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# Mass Media and Environmental Politics

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## INTRODUCTION

While organized studies of the art of communications—called rhetoric—began as early as ancient Greece and Rome, it was not until the 1920s that scholars actually began to speak of such activities as 'media', like we do today (Briggs and Burke 2005). Since Greek and Roman times, through the Middle Ages and Renaissance, media representations have encompassed a wide range of activities and modes of communication. From performance art, plays and poetry to news and debate, media portrayals have drawn on narratives, arguments, allusions and reports to communicate various themes, information, issues and events. Similarly, despite the presence of books, pamphlets, and newspapers that began to circulate from the time of the invention of the Gutenberg printing press in 1450, the ways we think of 'mass media' also came much later (Briggs and Burke 2005). Media growth during the intervening centuries faced constraints from a number of competing factors, such as strong state control over the public sphere, legacies of colonialism, low literacy rates, and technological capacity challenges (Starr 2004). None the less, rapid expansion of modern media communications in the 19th and 20th centuries set the stage for the impressive deployment of information via countless channels and outlets now dubbed the 'fourth estate' in contemporary society. Nowadays, scholars and practitioners describe mass media as publishers, editors, journalists and others who constitute this communications industry, and who produce, interpret and disseminate information, largely through newspapers, magazines, television, radio and the internet.

This essay broadly explores the dynamic terrain of mass media and environmental politics. The first section provides an overview of contexts that shape such interactions through time. The second section explores multi-scale processes—both external (e.g. political economics) and internal (e.g. journalistic norms) that shape mass media production of news. The third section surveys the dissemination and interpretation of environmental news in the public sphere through two models that map links between media and policy attention/engagement. The fourth section briefly looks at such processes through the example of Hurricane Katrina in 2005. Overall, this chapter outlines the contested spaces between media and environmental politics in order to help make sense of how media representations frame truth claims, as well as how larger political contexts influence such framing processes. 'Authority' garnering attention via mass media is not simply the 'truth' translated, but signifies a leveraged and amplified voice

warranting critical consideration. In other words, the essay looks at the Lorax-like role of media as a key interpreter and actor at the interface of humans and the environment.

### CONTEXTUALIZE THIS! MASS MEDIA AND ENVIRONMENTAL POLITICS

Through time, mass media coverage has proven to be a key contributor—among a number of factors—that has shaped and affected ongoing interactions within environmental politics. Moreover, mass media have influenced environmental policy and public understanding. Mass media representations frame environmental issues for policy, politics and the public, and draw attention to salient actors negotiating the spaces of environmental politics. Communications unfold within a larger political context that then feeds back into ongoing media coverage and considerations. For instance, regulatory frameworks (bounding political opportunities and constraints) along with institutional pressures (influencing political and journalistic norms) shape how these interactions unfold.

Many books, essays, media reports and texts throughout the last century have considered environmental issues, thus provoking attention and movements of environmental politics. For instance, Aldo Leopold's 'Sand County Almanac' prompted many to consider environmental stewardship through his discussion of the 'land ethic' (1949). In media studies, foundational texts from the 'Chicago School' (e.g. Mead 1934), the 'Frankfurt School' (e.g. Horkheimer and Adorno 1947) and luminaries such as Paul Lazarsfeld (e.g. Lazarsfeld and Merton 1964) and Walter Lippman (e.g. Lippman 1957) shaped thinking in politics and cultural studies as they related to modern media communications during these decades as well. Intersections between mass media and environmental politics coalesced more prominently in the 1960s and 1970s, as practitioners and researchers gained more insights into connections between human activities and environmental responses. For instance, Rachel Carson's book *Silent Spring* raised public awareness of the environmental risk from pesticide exposure, and examined how chemical industry interests influenced the lack of environmental policy action (1962). Carson's analysis (focused on the disappearance of spring bird songs from fatal toxic exposure) significantly shaped investigative environmental reporting and the profession of science journalism in the following decades up to the present (Kroll 2001). Therefore, in the last 40 years, mass media representational practices have shaped perceptions of associated issues of environment, technology and risk to humans, animals and ecosystems (Weingart et al. 2000; Schoenfeld et al. 1979). For instance, Burgess and Gold assembled an edited volume examining intersections between media and culture across many environmental issues (1985) and Nelkin wrote an influential book on reasons behind the increase of media coverage of science and technology (1987). Following on from this work, Burgess put forward a foundational and conceptual work regarding the production and consumption of environmental meaning via the media, and commented on the emerging need to examine aspects of the

intersections between mass media, science, environmental politics and public citizens (1990).

