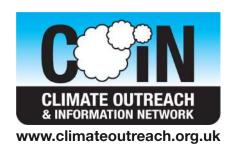
Science & Stories

Bringing the IPCC to Life





About COIN

The Climate Outreach & Information Network (COIN) is a charity that engages people from different backgrounds to understand and take action on climate change. We have established a reputation as leading specialists on climate change communication, and we work to develop meaningful narratives about climate change that engage a wide range of different people and organisations. Using our unique position as a bridge between research and practitioners, we translate academic knowledge on climate change communication and tailor it to the needs of a wide range of audiences, including NGOs, policy-makers and community groups. Through research, consultancy, training and workshops we disseminate the most effective methods of communicating about climate change.



About the authors



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Christel van Eck

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Executive summary

Combining COIN's climate change communication expertise with a series of 16 interviews with leading figures from the UK media and civil society – experts on translating the science of the Intergovernmental Panel on Climate Change (IPCC) for their audiences – this report asks what the IPCC process would be like if it was designed to catalyse a political and public response proportionate to the scale of the climate change challenge.

For almost 25 years, the IPCC has released regular reports warning the world of the dangers of climate change. The scientific knowledge that has been accumulated over this time is astonishing in its breadth and scope, and the IPCC is the central reference point for policy makers, the media and campaigners wishing to communicate about climate change to the general public.

In addition to its primary audience of policy makers, the IPCC also seeks to reach secondary audiences, including the wider public. But are its strategies working? In the UK, where policy makers have accepted the IPCC's conclusions and recommendations for more than a decade, public engagement with climate change has regressed since the mid 2000s and the political consensus has begun to unravel.

Our argument is not that the IPCC is failing in its role of presenting facts about climate change to policy makers, but that this role reflects an outdated model of how science is incorporated into society, and how social change occurs. Catalysing a proportionate political and public response to climate change means rethinking how climate change is communicated: from science to human stories.

In this report we ask what would the IPCC process be like if it was designed to catalyse a political and public response proportionate to the scale of the climate change challenge? Our suggestions are based on interviews with 16 leading climate change communication experts from the media and NGOs in the UK and combined with the latest climate communication research understandings

We make a series of seven recommendations. Some could be easily implemented; others would be organisationally transformational for the IPCC. We argue that IPCC outputs must be coupled with human stories and powerful narratives which can bring the science to life. In addition, by reorienting and restructuring the IPCC – so that it provides science 'on demand', tailored to the needs of different audiences and stakeholders – its relevance and influence could drastically increase.

These are not challenges that the IPCC can meet on its own. There are practical, political and financial barriers which limit what the IPCC can hope to achieve. But by working with a range of partners who can lend cultural credibility to the scientific consensus they convey – voices and groups from across the social and political spectrum – the findings of the IPCC can be brought to life.

Interviewees

Adam Vaughan - Deputy editor of Guardian/environment

Alister Doyle - Environment correspondent at Reuters News Agency

Becky Buell - Founder and Director at Meteos

Marloes Nicholls - Project Manager, Finance and Climate Change at Meteos

Christian Teriete - Communications Manager at Global Call for Climate Action

Fiona Dear - Coordinator of the Climate Coalition

Fred Pearce - Environmental journalist and author of the book The Last Generation: How nature will take her revenge for climate change

Geoffrey Lean - Environment correspondent at The Daily Telegraph

George Marshall - Co-founder of the Climate Outreach & Information Network

Helen Collinson - Senior Public Advocacy Advisor at Christian Aid

James Painter - Head of the Journalism Fellowship Programme at the Reuters Institute for the Study of Journalism, and author of the book Climate change in the media: reporting risk and uncertainty

Leo Hickman - Chief Adviser on Climate Change at WWF UK and former environmental journalist

