Dangerous News: Media Decision Making about Climate Change Risk

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This article explores the role of broadcast news media decisionmakers in shaping public understanding and debate of climate change risks. It locates the media within a "tangled web" of communication and debate between sources, media, and publics. The article draws on new qualitative research in the British context. The main body of it focuses on media source strategies, on climate change storytelling in news, and the "myth of detachment" sustained by many news decisionmakers. The empirical evidence, gathered between 1997 and 2004, is derived primarily from recordings and notes drawn from a series of seminars that has brought together equal numbers of BBC news and television decisionmakers and environment/development specialists. The seminars have created a rare space for extended dialogue between media and specialist perspectives on the communication of complex climate change science and policy. While the article acknowledges the distinctive nature of the BBC as a public sector broadcaster, the evidence confirms and extends current understanding of the career of climate change within the media more broadly. The working group discussions have explored issues arising out of how stories are sourced and, in the context of competitive and time-pressured newsrooms, shaped and presented in short news pieces. Particularly significant is the disjuncture between ways of talking about uncertainty within science and policy discourse and media constructions of objectivity, truth, and balance. The article concludes with a summary of developments in media culture, technology, and practice that are creating opportunities for enhanced public understanding and debate of climate change risks. It also indicates the need for science and policy communities to be more active critics and sources of news.

KEY WORDS: Climate change; news media; public understanding; sustainability; uncertainty

1. INTRODUCTION

Any exploration of the sources and significance of the gulf between lay and expert understandings of climate change risk is likely to settle on the media as one of its central subjects. Publics depend on news media to expand their knowledge about the world beyond the immediate horizons of lived experience; hence notions of dangers associated with climate change are to a significant degree mediated by news and other broadcast and published sources. This article is

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based on qualitative material drawn from a series of seminars that represent an extended body of interactions between media decisionmakers and environment and development specialists. As such it takes on a different task to the discourse analysis that is at the core of Burgess and Carvalho's (2004) intervention and audience research (e.g., Glasgow University Media Unit, 2000; VSO, 2002; Opinion Leader Research, 2002) in this area. It throws light on media decision making by concentrating on key moments in the process of mediation wherein the science, policy, and politics of climate change are transformed into the broadcast stories that do so much work in public discourses of environmental risk.

After locating the work within the critical social science literature on media and society, the main body of the article explores media practices of sourcing and telling climate change stories, and the "myth of detachment" associated with media editors. It concludes with a discussion of some ways of enhancing public understanding and debate that have been assessed within the seminars. There is evidence that wider changes in media culture and practice can open up new ways of exploring both "factual" and affective dimensions of risk in tandem. However, one of the most easily addressed and significant conclusions lies in the hands of readers of this article: editors acknowledge that the climate change science and policy communities need to be more accessible to help in the telling of stories and more insistent and audible in the review of media performance.

2. METHODOLOGICAL NOTE

The argument in the article is drawn from a body of qualitative empirical evidence gathered between 1997 and 2004. Recordings and notes were drawn from the plenary sessions and working groups within a series of annual two-day seminars. These have brought together senior media decisionmakers, primarily from the BBC, and equal numbers of academic and policy specialists for two-day meetings. These have addressed media performance on a range of environment and development issues. It is important to note that the BBC and other media participants have been drawn almost exclusively from senior editorial staffs that do not have specialist expertise or experience in environment and development issues. They have in almost all cases been invited to attend by the BBC Director of News and are hence not self-selecting as "supportive" or "committed to" the issues under discussion. Indeed, media participants have on a number of occasions expressed skepticism about the need to consider their performance on these issues in advance of the meetings. With roughly 35 people attending each seminar, half media and half specialists, the total number of media participants in the seminars is just over 100. Only on rare occasions have media participants been invited to attend more than one seminar.

These seminars were organized by the Cambridge Media and Environment Programme, co-directed by the author and Roger Harrabin of the BBC Radio 4 Today Programme. The seminars have addressed media performance on a range of subjects. The references in the text to workshop and plenary discussions specify which seminar the material was drawn from, using shortened titles, given here in parentheses, and dates: Sustainable Development: The Challenge to the Media (Sustainability) 1998, 1999, 2001; World Summit on Sustainable Development (WSSD) 2002; Risk: The Challenge to the Media (Risk) 2003; and two meetings addressing British broadcasting's representations of the developing world: the Real World Brainstorms (Real World 1 and Real World 2, 2004). The media participation at all but the last two seminars has been drawn from news and current affairs. The Real World Brainstorms were attended by a wider group of BBC TV decisionmakers. The seminars were held under Chatham House rules; hence none of the reported comments or quotations in the text are attributable. In the case of quotations from workshops and plenaries, informants are distinguished as either media participant (MP) or specialist participant (SP), and where necessary distinguished by number (e.g., MP1). Some quotations are included from supplementary interviews. These quotes are again not directly attributable, but where there is more than one respondent with the same job description they are coded (i.e., journalist 1 = J1).