Since the early 1990s, a sharp increase in research has explored the influence of mass media on environmental politics (e.g. Hansen 1991; Mazur and Lee 1993; Allan et al. 2000; Szerszynski and Toogood 2000; Davies 2001; Anderson 2006). Many studies have examined specific environmental issues. Examples include:

- agricultural biotechnology and genetically modified food (e.g. Kepplinger 1995; Cook et al. 2006; Nisbet and Huges 2006)
- climate change (e.g. Trumbo 1996; Antilla 2005; Carvalho 2005; Boykoff and Rajan 2007)
- earthquakes (e.g. Dearing 1995)
- energy (e.g. Koomey et al. 2002)
- hazardous waste (e.g. Szasz 1995)
- nanotechnology (e.g. Anderson et al. 2005; Stephens 2005)
- nuclear power (e.g. Gamson and Modigliani 1989; Entman and Rojecki 1993)
- natural hazards and disasters (e.g. Liverman and Sherman 1985; Van Belle 2000); and
- stratospheric ozone depletion (e.g. Ungar 2000).

The majority of these studies have examined print media coverage, while others have sought to examine television news (e.g. Cottle 2000; Van Belle 2000; Smith 2005; Boykoff and Boykoff 2007), and radio news coverage (e.g. Harbinson et al. 2006). Additionally, most of these assessments have focused on North American (e.g. Wilson 1995), UK (e.g. Anderson 1997; Miller and Riechert 2000; Smith 2000), EU (e.g. Hijmans et al. 2003; Brossard et al. 2004) and Australian/New Zealand (e.g. Bell 1994; Henderson-Sellers 1998; McManus 2000) contexts.

### MULTI-SCALE INFLUENCES SHAPING MEDIA COVERAGE OF THE ENVIRONMENT

Interactions between media and environmental politics are complex, dynamic and messy. It is clear that environmental politics shape media reporting; however, it is also true that journalism shapes ongoing politics, policy decisions and activities. A key function of mass media coverage of the environment has been to 'frame' environmental issues for policy actors and the public. Meanwhile, various actors—both individuals and collective—seek to access and utilize mass media sources in order to shape perceptions of environmental issues contingent on their perspectives and interests (Nisbet and Mooney 2007). Framing is an inherent part of cognition, employed to contextualize and organize the dynamic swirl of issues, events and occurrences. It can be defined as the ways in which elements of discourse are assembled that then privilege certain interpretations and understandings over others (Goffman 1974). Media framing involves an inevitable series of choices to cover certain events within a larger current of dynamic

activities. Through journalistic norms and values, certain events become news stories, thereby shaping public perception (Tuchman 1978; Iyengar and Kinder 1987; Gamson et al. 1992). According to Entman, 'Framing essentially involves selection and salience ...' and it 'plays a major role in the exertion of political power, and the frame in a news text is really the imprint of power—it registers the identity of actors or interest that competed to dominate the text' (Entman 1993: 52–55). Asymmetrical influences also feed back into these social relationships and further shape emergent frames of 'news', knowledge and discourse. Thus, Bennett defines framing as the process of 'choosing a broad organizing theme for selecting, emphasizing, and linking the elements of a story such as the scenes, the characters, their actions, and supporting documentation' (Bennett 2002: 42).