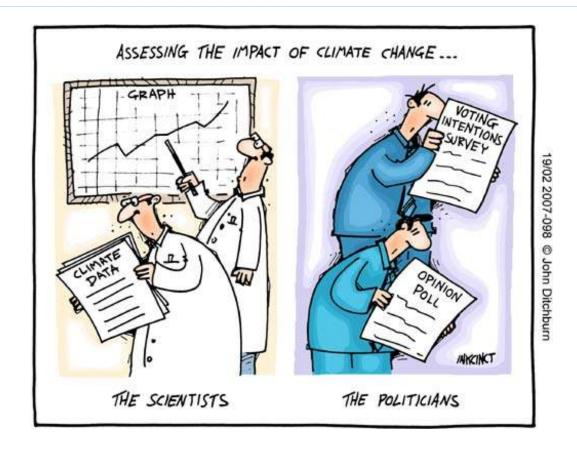
Louise Gray - Former environment correspondent at The Daily Telegraph

Malachi Chadwick - Content and ommunity manager at 10:10

Mike Childs - Head of Policy, Research and Science at Friends of the Earth England, Wales and Northern Ireland

Nick Comer-Calder - Director of Climate Media Net

Richard Black - Former environment correspondent at the BBC



Summary of recommendations

Ease of implementation

1. Invest in communications

EASY

An enhanced communications budget would provide more resources for the IPCC's existing communications team to expand their role and reach, and to train some of the hundreds of scientists involved to communicate more effectively

2. Embrace video content and social media

EASY

With an enhanced communications budget and a group of scientists with focused communications training at their disposal, the IPCC could significantly expand into a broader range of communication channels that it currently makes only very limited use of.

3. Show the human face of the IPCC

MODERATE

The IPCC has excised virtually all evidence of human life from its publications. One way of bringing the IPCC to life would be to show the (many) human faces of the IPCC - the scientists who give their time and valuable expertise - and tell their personal stories.

4. Work with a diverse range of partners

MODERATE

The IPCC should work with a range of partners from across the social and political spectrum who can lend cultural credibility to the scientific consensus they convey and bring the science to life.

5. Tell human stories about climate change

MODERATE

IPCC outputs must be coupled with human stories and powerful narratives which can bring the science to life. How will climate change affect the things people love?

6. Test everything

MODERATE

Any recommendations for communication should be grounded in systematic testing.

7. No more Assessment Reports

DIFFICULT

- deliver science to 'order'

If the IPCC were structured in order to catalyse a proportionate public and political response to climate change, the Assessment Reports would be turned on their head and would start from the needs of their audiences. These audiences would be defined by their capacity to bring about rapid social, technological and economic change.

What is the IPCC?

Compiling, collating and synthesising publications from dozens of scientific disciplines and distilling all of this into a format that policy makers from across the globe can use as the basis of their national policies on climate change is a phenomenal, painstaking and noble undertaking.

The Intergovernmental Panel on Climate Change (IPCC) is an unusual organisation. Since being founded in 1988, its purpose has been to "prepare, based on available scientific information, assessments on all aspects of climate change and its impacts, with a view to formulating realistic response strategies" (IPCC, 2014). It has a small core secretariat, a revolving cast of scientists and expert reviewers, an elected Chair, and is funded by the United Nations Environment Program, the World Meteorological Organisation and its own Trust Fund (through which it solicits contributions from governments).

For almost 25 years, the IPCC has released regular reports reviewing the risks, causes and predicted impacts of climate change, as well as possible societal responses. The body of knowledge that has been accumulated over this time with 2014 witnessing the release of the fifth Assessment Report (AR5) - is astonishing in its breadth and scope. Correspondingly, the IPCC is the central reference point for policy makers, the media and campaigners wishing to communicate about climate change to the general public

Since 2010 it has had a small communications staff, and in addition to its primary audience of policy makers, the IPCC also seeks to reach secondary audiences (including the wider public, the business sector and NGOs) with "timely and audience-appropriate information...both proactively to communicate reports, and reactively in response to questions or criticism" (IPCC, 2012)

Michel Jarraud, Secretary-General of the World Meteorological Organisation, described the conclusions of AR5 as "the most solid evidence you can get in any scientific discipline", with more than 12,000 peer-reviewed studies reviewed for its publication (McGrath, 2014).

How does the IPCC communicate and what are the challenges?

Having the extra responsibility of communicating effectively with wider audiences - including members of the public - is a significant additional undertaking, the difficulty of which should not be underestimated. There are signs that the IPCC's approach to communication and public engagement are changing, and these changes are for the most part welcome. But there is a great deal more that could be done, without the body compromising its scientific reputation.