The author has worked to draft the participant list, design, and implement the seminars with other colleagues. While this fact allows for a depth of familiarity with the materials generated, it has demanded a degree of careful self-reflection in the handling of them.

Another important contextual note regards the particular nature of the institution that has provided the vast majority of the media participants. The BBC has distinctive governance and funding structures, combining funding from an almost universally levied license fee within the United Kingdom and an independent board of governors, all working within a charter framework granted by the U.K. government. It is recognized as an important reservoir of journalistic talent; it is both a training ground for the early stages in many media careers and a destination for top journalists and editors. These conditions have led to the BBC being widely seen as an international leader in terms of balance, independence, and clarity.

But it has also been criticized as complacent or inattentive in its coverage of complex issues, and as driven by narrow priorities (Nason & Redding, 2002; Dover & Barnett, 2004; Peck *et al.*, 2004). It is viewed as hegemonic within British broadcasting, helping to dictate the limits of what might be considered "news" in mainstream reporting (see, e.g., Philo & McLaughlin, 1995). The support of the seminars

by the BBC, in the form of their contribution of substantial senior management time and other resources reflects a recognition of the responsibilities implied by these strengths and a need to consider and respond to the criticisms on the part of senior news management.

The social definition and deliberation of risk and danger, and the broadcast media's role within this, have been persistent themes throughout the series, with one seminar focusing solely on the subject of the reporting of risk. Climate change has been a persistent theme throughout the series.

3. FROM HYPODERMIC MODELS TO TANGLED WEBS

The self-perception of news media is that they cast, direct, and stage-manage the public's notion of life beyond immediate lived experience. Certainly, there is little arguing that the mass media are a key location for the social production—including the definition and evaluation—of risks. Hence the broadcast media's treatment of climate change becomes central to any attempt to unpick risk communication surrounding the issue. This article contributes to the growing body of literature that seeks to explain the links between news media and public understanding and debate of climate change (see, e.g., Wilkins, 1993; Trumbo, 1996; Weingart *et al*., 2000).

The climate change science and policy community participants at the seminars have consistently charged the media with having failed in what they view to be a duty to inform. They suggest the media are responsible for public ignorance of both causes and consequences of climate change. These participants have tended to display what has variously been termed a "hypodermic," "transmission," or "information deficit" model of mediation of knowledge. In other words, they imagine an uncomplicated flow of data from experts, packaged by the media, to an underinformed, receptacle-like society. They feel that the news media simply need to recognize their responsibilities as a mediating channel on the subject of climate change. This model of the role of the media has long been picked apart by media researchers, including in the field of representations of environment (Burgess, 1990; Hansen, 1993) and in calls for more sophisticated approaches to understanding science communication (see, e.g., Bucchi, 1998; Friedman *et al*., 1986; Nelkin, 1987). Such work has demanded that researchers engage with the messy realities of the interactions between media, politics, and society that produce knowledge, debate, and decisions.

In his weaving together of theoretical and empirical work on media, space, and democracy, Barnett (2003, p. 178) finds that "news is . . . constructed out of the complex mediation of knowledge, meanings, and performances produced and distributed by a variety of different actors with different interests." Krimsky and Plough's (1988, p. 298) analysis of sources of risk messages finds that "risk communications in their social context resemble tangled webs, in contrast to a parallel series of sender-receiver interactions." The material drawn from the seminars inform this attempt to throw light on the tangled web of interactions that shape media treatments of "dangerous" climate change.

4. SOURCING CLIMATE CHANGE SCIENCE

Allan *et al*. (2000, p. 13) argue that the "capacity to define potential risks and hazards is broadly aligned with the distribution of power among 'credible,' 'authoritative,' and 'legitimate' definers of 'reality' across the media field." The role of environmental NGOs as sources developed in the British context in part as a consequence of a vacuum in terms of the profile of environmental issues within representative politics, but also as a result of their entrepreneurialism. Their role as issue entrepreneurs has been particularly evident in their generation of media events (Smith, 2000b, pp. 168–185). Whether through photogenic direct actions, or the timing of the publication of a report, adept NGO media handlers have designed actions with a close and trained eye on winning victories in the discursive struggle played out in the media over an issue such as climate change. Campaigners have acknowledged that danger is a driving plot device, in the narratives they put to news professionals (working groups, WSSD, 2002; Risk, 2003). However, the NGOs do not work with rigid metrics of risk; their claims are fluid across time and space, allowing them to be opportunistic and innovative in ways that satisfy news needs and practices.