For example, in the area of media coverage of stem cell research, Nisbet et al. have defined frames as 'central organizing idea(s) or storyline(s) to a controversy that provides meaning to an unfolding series of events, suggesting what the controversy is about and the essence of the issue' (2003: 38–42). Focusing on media interactions in the issue of nanotechnology, Anderson et al. point out that it is often a process of 'intense negotiation between journalists and their editors ... [to] help render 'an infinity of noticeable details' into meaningful categories' (2005: 201). The emphases on 'controversy' and 'negotiation' demonstrate the intensely politicized spaces these media-politics interactions occupy in the process of framing. Such considerations thus provide a window into principles and assumptions underlying framing of representations of environmental issues and politics. According to Forsyth, examinations of particular framings provide an opportunity to question 'how, when, and by whom such terms were developed as a substitute for reality' (Forsyth 2003: 81).

While journalists have consistently viewed their role as one of information dissemination rather than education, in fact the distinction between these roles becomes blurred in practice. As media representations, by their very nature, inherently frame various environmental issues, such practices also then contribute—among a host of factors (discussed throughout this book)—to setting agendas for considerations within environmental politics.

Media professionals—such as editors and journalists—operate within an often-competitive political, economic, institutional, social and cultural landscape. Path dependence through histories of professionalized journalism, journalistic norms and values as well as power relations shape the production of news stories (Starr 2004). Therefore, the construction of meaning and discourse—negotiated in environmental politics—derives through combined structural and agential components of mass media. These processes take place simultaneously at multiple scales. Large-scale social, political and economic factors influence everyday individual journalistic decisions, such as how to focus or frame a story with limited time to press as well as a finite number of column inches.

In terms of political economics, modern multinational media organizations—dominated by developed-country interests—have continued to consolidate. Efficiency and profit drive the production of news content, and this has had a detrimental effect on training for news professionals in covering varied news

'beats' (Gans 1979; Bennett 1996). This has thus affected coverage of environmental issues in sometimes contradictory ways (Dunwoody and Peters 1992; Dunwoody 1999). For example, in terms of quantity of coverage in developing countries, Harbison et al. posit that lack of journalist training for specialized environmental reporting has decreased the number of climate change stories in these countries (Harbinson et al. 2006). Conversely, when the issue itself pushes coverage beyond specialist reporters in the science pages and into political, business and general assignment reporters, the issue can gain increased coverage and attention. Nisbet and Huges assert that in coverage of plant biotechnology, such 'spillage' has helped to explain an increase in stories on the issue (Nisbet and Huges 2006). Generally, a lack of journalist training has hampered accurate communications of environmental issues through such constraints (Anderson 1997).

These issues intersect with processes such as journalistic norms and values, to further shape news content (Jasanoff 1996). These include 'objectivity', 'fairness', and 'accuracy'. Much as storylines are fuelled within environmental politics, the mass media play an important role in shaping this discourse as an interpreter, translator and disseminator of information. In a 2007 paper, Boykoff and Boykoff examine these journalistic norms. These are personalization, dramatization, novelty, authority-order bias and balance, and they shape both what becomes news and how that news is portrayed (Boykoff and Boykoff 2007).

The tendency to personalize stories means coverage focuses on 'charismatic humanoids', struggling in the negotiated spaces of environmental politics as well as daily livelihoods. The human-interest story often privileges individual movements over collective action in the media purview (Gans 1979). The gaze is on the individual claims-makers in the arena of environmental politics, and thus deeper structural or institutional analyses are foregone in favour of media attention on individual and 'sensationalized' stories. This connects to dramatization, where coverage of dramatic events tends to downplay more comprehensive analysis of the enduring problems, in favour of covering the surface-level movements (Wilkins and Patterson 1987). These norms intersect with the journalistic attraction to novelty (Gans 1979; Wilkins and Patterson 1987; Wilkins and Patterson 1991). Commonly, journalists mention the need for a novel 'news hook' in order to translate an event into a story.