With a very limited budget, the IPCC has begun to make progress in communicating more effectively. But the communication strategies of the IPCC have been criticised from multiple perspectives. In this report, we do not seek to add to the barrage of complaints that the IPCC has faced, but rather to act as a critical friend.

To be clear: the primary audience for the IPCC is currently policy makers and the IPCC's outputs are not currently designed to act as communicative tools for directly engaging the public. But in this report we argue that they should be. Here we highlight some of the main challenges and in the next section we ask what would the IPCC process be like if it was designed to catalyse a political and public response proportionate to the scale of the climate change challenge?

Structural challenges

Firstly, the structure of the IPCC causes problems. Any official statement on behalf of the IPCC must pass through a convoluted process in which the summaries for policy makers are agreed line-by-line, and contributors are sworn to secrecy until the final draft is complete. However, because participating in the IPCC process as an 'expert reviewer' is open to almost anybody, drafts of the reports are almost always leaked. Several experts who we spoke to for this report suggested that the inability of contributing authors to comment on leaked drafts can make the organisation appear closed and non-transparent. Alister Doyle, Environment correspondent at Reuters, commented that:

"The whole IPCC seems to be shrouded in a great veil of secrecy when it is not really. It is quite an open process."

The remit of the IPCC also produces tensions, which affect its communication with the outside world. The IPCC seeks to produce (in its own words) 'policyrelevant' but not 'policy-prescriptive' information. But as George Marshall, cofounder of COIN points out, these are very fuzzy concepts, which position the IPCC precariously in terms of what it can and cannot communicate about. So, while it has regularly assessed national emissions of greenhouse gases, it has never produced an inventory of fossil fuel production (that is, the source of the emissions themselves).

"The IPCC decided that they cannot talk about fossil-fuel production. They can only talk about gases...although of course fossil fuel production is an essential part of climate change, they don't discuss it because that would be policy. It would be political."

Using the most effective language

The language that survives the long process of approving official texts becomes critically important for framing subsequent understanding of the science by politicians and other audiences. But while the resulting text is accurate and politically acceptable, it tends not to be well suited to the purpose of clear, concise communication. For a start, it is not clear that IPCC outputs – even the ones specifically aimed at particular audiences – are in fact widely understood. As Richard Black, former BBC Environment correspondent puts it:

"Let's be honest, if you put the summary for policy makers in front of most members of most parliaments, they wouldn't really have a clue what you were talking about because it is technical language, scientific language, economic language and a lot of jargon."

There was also a general sense among the experts we spoke to that the IPCC did not make it easy for the media to identify key messages, or aspects of the science that had changed or developed since previous assessment reports. Louise Gray, a freelance journalist who previously covered environmental issues at The Daily Telegraph, said:

"It's a noble body. It is doing something profound and important. But as a journalist it is quite impenetrable. The reports are difficult to read and the Secretariat's office is quite difficult to get hold of. And when you do, they tend to speak in very scientific terms, which are very difficult for journalists to interpret for the public."

However, as Mike Childs, Head of Policy, Research and Science for Friends of the Earth argues:

"The IPCC is between a rock and a hard place. If they do simplistic stuff they will be criticized for being simplistic. And if they do complex stuff they're criticized for not communicating simply. And actually what they have got to do, they have got to communicate accurately. If they can do that in a simple way, then fantastic, but if they can't communicate accurately in a simple way, then they should not communicate in a simple way I think. Otherwise they would lose their credibility."

There are well-documented, generic difficulties in communicating the uncertainty inherent to climate science – and the IPCC experiences these particularly acutely (InterAcademy Council, 2010). When a team at the department of psychology at the University of Illinois tested the language used in the IPCC reports, they found that people severely underestimated the probabilities that the IPCC intended to communicate. The IPCC uses the term 'very likely' to mean a chance of over 90%, but three quarters of the lay readers put the odds far lower, some as low as 60% or less even when they had the official IPCC definitions of these terms to hand (Budescu, Por & Broomell, 2012). Other research has shown that there are

substantial cross-cultural differences in the way that people understand the IPCC's probability statements, for example between China and the UK (Harris et al, 2013).