In the small group workshops, where the specialist contingent usually combines senior NGO figures (in a minority) with scientists and policy actors rooted in evidence-based practices, the latter have frequently bemoaned the media's tendency to rely on NGOs as sources and voices in environmental news stories. Yet the same discussions showed that these specialists generally had very limited understanding of news practices. However, the workshop discussions have shown that as scientists and policy specialists have gained a better grasp of what might be

required in presenting their concerns in news contexts they become, if anything, even less willing to act as sources.

Their concerns include losing scientific credibility with colleagues through simplification; giving up control of their statements to editors uninformed about their specialism; and the fear that "the two minutes you'll give to an issue I've given ten years to trying to figure out will only make the public more confused—not less" (SP, working group, Risk, 2003). Several had extensive experience of contributing both off-air advice and on-air contributions to broadcasts. Among these there was a consistent sense that they felt obligated to assist public understanding in this way, but that the chances of the edited broadcast giving any reasonable level of depth or sophistication were very limited.

At the same time, working group discussions consistently showed that editors and journalists have a tendency to be less probing and reflective about the status of scientists as sources. Journalists have demanded to know what facts there are—or to demand "when are we going to get to the truth on climate change" (working group, Risk, 2003), and do not carry with them a sense that science is primarily a process of contestation. The journalists acknowledged that the dramatic device of presenting two contrasting opinions within a piece where disagreement exists as to facts is followed less consistently in the scientific realm (working groups, Risk, 2003).

Nevertheless, the balanced presentation of "pro" and skeptical climate change scientists was a persistent feature of climate change coverage into the late 1990s in Britain, and is still intermittently applied in the casting of broadcast news. Boykoff and Boykoff's (2004, p. 125) research shows it to persist in the U.S. prestige press, arguing that "[t]he continuous juggling act journalists engage in often militates against meaningful, accurate, and urgent coverage of the issue of global warming." This has been explained in workshop discussions by the fact that journalistic decision-makers can look at the spread of seats for different political parties, or the size of a business sector or union membership to gauge whether their coverage is "balanced" and "appropriate," but rarely have the levels of scientific literacy required similar judgments about stories founded in scientific discourses. Specialist journalists from both broadcast and print media who may have the relevant experience and contacts to make fuller judgments complain of how implicit newsroom priorities are reflected in investments of time and human resources (Brown & McDonald,

2000, pp. 67–73; Harrabin, 2000, pp. 59–61). This problem is mirrored in the related field of health coverage, explored in Harrabin *et al*. (2003) and Seale (2002).

Hence the machinery that supports strong coverage of mainstream politics and economics can work to squeeze out science, environment, and developing world coverage in the earliest hours of a news production cycle at the planning meetings. Even when such stories get through to get a slot on a program, they are some of the most exposed items when breaking news emerges demanding space. Editors have consistently defended themselves within the workshops and plenary discussions by suggesting that they have a responsibility in their decisions to represent public expectations and priorities about the most relevant news of the day: "an issue may be important as you say... but that doesn't make it news" (MP, working group, Risk, 2003).

The resulting treatments of climate change have made the climate science community, which might act as a critical resource of depth and understanding for news producers, less rather than more likely to work with the media in their interpretation and representation of climate change dangers across time and space. They acknowledge that this reluctance to act as sources carried costs. One NGO media specialist noted that, on account of the weak understanding of science, there are now instances of coverage that exaggerate the risk of climate change, for example, associating specific flood incidents with climate change in circumstances where no such association is justified (interview, NGO press officer, Oct. 2004). The respondent's point supports a line of argument put by one specialist environment journalist that such editorial inflections, based on misunderstanding and overstatement of climate change dangers, could prove as costly in terms of public engagement with these issues as the previous insistence upon giving balanced coverage to skeptics and climate change scientists (personal communication J2, Feb. 2005).

This limited understanding of science compared with other fields of contemporary discourse among media professionals has frequently been acknowledged in discussions within the workshops—an admission that would be unthinkable for these media professionals in spheres such as economics or politics. This is reflected in ignorance of even the most fundamental aspects of science practice such as peer review. In the words of one experienced news and current affairs journalist, referring to their colleagues:

the number of times people (i.e., journalist colleagues) come to me . . . and to be absolutely honest perhaps myself 10 or 12 years ago . . . and I say, "is it peer reviewed?" and faces crumple because people don't necessarily understand the concept . . . . (MP, Risk workshop, 2003)