These three norms inform authority-order bias, where journalists rely on 'official sources' (Wilkins and Patterson 1990). While in some cases these authorities step in to restore order, other times they serve to increase political concern. Freudenburg discusses embedded power and leveraged legitimacy enabling privileged constructions of 'non-problematicity' in environmental issues (Freudenburg 2000). For example, in the case of agricultural biotechnology, Priest et al. examined divergent framings of risk, from short-term and concentrated to long-term and diffuse. They found that framing depended chiefly on perspective (from that of a philosopher to that of an ecologist) as well as on a firm reliance on expert community views (Priest and Gillespie 2000). Finally, these norms intersect with the journalistic norm of 'balance', an activity that often

appears to fulfil pursuits of objectivity (Cunningham 2003). With balanced reporting, journalists 'present the views of legitimate spokespersons of the conflicting sides in any significant dispute, and provide both sides with roughly equal attention' (Entman 1989: 30). In coverage of complex issues, such as stem cell research, risks and nuclear power, or genetic engineering, balance can provide a 'validity check' for reporters who are on deadline and do not have time nor scientific understanding to verify the legitimacy of various truth claims about the issue (Gamson and Modigliani 1989; Dunwoody and Peters 1992). While effective in some cases of political debates over environmental alternatives for action, the employment of this norm in covering issues such as anthropogenic climate change can serve to perpetrate informational biases in news reporting (Boykoff and Boykoff 2004). Overall, adherence to these norms contributes to 'episodic framing' of news, which means framing that fails to place stories into sufficient context (Iyengar 1991). This episodic framing can then skew media coverage, thereby influencing the ongoing dynamic and contested spaces of environmental politics in the public sphere

#### WHAT'S NEW(S)? INTERPRETATION OF ENVIRONMENTAL NEWS IN THE PUBLIC SPHERE

Once news texts or segments are disseminated into the public sphere, these encoded messages—television/radio broadcasts, printed newspapers/magazines, and internet communications—then compete in public arenas for attention. Considerations of the increases and decreases in media attention to environmental issues have predominantly been examined through two key theoretical models: Downs's 'Issue-Attention Cycle' (1972), and Hilgartner and Bosk's 'Public Arenas Model' (1988). These models seek to organize and make sense of the 'institutional, political, and cultural factors that influence the probability of survival of competing problem formulations' (Hilgartner and Bosk 1988: 56) within the mass media as well as environmental politics, policy and practices.

Many attempts to theorize the rise and fall of media coverage and public attention to ecological issues have relied on Anthony Downs's 'Issue-Attention Cycle'. For instance, in mapping the environmental policy-making process, Roberts relied on this model to 'provide an explanation of the waxing and waning of issues within the policy environment' (Roberts 2004: 141). In terms of 'agenda-setting' through the media, Newell has leaned on this model as an 'all-embracing explanation for the nature of media coverage of global warming', despite acknowledgement that the model fails to 'accurately depict the complexity and challenging nature of the climate change problem' (Newell 2000: 86). In describing the Issue-Attention Cycle as it relates to issues in ecology, Downs reasoned that attention to environmental issues moves through five sequential stages. First is the 'pre-problem stage', when an ecological problem exists but has not yet captured public attention. Downs posits that expert communities are aware of the risks, but this has not yet been disseminated more widely. The second phase is that of 'alarmed discovery and euphoric enthusiasm', where dramatic events

make the public both aware of the problem and alarmed about it. Third, there is the 'gradual-realization-of-the-cost stage' where key actors acknowledge sacrifices and costs incurred in dealing with the problem. Fourth, there is the 'gradual-decline-of-intense-public-interest stage' where, according to Downs, actors become discouraged at the prospect of appropriately dealing with the issue, and crises are normalized through suppression and in some cases boredom. Finally, fifth is the catch-all 'post-problem stage', where the formerly 'hot' issue 'moves into a prolonged limbo—a twilight realm of lesser attention or spasmodic reoccurrences of interest'. In this stage, Downs covers all possibilities when he states that the issue 'once elevated to national prominence may sporadically recapture public interest' (Downs 1972: 39–41). This cycle is argued to be 'rooted both in the nature' of the problem and in the 'way major communication media interact with the public' (Downs 1972: 42).