Signs of change

There are signs that some of the lessons from social science research are being taken on board. In particular, there has been a notable shift from 'uncertainty' to 'risk' language, something which some communication experts have been advocating for several years (Pidgeon & Fischhoff, 2011; Painter, 2013). Put simply, because people are more familiar with the concept of risk – from everyday situations involving insurance, for example – it offers a richer vocabulary than the alienating language of uncertainty.

At a recent press conference, IPCC co-Chair Professor Chris Field said that climate change was first and foremost a challenge of risk management. The opening line of the video accompanying the report was "climate change is a challenge in managing risk". Writing for Carbon Brief, James Painter (of the Reuters Institute for the Study of Journalism at Oxford University and one of the people who has argued strongly for climate change to be reframed as a risk issue for policy makers) suggested that the IPCC's shift to describing climate change in the language of risk was an important sign of progression – and a signal that ill-fated 'doom and gloom' messaging was no longer viewed as an appropriate communication strategy.

Like reframing uncertainty as risk, the avoidance of messages which emphasise catastrophe has long been a recommendation of climate change communication experts (e.g., CCCAG, 2010). A particularly clear example of the IPCC seeming to take this message on board is an interview with Chris Fields by the Telegraph newspaper, which was headlined "Look on bright side of climate change, says IPCC report author". In it, Fields is quoted as saying:

"One of the things that made it so difficult for individuals and countries to be serious about climate is that the agenda is such a downer. If climate change is a total downer because everything looks so serious, and the only ways to cope effectively are to give up all good things in life, it's going to be really hard to take action. If dealing effectively is taking an innovative, creative, entrepreneurial approach, building great businesses and communities, then it's a problem that we can deal with."

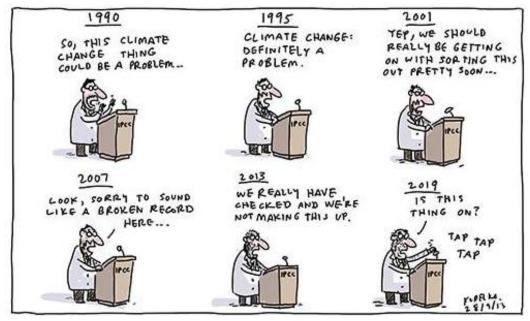
This kind of optimism is not usually associated with the IPCC – and given the magnitude of the problems set out in their reports, this is unsurprising. But Fields appears to have taken a deliberate decision – seemingly part of a coordinated shift in communication strategy – to avoid the language of catastrophe altogether.

Bringing the IPCC to life

There is a troubling contrast between the amount of effort and energy given over by scientists to the IPCC process and the payoff in terms of political capital or public engagement.

Do we need 'more science'?

The Australian journalist Graham Readfearn recently referred to the 'hellish monotony' of the IPCC, pointing to the remarkable similarities between the first report released in 1990 and the most recent in 2014. To put it bluntly, the science hasn't made all that much difference. Despite all the rebuttals of sceptics' arguments, and the 'myth busting', public opinion is no further advanced than it was when the IPCC first started producing its' Assessment Reports.



No-one is listening by Jon Kudelka

The idea that 'more science' will lead to 'better decision making' has itself been thoroughly discredited by social scientists (Kahan et al, 2012). It is now well-established that values and worldviews determine how people engage with climate change (Corner et al, 2014). Yet, the belief that increasing statements of certainty from scientists will lead to more ambitious political action and public support persists. The lesson from social science is not that the facts are unnecessary, simply that they are insufficient. Our argument is not that the IPCC is failing in its role of presenting facts about climate change to policy makers, but that this role reflects an outdated model of how science is incorporated into society.

Effectively communicating climate change means confronting a fundamental tension: between the norms of scientific practice on one hand and the need for communication strategies that actively engage with the values of different audiences on the other. The IPCC is a group of scientists, and is understandably

reticent to venture into specific policy debates or advocate for particular outcomes. But public engagement is predicated on engaging with the values of different audiences. So although a substantial body of social science research on climate change communication has built up over the past two decades little progress on public engagement has been made despite there being a range of well-supported findings with clear, practical implications for engaging the public (Talking Climate, 2014).