Compounding the generally limited direct experience of contemporary science among journalists is the fact that media decisionmakers work at least one, and often two, steps removed from sources. Material and story ideas will not only be drawn directly from primary sources; the cue for a story will often come from other media outlets. The workshop discussions support U.S. research showing that even in technically difficult fields journalists turn to other journalistic sources in working up stories (Wilson, 2000). Editors—sitting at the pinnacle of hierarchical news decision-making systems—spend almost all of their professional lives in the company of their journalistic colleagues, and rely on their correspondents/reporters to go out and bring back stories. The intense competition among specialists within news organizations can compound narrow and repetitive patterns of reporting:

> SP1: How much do your specialist journalists talk together, to encourage cross-fertilization?
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> MP1: (laughter) (several voices speaking at once): never—they are all far too competitive
>
> MP2: too busy
>
> MP1: . . . is a sort of naïve hope that you get in these units, a sort of scholastic community . . . the truth is that there is a very real fighting for turf. (working group, Risk, 2003)

The same discussion went on to point to some of the benefits of this feature of news production: "[OK] there's nothing more conservative—in a very conservative bit of society that's the media—than the structure of the portfolios but also it's legitimate, to get one bit of the story from one specialist and another from another" (MP3, working group, Risk, 2003). However, the fact remains that key news decisionmakers rely on their correspondents to work with sources in such a way as to bring back a fair and balanced representation of "the news," but they themselves rarely if ever gain direct contact themselves with diverse informed voices on an issue such as climate change.[1]

A separate working group at the same seminar recognized that social scientists would often provide

an important angle on a risk story but are rarely used—whether as background opinion in preparing a story or as broadcast voices. This is because editors recognize that "we're not very well plugged-in" (MPa) (to social science) but in the same group a news manager was happy to admit to having little respect for social science: "[It's] seriously dodgy, they just add the word science on the end to seem more legitimate" (MPb) (working group, Risk, 2003). Social scientists and policy specialists attending the seminars have consistently pointed to this as a significant weak point at a time when the communication and debate of climate change dangers will demand narratives that splice together uncertainty, social risks, and choices (Sustainability, 1999, 2001; Risk, 2003).

The degree to which action on climate change will necessarily involve collective social choices is regularly raised by specialists, but meets a revealing and important obstacle related to the media decisionmakers' figuring of "the public." Editors acknowledge that climate change risks and responses demand public understanding and debate, and that they are inherently political. Where discussion has charged them with underperforming on the issue one persistent reply has been that representative politics has not taken climate change "to the public" in ways that would allow these issues to be aired as choices in news contexts (Sustainability, 1999, 2001; WSSD, 2002; Risk, 2003).[2]

Despite the absence of a lively politics of climate change that could be reported much as tax, health, or defense issues through the voices of competing elected representatives, editors do seek to represent public voices, albeit through a narrow repertoire of more or less staged televisual forms. "Ordinary people" are not completely excluded as sources in the telling of environmental risks in the media, but there are some fairly rigid, if unstated, conventions that limit and shape their role. Cottle's (2000, pp. 29–44) empirical analysis of the use of lay voices in the visualization of environmental risks in TV news demonstrates the point. His study uncovers the cultural politics of environmental news production, showing that although lay voices are often presented within a report as making a particular threat tangible, through it being vividly experienced by a human subject, they are rarely given a chance to put forward their own

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[1] Indeed, creating such opportunities was a principal goal of the seminar series from its inception.

[2] Commentators on the U.K. May 2005 election noted how environmental issues received almost no attention from the main political parties (*New Statesman*, April 25, 2005, pp. 14–17; *The Independent Newspaper*, April 18, 2005, pp. 1–5).

claims (whether "social" or "scientific"; "subjective" or "objective").

Hence in the case of stories about climate change danger in the United Kingdom a persistent pictorial representation is of buildings being lost to an eroding coastline, with the former inhabitant facing the camera on the cliff top. The maker of one such documentary accepted shots might be set up this way, with the member of the public "saying something like 'global warming—its no theory—its here and now, and I'm suffering'" even if the causal link cannot be directly drawn (TV producer, interview, Nov. 2001). The TV producer, questioned about this practice, quickly acknowledged the problems with this cliché, but also the reason for it: "yeah—I know—it's not necessarily all [happening] because of climate change, but it gives the viewer a human side to it all . . . they can identify" (TV producer, interview, Nov. 2001). The media decisionmakers participating in the seminars are aware of the limitations of their representations of public voices, and insist that they do look for means of making space for them within news and factual outputs. They have received what they view to be scant or impractical suggestions when they challenge the specialist participants as to how they might respond given the limitations inherent in "one-to-many" broadcast media (WSSD, 2002; Real World 2, 2004).

