. On the right end of the figure, with the start of the COP21, the search interest reaches its maximum. We can therefore reasonable assume that the conference in Paris had a big influence on the public interest about climate change. If we look back on the past climate conferences in Warsaw (11.11-23.11.2013) or Lima (01.12-12.12.2014) we cannot see any attention peaks. Here we can ask, for example, if the public agenda is more affected by the event itself or the media coverage which usually increases during the events? Further, we should look at what other factors influence Google Trends? Figure 2 shows a comparison for the search terms *Climate change* and *Paris agreement* for the last seven days.



We can observe a rise of the search-interest for both terms in the crucial period of the conference. The public started to google Paris agreement with the

beginning of the last day of the conference just after the participants defined this term and also after the announcement that an agreement between the participating countries is realistic. These developments also affected the public attention for climate change in general. The decreasing search interest at the end of the conference could be explained with the issue attention cycle. Climate change will be replaced at the center of public awareness by different issues like the conflict in Syria or the refugee crisis.

Journalism at the frontlines of civic action

Anabela Carvalho
December 15, 2015

On Saturday morning the COP went past its scheduled finishing time. With successive postponements of the release of the agreement text (which what was going to be, in all likelihood, a watered down, strategically vague version of what the world needed) I found myself wondering what to do.

Having been all week at Le Bourget conference centre as an observer representing the International Environmental Communication Association, I decided to spend that day on the other side of history, the side of the citizens in the streets of Paris who defiantly organized several demonstrations to express their resolve in struggling for a better planet (eventually authorized by the police the day before).

After being prevented from exiting at my intended metro stop (“closed for security reasons”) and then forced to change plans again as buses modified their routes because of the “manifs”, I was lucky enough to walk right into the frontline of a demonstration.

I was at first curious to check how many journalists were present. There were plenty of cameras but I could only see a couple that looked professionals. I soon realized one belonged to *RTP*, the Portuguese public service television. A journalist and cameraman were talking to someone I knew and I ended up being recruited to speak live at the start of one o'clock news as “an observer of the COP”. I hesitated for a bit. I had gone to the demonstrations as an anonymous citizen of a globalized world, one more body to engross the demand of respect for “red lines” (a strong activist icon at this COP), and was now pushed back into my other identity, which I thought I had left behind at Le Bourget.

I was proud to see my country's public TV awarding much visibility to "civil society" in the stories told about climate change but worried about the kind of image of the day that was going to be constructed.

Two weeks earlier, on the 29 November, the day of the Global Climate March, I had seen that same television company change their normal programming in *RTP1* (their main, generalist channel) to connect live to the activists-police clash in the Place de la République in what appeared to be alarmist and sensationalist journalism coverage. There were the police shields, metal barriers and pepper spray; all the usual ingredients of the usual "activism-as-violence" narrative.

As many studies (and our own experience as media consumers) suggest, the "violent protest" frame often subsumes any other layers of meaning and modes of affirmation of citizenship. That media imagery is likely to impact on social representations of activism and of activists, and conduce many people to distance themselves from such practices and profiles. It may even promote disengagement with public causes and claims.

In the evening news of *RTP1* on 29 November, those stereotypical images had opened the coverage. President François Hollande spoke of "disturbing elements", who were "there to create incidents, not for the climate". Viewers were told that protesters confrontations with police had resulted in arrests and a few wounded people. To be fair, there was also a good amount of space given to the Marches in Portuguese cities (and worldwide), with constructive interviews of some participants. I looked at the news in other public service broadcasters such as *BBC World*, *Deutsche Welle* and *France 24* and found some references but few outlets placed much emphasis on the "violent protests" (it must be noted that this comparison is not fully adequate as unlike *RTP1* these are "news-only" channels and they may have changed their reporting throughout the day).

Back to last Saturday: As I walked with RTP's crew ahead of the demonstration, I kept wondering about the thought process behind the symbolic construction of the footage of protesters that occurs at different levels of the journalistic and editorial hierarchy within a public service broadcaster. I also thought about what I was going to say and what persona I was going to take up in the screens of one of the biggest channels back in Portugal. There was the "me, the citizen" that was frustrated and had political claims to make. But that was not what the journalist wanted me to speak as. There was the "the academic" side of me that could make a "cooler" analysis of the situation. But an analysis of what? I am a communications scholar and that was not what the journalist wanted me to speak as/about. She wanted me to talk about the agreement. So the "the observer" side of me kept thinking about the observer communities back at the COP and what they thought about draft versions of the agreement.

The UNFCCC awards observer status to multiple types of organizations: business and industry non-governmental organizations (BINGOs), environmental non-governmental organizations (ENGOS), local government and municipal authorities (LGMAs), indigenous peoples organizations (IPOs), research and independent non-governmental organizations (RINGOs), trade union non-governmental organizations (TUNGOS), farmers and agricultural non-governmental organizations (Farmers), women and gender non-governmental organizations (Women and Gender) and youth non-governmental organizations (YOUNGOS). The nine UNFCCC "constituencies" have, obviously, widely diverse views in many regards. Plus, each of them is a loose group of actors with multiple perspectives and preferred discourses. Furthermore, observers to the COP are not the same as observers to elections: they are there to try to influence the outcome in one way or the other even though they are given very little voice in the process.