The limits of reframing uncertainty

One recommendation that the IPCC does seem to have taken on board is the idea of reframing uncertainty as risk. This is important, but there is also only so much that refining our communication of risk will achieve - because while accurately conveying the uncertainties inherent in climate science is a laudable goal, the single biggest uncertainty in climate models is 'us' and how much carbon we emit. Procrastination over uncertainty is a consequence of other factors - a clash between the framing of climate change policies and people's values, and politically motivated reasoning. Our existing political beliefs have a far greater influence on people's views about climate change than the error bars on scientists' graphs (Kahan et al, 2012).

Uncertainty about the science is likely to dissipate in the face of meaningful engagement with effective climate solutions (Patt & Weber, 2014). When people feel inspired by the answers to climate change, they no longer see uncertainty about future predictions as the central question. But the longer the climate discourse is mired in the intricacies of uncertainty, the less likely it is that this kind of transformation will take place. It is a difficult message for scientists to take on board - the careful communication of uncertainty is a central plank of their training.

But, the evidence that the barriers preventing effective climate policies reside primarily with us (rather than the uncertain predictions of climate science) continues to grow. And the focus on finding the perfect method of communicating uncertainty may in fact be simply reinforcing the sceptics' framing of the problem. We should not expect the improved communication of climate science - whether as risk or uncertainty - to do much on its own to shift public views. Instead, the IPCC must start from the needs of its audiences, translating the science into stories that people can relate to (about the scientists who comprise the IPCC and the people who are already impacted by climate change).

Recommendations

The remainder of this report shows how applying climate change communication research can aid the IPCC in achieving its mission of engaging 'secondary' audiences. Our recommendations are based on combining the practical experience of the interviewees with existing social science research. Some could be easily implemented; others would be organisationally transformational for the IPCC.

1. Invest in communications

EASY

The IPCC has a small communications staff, a limited budget, and only a partial remit to communicate beyond specialist policy circles. As Nick Comer-Calder, Director of Climate Media Net, puts it:

"Probably like any other number of specialist organizations that have a particularly technical task to fulfil, they put all their resources to fulfilling that technical task, but are under-resourced when it comes to communicating the meaning of the work they have done."

At a basic level, an enhanced communications budget would provide more resources for the IPCC's existing communications team to expand their role and reach. However, the IPCC has a huge number of potential communicators: hundreds of scientists participate in the report writing process. Our argument is not that the IPCC should place scientists in a position where they are asked to 'promote' the IPCC in a way that they don't feel comfortable doing. As Louise Gray puts it:

"I think that scientists should be allowed to remain as individuals you know. If they all did a training and all give the same speech then the public would lose trust."

But some scientists are both motivated and talented communicators. The IPCC could offer – either internally or by partnering with climate change communication specialists – regular media and communications training for the scientists who wished to pursue this type of work. As Richard Black says:

"Every scientist learns how to write a scientific paper, which is a form of communication...these people are very smart. They can also be helped to produce a very different kind of communication".

2. Embrace video content and social media

EASY

With an enhanced communications budget and a group of scientists with focused communications training at their disposal, the IPCC could significantly expand into the broader range of communication channels that it currently makes only very limited use of. Few experts that we spoke to had anything very positive to say about the IPCC's use of social media or video channels (in fact, most were not aware that resources other than the Assessment Reports existed).

There was consensus among our interviewees that Facebook, Twitter, and YouTube are channels that needed to be used more proactively. Leo Hickman, Chief Adviser on Climate Change at WWF UK, said:

"It is really really important that the social media channels in particular are policed and someone at a scientific level, not just the press spokesperson, is actually available to answer quite technical questions and point people to the right bit of the chapters etc, and to respond to misleading press'.'