News media rely on a limited cast list in their telling of climate change stories. The reasons for this are based in craft, time, and budget limits and the nature of journalistic training. The seminars have discussed how these factors contribute to distorted and cramped representations of climate change risks and how they may stand in the way of editors accepting more regular and in-depth treatment of the myriad dimensions of climate change adaptation and mitigation. Working group discussions have shown that editors are often aware of the tensions and ambiguities inherent in the way they think about and represent publics in relation to global environmental change issues, but cannot see immediate means of addressing these. Hence particular patterns of representation, or framings, of climate change are rarely disturbed. The next section looks more closely at these representations.

5. CLIMATE CHANGE STORYTELLING

"Journalists never talk about 'issues'—they always talk about stories, because that's what interests people" (Radford, 2004).

The media shape complex science, policy, and political debate into narratives. These processes have been traced by a number of researchers in relation to science and environmental storytelling (see, e.g., Silverstone's (1985) account of the making of a TV documentary or Wilkins and Patterson (1990) on media amplification). This is a dynamic process of mediation wherein media discourses do not simply reflect the reality of environmental risk; rather, they provide, in the words of Allan *et al*. (2000, p. 14), "contingently codified (rule-bound) definitions of what should count as the reality of environmental risks."

While it is important to recognize the diversity of news forms, even within the one news organization within one country that provides the core of the empirical material presented here (i.e., the BBC's prime-time bulletins; 24-hour rolling news, radio, and TV; web; Nations and Regions broadcasts and World Service), there are some common approaches to the way stories are told, and some more or less hidden but significant causes and consequences of this. Respected news craft lies in the choreography of words and images, where pictures make the script both memorable and legitimate. Editorial decisionmakers manage the kind of stories and the rate of flow around a particular topic. This section discusses some narratives of dangerous climate change in broadcast news.

Climate change can no longer be dealt with purely as a story about the reliability or otherwise of scientific data. Specialists have argued throughout the series of seminars since 1997 that it reaches into international affairs, food, mainstream politics, farming, transport, health, energy, taxation issues, and more. To represent this complexity requires an awareness of this body of scientific, policy, and political debate surrounding climate change across a very wide range of news specialisms and categories. Furthermore, not only program editors (the senior editor), but also their colleagues who are responsible for "out of hours" and minute-by-minute decisions, such as duty and news editors, need to be able to appreciate climate-change-relevant strands within these categories. This makes for several steps in a media decision-making process where lack of knowledge by editors or journalists, or reluctance among, or absence of, suitable sources might halt the progress of a relevant news item toward a slot in a broadcast. Even when a particular story has passed these personnel-related hurdles, "craft" challenges remain.

In most areas of reporting journalists refuse to tell stories in the abstract, and the climate change dimensions of a story can be cut out, having been considered

too complicated, or too uncertain.[3] Alternatively, the scope of climate-change-related issues may be narrowed by journalistic practices. Commonly, the force of the specific story might be very visual, including perhaps a flood, storm, landslide, or drought, or politically immediate, such as a fuel tax protest or new jobs/job loss story, and the cross-cutting and long-term nature of the wider issues will be obscured.

Discussion in the workshops (Sustainability, 2001) of the case of the Mozambican woman, Sofia Pedro, who gave birth to a baby daughter in a tree during a period of serious flooding in March 2000, was particularly revealing for the opportunity it gave editors to explain their decision making. They talked about why the "human fortitude in the face of cruel nature" story was an easier and better story to tell than the connections that might have been drawn between the devastated communities and possible impacts of processes of climate change. It was an emotionally engaging narrative, and a good "picture story." When challenged by climate change scientists and campaigners editors turned the charge around. They asked for ways that their understanding of global environmental change processes that link in uncertain and unpredictable ways to dangers such as flooding could be told engagingly in a $2\frac{1}{2}$-minute broadcast story. The response from specialists was muted (working groups, Sustainability, 2001).

The interconnections across scales implicit in current understanding of climate change are particularly difficult to express given the news media's ways of thinking about scale. News stories are ordered via lurching shifts from local to national to global scales. They are also ordered by subject categories (also referred to above as specialist "silos" by editors and journalists). Editors have great difficulty placing climate change; an issue that not only spans these scales and categories but also is constituted by interactions between them.[4] Hence references to climate change have most commonly been placed at a global scale, for example, with Margaret Thatcher or Tony Blair represented as international leaders on an international threat or via UN conferences and political wrangling, such as U.S. stances on the Kyoto Protocol. They

might also arise through an ideally visual localized threat. Environment correspondents have acknowledged that they regularly work to get climate change stories on air or into articles via the narrative device of located flood damage, coastal erosion, or the arrival of "exotic" diseases/species (personal communications, J1, June, 2002, and J2, July, 2002; see also, e.g., Brown & McDonald, 2000, p. 75). These devices allow journalists to give editors a place on a map with a name, a dramatic image—almost a personality—and a clearly figured denouement such as "when will it fall into the sea?" (personal communication, J2, July, 2002).