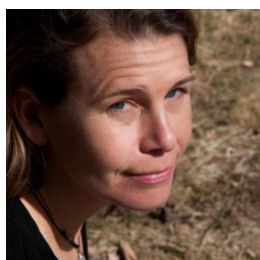
I had gone to side events and press conferences by different types of observers throughout the COP and heard the frustration of many of them towards the emerging text. However, RINGOs (the constituency I was part of through IECA), were supposedly not advocating a particular outcome, a non-position that makes me wonder whether all of its members identify with it.

Coming back to my live interview, I didn't have long to reflect upon which observer identity to take up. The microphone was in front of me for a predictably short time after references to a "report" of a girl "beaten up" by the police (which the journalist did not appear to be well informed about) and to the police helicopter up in the air. I ended up sounding more like the academic than a citizen but inserted cautionary "observer" points just before the helicopter was mentioned again.

That evening I watched *France24* for several hours, anticipating the celebratory, triumphalist tone and the symbolic dividends that France was going for.

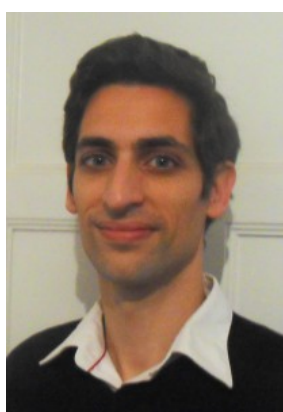
There was nothing about the large, peaceful demonstrations that had taken place a few hours earlier. Looking at the websites of other public broadcasters the story was pretty much the same.

ABOUT THE AUTHORS



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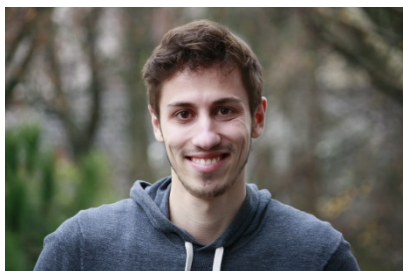
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Felix Schreyer is a master student in Integrated Climate Sciences at the University of Hamburg. He has an academic background in Physics of the Earth and Philosophy. During his undergraduate studies he wrote for the student newspaper Der Albrecht. He likes to think about how society shapes climate and climate shapes society.



Fenja Schmidt works as a research assistant and doctoral student at the chair of Prof. Brüggemann in Hamburg. During Paris' climate conference, she will coordinate the "Down to Earth" study about the audience's perceptions of news from the conference. Aside from her scientific activities, Fenja has been working as a freelance journalist. She tweets as @Fen_Ja.



Gesa Luedecke is an environmental scientist with a Ph.D. in Sustainability Sciences from Leuphana University. She is a current postdoc at the CIRES Center for Science and Technology Policy Research at the University of Colorado in Boulder. She has ongoing interest in climate change and sustainability communication via media, and is involved in the Media and Climate Change Observatory lead by Max Boykoff. Her research also focuses on the influence of media communication about climate change on individual behavior.



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James Painter is Director of the Journalism Fellowship Programme for the Reuters Institute for the Study of Journalism at Oxford University. He also teaches a MSc module on the media and the environment at the School of Geography. James writes regularly about climate change in international media, often speaking at major international conferences for academics, journalists, policy makers and scientists. He is the author of four RISJ publications: the most recent being: *Disaster Adverted? Television Coverage of the 2013/4 IPCC Climate Change Reports* (2014).



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Joost de Moor is a 28 year old Dutchman living in Belgium. For the past year, as part of his PhD in political science at the University of Antwerp, he's undertaken a case-study into the mobilization of the climate movement around the Paris summit. Joost will attend the summit for the entire two weeks and observe protesters participating in various forms of civil disobedience and action. He will share his thoughts and experiences about climate action with *Climate Matters*.



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Reiner Grundmann is Professor of Science and Technology Studies at the University of Nottingham (UK). He has a long standing interest in issues about sustainability and global environmental problems. His research explores the relation between knowledge and decision making, the role of expertise and public discourses, and comparative media analysis across countries and issues. He is a co-author of the Hartwell Paper for a reorientation of climate policy and blogger at Klimazwiebel. He tweets as @ReinerGrundmann.



Sara Nofri lives between Arezzo and Hamburg. She is a researcher, an entrepreneurial linguist, a consultant, media analyst, family person and foodie. She has studied in many countries including Italy and in Germany and is a polyglot. Her focus is on analysing and comparing environmental communication, especially from a cultural perspective.



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Warren Pearce has been Research Fellow on the University of Nottingham's *Making Science Public* programme since 2012. His research focuses on the changing meanings of knowledge as it moves between science, publics and policymakers, and the political implications of such changing meanings. He has applied this research agenda across a range of significant contemporary case studies, including climate change communication and policy. He tweets at @WarrenPearce



CLIMATE MATTERS
RESEARCHING SCIENCE AND
CLIMATE COMMUNICATION



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