George Marshall added:

"On YouTube there's something called the IPCC channel, in which their videos are sometimes watched by fifty people. It is mostly dull stuff. If you consider that the majority of young people now use YouTube as a search engine when they seek for information, it seems an amazing failure"

3. Show the human face of the IPCC

MODERATE

The IPCC is an incredible, inspirational, in many ways unprecedented undertaking. But it is perceived as a dry, bureaucratic and even secretive organisation. The IPCC has excised virtually all evidence of human life from its publications. One way of bringing the IPCC to life would be to show the (many) human faces of the IPCC - the scientists who give their time and valuable expertise - and tell their personal stories. Scientists are understandably seeking to keep their language balanced and unemotional, and because of this they command a great deal of trust. But in the absence of personal stories or a compelling narrative of collective endeavour, the debate on the trustworthiness of climate science has become reduced to an arid statistical debate about the percentage of scientists who accept human induced climate change. The debate is missing the story that really would engage, excite and inspire people: the story of individual scientists and their own passion for their science. As Christian Teriete, Communications Director at the Global Call for Climate Action (GCCA), puts it:

"They cannot have an advocacy message, but I think they can be human beings - without using their credibility or their legitimacy. They can be fathers or grandfathers or mothers and grandmothers, and they can explain what the science means for their children and grandchildren. People watching an IPCC scientist on the BBC may respect the expert who explains the science to them, but they will connect and sympathize with the parent who is worried about their kids, because suddenly they can see themselves in this person and identify with the scientists."

The story of science must be told to bring the facts to life. The CERN project and its celebrated particle accelerator - is another example of a high profile international collaboration between scientists, but occupies quite a different place in the public imagination. As George Marshall puts it:

"The narrative behind everything that CERN does is about the excitement of science - the extraordinary scale of the project, bringing people from all over the world together to try and discover something new. They allow scientists to talk

about their excitement about what they do, so they actively try and promote. So they are turning their science into what people might want to know about. All those narratives apply to climate science. The IPCC is the largest process in human history that brings together science and learning from all of these different schools and disciplines. Bringing people together from around the world to agree, to reach a consensus on the most important issue, and the most critical issue of our times, isn't that a story? I see nothing about that."

To be clear: the data produced by CERN are no more inherently engaging or interesting than the findings of the IPCC. But they have been presented to the world in a way that is congruent with peoples' intuitive grasp of what makes a good story (and, by extension, what fires their imagination).

The consensus conveyed by the IPCC should be a powerful message - and research suggests that once people accept the level of scientific consensus on climate change, they are more likely to accept the need for action (Lewandowsky, Gignag & Vaughan, 2013). But getting people to the point where they do accept the consensus is another matter entirely. At a minimum, convincing people of the need for action hinges on using 'culturally congruent' communicators - and this means working with a range of partners.

4. Work with a diverse range of partners

MODERATE

Clearly, there are limits to what the scientists - or the press team - of the IPCC can achieve, even with a new commitment to communication. Advocating for specific policy outcomes or campaigning for greater public engagement is not an appropriate role for a group of scientists. But, at precisely the point where a focused, co-ordinated and carefully designed communication and engagement process rooted in public values is required, there is a vacuum. If scientists cannot be expected to fill this vacuum, then who should instead? It is a space that several organisations have voluntarily stepped into.

A layer of informal communication and 'interpretation' has developed around the IPCC, with multiple organisations producing resources to distil the key points from the dense reports themselves. The Grantham Institute at the London School of Economics, for example, has produced a range of briefings, guidance notes and summaries of key findings and points of procedure on the IPCC. The GCCA, a coalition of climate change charities, has produced and promoted a range of materials that link the global themes of the IPCC to the everyday lives of people from around the world (which we discuss in detail in the next Recommendation). The Cambridge Programme for Sustainability Leadership and the European Climate Foundation have focused on what the implications of AR5 are for businesses. But as admirable as these efforts are, they are not happening with an IPCC mandate. They are an unofficial addition to the IPCC process, when they should be central to it.

Why not formalise and extend these relationships? The IPCC could hold and distribute a fund that civil society partners could bid for, a fund dedicated to bringing the science of the IPCC to life. Part of the application process could involve a 'vetting' of the aims and values of the civil society partners by the government representatives who fund the IPCC and agree final text for policy makers. Many would argue that this would mean 'blurring' the lines between science and the values of civil society and NGO groups who the IPCC would partner with, but that's precisely what a complex, multi-dimensional problem like climate change requires. The challenge would be to involve a sufficiently diverse range of partners that the different 'biases' effectively cancelled each other out. As Richard Black puts it:

"If the IPCC finds it difficult to turn their work into plain language, you will find other organizations that want to do things properly and are really helping the IPCC to do that wider communications job. And I think that is a very good thing. Very positive. It is probably the only realistic solution."