In this way they are turned into "situation morality plays whose plot and denouement depend to a considerable degree on the nature of the community in which the drama unfolds" (Dunwoody & Griffin, 1993, p. 49). So flooding and storms in Britain and continental Europe in recent years that might have previously been presented solely in terms of awe at the unpredictable force of natural hazards have frequently become associated in the opening or concluding sentences of stories with processes of human-induced global environmental change.

In the case of the U.K. floods of autumn 2000, working group media participants explained how the climate change dimension of the story can be set within established domestic news frames, the patterns of decisions about media content that organize, shape, (and limit) interpretations (see, e.g., Entman, 1991, 1993) that are known to register with audiences. These might include: government competence, security of homes and insurance risks, and vulnerable social groups (working groups, Sustainability, 2001).

The negotiation between correspondents and editors is a critical point in the mediation of climate change knowledge. It often centers on the degree to which the proposed stories fit with dominant news frames. These negotiations take place in the context of immense time pressures and acute surveillance of the performance of individual editors. While this can sometimes lead editors to commission pieces that will really stand out in their news programs (such as a piece from Antarctica or other exotic locales), the more general effect is to veer toward a conservative assessment of what senior colleagues and peers in other journalism outlets will also consider to be that day's news. The result is very likely to be stories that satisfy editorial standards much more satisfactorily than they communicate the social or scientific reality or significance of an issue as understood by specialists. Media seminar participants have frequently acknowledged that there is the danger that the audience might be

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[3] One anonymous reviewer of the article noted helpfully that economics reporting is an exception, and is frequently reported in the abstract, without directly relevant images.

[4] Climate change is not the only "issue" to suffer in this way: media decisionmakers recognize that globalization, trade, some aspects of new technologies, and migration all present news production with similar challenges (workshops, Real World 1 and Real World 2, 2004).

entertained without being informed (confirming Wilkins and Patterson's (1990) account of the construction of unrepresentative and conflict-centered "debates" in the North American context of logging disputes). In the case of domestic flood stories and threats to Antarctic ice shelves climate change hazards have to meet editors' expectations. One of the most prominent features of these is the influential but elusive principle of "news value."

News values are the fine-gauged sieve through which ideas must pass to have a chance of making it onto the running order of stories on a broadcast TV news bulletin. They are the organizing principle by which stories competing to win "slots" within the savage time and space constraints of news production are judged. News values are a long-established focus of the communications literature (e.g., Galtung & Ruge, 1965; Gans, 1979), and a recognized source of tension between good editorial practice and the communication of complexity. But the discussion of news values has also been an important focus of working group debate. Several specialists have reflected in the wake of seminars they have attended that the insights they have gained into news values have helped them understand the very uneven career of global environmental change, development, and sustainability issues in the media.

News values are a blend of an editor's intuition about audiences' tastes and expectations, intelligence about what the competition (internal and external; print and broadcast) have rated as news that day, and of course, an assessment of the current of new events garnered from journalists in the field and the news wire services. For reasons already touched upon, climate change science and policy only infrequently satisfy them. The working group discussions relating to Mozambique and U.K. floods and the Antarctic ice shelf all triggered reflection on the intangibility, but also the centrality, of news values in shaping public understanding and debate. Dramatization of climate change through narratives of danger has allowed the issue to be represented in the context of disasters. Nevertheless, it has often been presented in terms that specialists would not have chosen, and that publics may not be able to work with. When trying to summarize in news stories the meaning of climate change for human societies the threat is expressed in dramatic terms that can be difficult for people to connect with the decisions about lifestyle and resource use that they make every day.[5]

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[5] This is a central conclusion of a recent review of climate change communications for the U.K. government (Futerra, 2005).

6. FACTS AND BALANCE: THE MYTH OF DETACHMENT

Editors have little chance or cause to pause to reflect on their practice, indeed the desire to create space for such assessment has been one of the driving principles of the seminar series, and is one reason for the BBC's continuing support of it. Against a backdrop of intense time pressures and competition they gain promotion and keep top editorial jobs on the basis of largely informal peer review of their judgments about what is news and how it should be presented (Brown & McDonald, 2000, p. 67; Harrabin, 2000, p. 54; personal communications, J2, J3).

News media professionals have often been charged with suffering from a "myth of detachment." Specialist participants have challenged editors' tendencies toward simplistic deployments of terms such as objectivity, neutrality, impartiality, and truth on several occasions (Sustainability, 1998, 2002; Risk, 2003). In these discussions the daily practice of news production was often described as the pursuit of truths: "it's our job to find the facts and to present them to the public" (working groups, Risk, 2003). The confident assumption that there are facts to be found and communicated leaves editors poorly equipped to understand and negotiate the character of uncertainty within climate change science and policy, let alone facilitate exploration of the "postnormal" model of science and public participation that is increasingly emerging as an orthodoxy in science communication and that is proposed in Lorenzoni and Pidgeon's (2004) review of the literature on climate change and danger.