If engaging the public on climate matters ultimately means engaging with peoples' values, then bringing in a wide range of public values to the process of communicating science is what is required. Working directly with a range of groups would bring the IPCC findings to life – and the materials the partners produced would tell stories about the people and places affected by a changing climate. How will climate change affect the things people love?

By working with a range of partners who can lend cultural credibility to the scientific consensus they convey – voices and groups from across the social and political spectrum – the findings of the IPCC can be brought to life.

5. Tell human stories about climate change

MODERATE

As well as telling the 'inside story' of the IPCC, more human stories about the impacts that climate change will have – and is already having – are urgently required. These stories would not form part of the IPCC reports: they would not primarily be the job of the IPCC at all. But if the IPCC has formalised and embraced a diverse range of partnerships, then their partners can create the human stories needed to engage the general public. Stories are the means by which people make sense of the world, learn values, form beliefs, and give shape to their lives. Stories are everywhere; in myth, fable, epic, history, tragedy, comedy, painting, dance, stained glass windows, cinema, social histories, fairy tales, novels and comic strips. But for the most part, they are absent from climate change communication. As journalist Alexis Sobel Fitts puts it in the Colombian Journalism Review:

"..(T)he justification for releasing a report – one that contains no new information - is that 'just the facts' haven't been a good enough story to educate people on climate change. The facts also have to be told 'compellingly'. There are other ways of creating a narrative surrounding the facts of climate that doesn't distort, but is compelling."

In a recent piece for the New Statesman magazine, the writer Sarah Ditum argued that 'the left is addicted to smartarse debunking. But arguments are won by telling human stories'. A similar argument could be made about climate science communicators.

A deeply unengaging narrative that is based in fact may find it extremely hard to compete with a compelling narrative based in falsehood. "The balance of evidence leads many scientists to suggest that our emissions may be damaging the climate" is, unfortunately, less inherently compelling than "rogue scientists are conspiring to fake evidence in order to secure larger research grants". The careful, considered science and statistics of the IPCC cannot compete with the siren stories of climate change scepticism or the priorities of parts of the rightwing media (where one man's fight against a wind turbine trumps a thousand scientists setting out the case for decarbonisation).

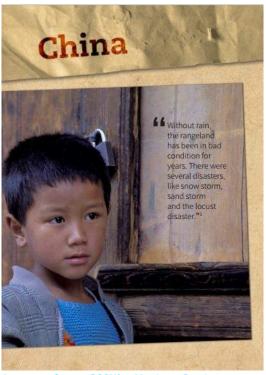
Walter Fisher, a communications theorist, argued that when non-experts make sense of complex technical issues they make their decisions based on the quality of the story - what he calls its Narrative Fidelity - rather than the quality of the information it contains (Fisher, 1984). Fisher says that when we encounter a new issue we will ask: "does it hang together, does it contain a linear sequence of events from past to future, do the characters behave as we would expect them to behave, with clear and understandable goals and motives, does it match our own beliefs and values" (Fisher, 1984).

"We produced regional summaries of the IPCC findings and storytelling material, because we wanted to take the science a step further to make it relevant for public audiences. Breaking things down to the local level allows you to paint a picture that shows people the changes where they live. Personal stories help by giving the scientific facts a human face and a real voice."

Teriete further commented:

"We tell our member NGOs that they don't need to behave like scientists and repeat what the experts have said, but that they should focus on what the science means. What does being part of the solution while adapting to climate change mean for governments, businesses, or communities? What does it mean for the public, your political choices, your consumption, your lifestyle?"

Another example of using stories to bring climate change to life is COIN's report 'Moving Stories' project and associated videos. The report compiled real human stories from across the world from people whose lives had been affected by climate change. Specifically, the stories focused on people who had been displaced or migrated in the context of climate-linked disasters. The connections between climate change, disasters and migration are hugely complicated and this complexity has often been a barrier to engaging policy makers on the issue. However, by using human stories we were able to create compelling narratives around migration and displacement, while at the same time acknowledging and exploring the inherent complexity of this issue. The complicated relationship between climate change and migration has for a long time meant that the issue has been the focus of academic research, but has received little attention by the media or wider public. The use of real human stories allowed us to put a human face on what had previously been an issue largely confined to academia.