Disagreement about facts does not bar a story from getting on air. Far from it: but it will have to then conform to a rigid formula of presenting claim and counterclaim that is unsuited to the slowly unfolding exploration of narrowing bands of distribution of opinion that the science and policy of climate change implies (May, 2000, p. 18). This is in pursuit of another professional obligation: a commitment to balance and impartiality. As one experienced news decisionmaker puts it:

> the trick with the BBC... is that we can say "here are the facts—unadulterated." Where there is a political argument then we'll try to make clear what the political arguments are. (working group, Risk, 2003)

The BBC is not unusual in insisting on its journalistic impartiality, but Schlesinger's (1987) study of the organization showed how the claim is deeply founded in its culture and history. Recent statements of purpose by the corporation emphasize this impartiality

(BBC, undated, 2005). In the context of an issue with any degree of uncertainty, there are particular rituals of journalistic balance that are repeated again and again. Boykoff and Boykoff (2004, pp. 125, 134) showed how reporting practices result in "balance as bias." Their work concluded that "[t]he failed discursive translation between the scientific community and popular, mass-mediatized discourse is not random; rather the mis-translation is systematic and occurs for perfectly logical reasons rooted in journalistic norms, and values."

Yet Boykoff and Boykoff (2004) and others that have pinpointed the origin of the disproportionate representation of climate change skeptics/contrarians need to go further than the rituals of balance to understand editors' reactions to climate change. When challenged about the limited nature of their climate change coverage editors are quick to see that the kind of purposeful social action demanded by the science and policy community carries them quickly out of questions about "good science" and into messy and editorially hazardous ethical-political terrain. In this terrain "facts," claims, public interests, and values merge into one another. This was a persistent theme in working groups during seminars that explored the nature of the reporting challenge implied by the concept of sustainable development (Sustainability, 1998, 1999, 2001; WSSD, 2002).

The symbiotic relationship between the career of climate change and the concept of sustainable development presents obstacles in the minds of editors. Discussions have shown a fear of being captured by the normative agenda implicit in sustainability discourses via, e.g., ethical commitments to future and distant generations, and the nonhuman natural world. As one journalist put it, to nods of assent from media colleagues: "you've got to understand this—we're not here to tell the public how to behave—we're there to tell them what's happening" (MP, working group, WSSD, 2002).

Following climate change and sustainable development debates demands patience from observers and commentators. These issues are run through with uncertainties across time and space, and interconnections between science, policy, and public and political reactions. Many of these characteristics are at odds with the daily practices of news journalism. This provokes those editors who accept they need to cover these issues more fully into a degree of frustrated resignation: "I see all this is important—but you've got to see where I'm coming from . . . I mean—where are the stories in all this?" (MP, working group, WSSD, 2002).

There are signs from within the working groups at the seminars that those editorial decisionmakers who are sufficiently informed about climate change to appreciate the policy consequences of most mitigation and adaptation responses fear that to "buy-in" to climate change is to accept a predetermined set of value positions. Taking such a series of steps threatens not only the professional reputation of an editor but, in a highly fluid and insecure profession, his or her hard-won position. Kasperson and Kasperson's (1991, p. 10) observation that climate change is value threatening and an ideological hazard is as true of news editors as it is of anyone. Editors are very wary of values-based agendas, and insist that they are careful to avoid a close association between their outputs and a particular philosophical perspective on the world.

Nonmedia participants have questioned this stance persistently. Comparisons have been drawn with the evident normative stance in editorial lines on terrorism, human rights, and child labor (Sustainability, 1999; WSSD, 2002; Real World 2, 2004). Participants, particularly, though not exclusively, those from NGOs, have gone further, charging the U.K. news media with uncritically promoting the globalization of a narrow Western model of democracy, neo-liberal commitments to free trade, or the right to unlimited fossil-fueled personal mobility (plenary, Real World 1, 2004; working group, Real World 2, 2004). While there are signs that editors view "the facts about climate change" as something they should communicate to publics (e.g., Risk, plenary, 2003; working groups, Real World 1, 2004), they are, to the frustration of many of the specialist participants, much more cautious about their role in signaling societal/policy paths in response to them.

The program of seminars was founded with the purpose of shared learning between the media and specialist participants. To this point the article has tended to emphasize the diagnosis of problems within media culture and practice in the handling of climate change. However, this distinctive body of dialogues has forced specialists to acknowledge their own ignorance of media practice, and accept the very real constraints and pressures facing media decisionmakers. The seminars have pointed to a number of ways of working within these that might result in more effective public understanding and debate of climate change and other pressing risks, and these are the subjects of the concluding section.