A page from COIN's Moving Stories report detailing the voices of people who move in the context of environmental change

6. Test everything

MODERATE

This recommendation is really a caveat to all of the others: any recommendations for communication should be grounded in systematic testing. The IPCC should invest in the foundations of communication by trialling, comparing and testing different approaches with different audiences. What kinds of communications strategies and communicators are effective with which kinds of audiences? How can the science be presented in ways that are culturally congruent with a range of different social and political perspectives?

As James Painter contends:

"If you have a communication strategy, you need to test that strategy. In other words you need to work with the other key secondary audiences to talk about whether the sort information they are giving out is helpful or not."

7. No more Assessment Reports - deliver science to 'order'

DIFFICULT

- deliver science to 'order'

At the heart of any communications strategy is an understanding of the audience, and their needs. For the IPCC, this has so far been policy makers – although as we have detailed above, it is not clear that even their needs have necessarily been well catered for. Certainly, a political response proportionate to the scale of the climate change challenge has not been catalysed. Do policy makers need a mammoth report every seven years? Do their secondary audiences like the media, civil society and the public benefit from this model? Are the scientists involved making best use of their time? Several of our interviewees posed exactly these questions. Richard Black said:

"You can legitimately ask what is the point of having a process that goes through all this...it could actually be more responsive to what is going on in the science...(and) concentrate on the things that are different"

Fred Pearce, a regular contributor to the Guardian and New Scientist magazine, suggested:

"The big Assessments every six or seven years are almost becoming a burden for the IPCC and they might be better off spending more time on reports on particular issues"

If the IPCC reports were produced in order to catalyse a proportionate public and political response to climate change, the Assessment Reports would be turned on their head by starting from the needs of their audiences – and defining these audiences by their capacity to bring about rapid social, technological and economic change. This would likely involve policy makers, but it would certainly not be limited to this group. What does the construction sector need to know about climate change to create low-carbon infrastructure? How can conservationists get the facts they need about climate change to design programmes for adaptation? How will programmes of health care for the elderly be impacted in a changing climate?

While it would require a significant organisational shift these are questions that the IPCC could answer by delivering science 'to order', rather than a summary of everything that anyone could possibly want to know about climate science. This would mean a major re-structuring of the IPCC's role. But while the IPCC could not effect these changes itself, the governments that fund it could create a new role for the organisation – one that places communication at the heart, rather than the periphery.

Conclusion

Despite twenty five years of IPCC reports, debunking sceptic arguments and 'myth busting' the general public in many western countries are less concerned about climate change than they were in the mid 2000s. It's time to do things differently.

By drawing on the expert views of 16 UK climate change communicators and integrating these with existing social science research, we have made a series of seven recommendations. Some of the recommendations we have made would be straightforward to implement, others would represent a radical departure from the IPCC's current role. But if the more ambitious recommendations seem like a considerable undertaking, then it is worth reflecting on how many person-hours have been poured into the IPCC process over almost a quarter of a century, and how lacklustre the political and public response has been.

There is a great deal that could be done. But how would change come about?

The terms of the IPCC are ultimately set by the governments that comprise the UN. This means that they can be changed by putting pressure on the policy makes who jointly oversee the funding and procedure of the IPCC. As part of the preparation of this report, we put our recommendations to Jonathan Lynn, the Head of Communications and Media Relations for the IPCC. His response, in part, was that the IPCC is there to do whatever the participating governments think it ought to. And while moving away from the system of Assessment Reports every six to seven years and towards science 'on demand' might seem like a major upheaval, it is certainly not beyond the bounds of possibility:

"If the governments say, forget the Assessment Reports, we want you to do only special reports, yeah that's not a problem. I mean as an organization, we don't have an opinion."

Disclaimer: The recommendations in this report are those of COIN, and are not necessarily endorsed individually by the people interviewed for this report. However, they reflect dominant themes that emerged from the interviews.

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