7. CONCLUSION: "TELLING THE 360 DEGREES OF A STORY"

The media are indispensable to any attempt to answer a key challenge put by Lorenzoni and Pidgeon (2004), that is, what might it mean for people to hear about and discuss climate in such a way that they decide to behave "dutifully"?

Climate change is perhaps the most dramatic illustration of a radically reviewed model of human-environment interactions that assumes the interconnectedness of humans and their environments. Specialists from the social sciences have argued in the working groups (Sustainability, 1999; WSSD, 2002; Risk, 2003) that climate change reporting can contribute to a progressive loosening of the stark division between nature and society that has dominated contemporary representations. These participants have emphasized how anthropogenic climate change is a very potent illustration of the principle of co-production of nature and culture.

Climate change science and policy confirms the inextricable interconnectedness of natural and social worlds at precisely the point when, in Beck's (2000) words, politics "escapes" from the categories of the nation-state. Media participants have acknowledged that new thinking and approaches are needed. The seminars have worked to appraise methodological, organizational, and technological developments within the broadcast media that might overcome some of the substantial obstacles that this body of conversations has revealed. While the particularities of the case of the BBC need to be acknowledged, these discussions are of wide relevance for any consideration of media performance on complex and urgent but "difficult to report" issues.

The new politics of environmental change needs new resources to base stories around. Discussion of new metrics of environmental risk and responsibility, such as ecological footprinting and sustainability indicators, has succeeded in catching the attention of news decisionmakers when they have been presented at seminars (Sustainability, 1999, 2001; WSSD, 2002).[6] In the case of climate change attempts to contextually define "danger" in space and time, for example,

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[6] However, it is worth noting that their curiosity has not translated into substantial or prominent coverage when sustainable development indicators figures have later been released. TV and radio news coverage of the publication of the U.K. government's sustainable development indicators has at least twice been knocked out of prominent slots, or off programs altogether, by late-breaking news (personal communications, J1).

via the mapping/tracking of impact hotspots as Lorenzoni and Pidgeon (2004) suggest, and insurance risks (Hoeppe, 2004), might satisfy news values on a regular basis. In such cases the climate change science and policy community would be taking more control of the representation of, for example, floods and storms to ensure that exaggeration or ignorance of possible climate change links is reduced. But at the same time such materials promise to give a consistent frame of reference for understanding the interconnections between individual actions and global environmental consequences that might at first sight seem incomprehensible, disempowering, or improbable to the public.

There are also technological developments that promise to contribute to richer storytelling and more prominent and fuller expression of diverse public voices. One of these is an increased interest in finding a new depth in storytelling about everyday lives, for example, through diary styles and "360 degree storytelling" (Richard Sambrook, plenary intervention, Real World 1, 2004). These new televisual forms (or reinvigorations of old ones) are made more affordable and more direct and engaging through advances in production and broadcast technologies, including multichannel and interactive digital TV, and linked web initiatives, and increasingly cheap and unobtrusive filming and editing technologies. These are able to offer varying depths of coverage to diverse audiences, and enable greater interactivity—including the possibility for a campaigning voice such as the BBC's iCan webpages (BBC, iCan) or, in the case of their Springwatch programming and webpages, an opportunity to participate in scientific practice (BBC, Springwatch).

While changes in the media landscape are fragmenting audiences, and diluting the influence of flagship news programs as a collective experience, a wider range of opportunities are opening up for different kinds of news tailored to a range of audiences and platforms. Instances of programming that blurs the boundaries between news/current affairs and other broadcast categories, in the form of drama documentaries and programs based around expert and/or citizen deliberation, offer further opportunities for engaging publics in understanding and debate of climate change risks. The capacity to build future scenarios and to represent affective dimensions as well as "the facts" has been recognized in working group discussion as holding the potential to more fully represent "the dance between affect and reason" (Finucane _et al._, 2003) that runs through the perception and deliberation of risks (Slovic _et al._, 2004).

One vital area in which progress can be made lies not in the hands of the media but rather with the science and policy community. Editors and specialist journalists have consistently proposed that one of the most important roles science and policy sources can play is as a persistent source of ideas, advice, and critical feedback relating to climate change storytelling. Editors acknowledged in several seminars that they receive little exposure to external feedback and are sensitive to it. Over seven years they have frequently pointed out that specialists have a capacity to shift the center of gravity of reporting of an issue through emails, letters, and calls that is rarely used. Hence one of the most important conclusions of this extended dialogue may be one of the most straightforward to act upon: specialists need to be more available and more assertive in relation to what may come to be seen as the century's biggest story.

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