This 'natural history' framework is useful perhaps in considering the intrinsic qualities of the issues themselves that influence these ebbs and flows of coverage. Yet, the Downs model does not capture the contested terrain of environmental politics upon which and from which 'alarm' and 'costs' are determined and contested. For examples, it does not account for political economic drivers as well as cultural pressures or social mores (exhibited through regional or national political differences). It also does not account for the non-linear factors that shape dynamic interactions in environmental politics via the mass media (Williams 2000). Critics have also made the point that cycles may have both sped up in recent years, as well as become less apparent (Jordan and O'Riordan 2000). Moreover, cross-cultural research has found evidence that while the Downs model appears to hold in some contexts, it does not hold in others (Brossard et al. 2004). In sum, this model is left wanting in that it is too partial an explanation, as well as too linear and rigid an interpretation of the messiness of the multiple internal as well as external factors shaping environmental policy, politics and practice. In terms of media coverage influencing public attention, understanding and engagement, it does not account for how the aforementioned journalistic norms could undergird what becomes news, rather than just the issue itself. Therefore, the entrenched use of this Downs model has been detrimental in considerations of *how* these media representations are constructed, thus contributing to possible impediments to considerations in the purview of environmental politics.

However, the 'Public Arenas Model' 'stresses the 'arenas' where social problem definitions evolve, examining the effect of those arenas on both the evolution of social problems and the actors who make claims about them' (Hilgartner and Bosk 1988: 55). This approach enables examinations of both intrinsic and extrinsic factors—as well as dynamic and non-linear influences that shape media influences on environmental policy, politics and practices. This helps move analyses beyond static representations to more accurate analytical lenses for understanding current trends, strengths and weaknesses in media coverage of environmental issues. In this Public Arenas Model, there is an accounting of dynamic and competitive processes to define and frame 'environmental

problems'. Moreover, this accounts for the institutional arenas where these problems compete for attention and are negotiated. In other words, there is acknowledgement of the 'attention economy' (Ungar 1992) that brackets the quantity and quality of media coverage of environmental issues at a given time.

### MEDIA COVERAGE OF 'HURRICANE KATRINA'

Media studies researchers have asserted that, 'Journalists are less adept at reporting complex phenomena ... [and] have difficulty reporting stories that never culminate in obvious events' (Fedler et al. 1997: 94). One such 'obvious event' was Hurricane Katrina, which made landfall in August 2005 in the Gulf Coast of the USA. This hurricane provides an example of an event that tapped into multiple political, economic and cultural pressures, and mobilized a number of journalistic norms, thus generating a 'whirlwind' of news coverage. Emergent questions of risk, hazards and vulnerability—and media coverage of them—served to reconstitute the terrain of environmental politics in terms of what the causes were, who was responsible, and what needed to be done. Intense devastation of human livelihoods and ecosystem services, as well as the toll on human lives, was overwhelming dramatic material for television, newspaper, radio and internet coverage.

At the level of the story, duelling authority figures and personalities such as then-director of the Federal Emergency Management Agency (FEMA) Michael Brown, New Orleans Mayor Ray Nagin, and members of the Bush Administration were 'news hooks' aplenty. The unprecedented impacts of the storm and the multiple layers of political, economic, environmental, social and cultural consequences generated voluminous media coverage overall. In terms of causes, scientific uncertainty regarding links between hurricane intensity and frequency and climate change provided opportunities for news outlets to call on a range of sources to comment. Overall, this biophysical and socio-political event spurred a 'wave' of coverage exploring each of these aspects and many more. Many of these politicized issues clearly fell into the messy arena of environmental politics within which policy actions were debated and discussed. In the USA, Juliet Eilperin reported in *The Washington Post*, 'Katrina's destructiveness has given a sharp new edge to the ongoing debate over whether the United States should do more to curb greenhouse gas emissions linked to global warming' (2005: A16). Considerations of links to environmental politics were made more explicit by comments from prominent political actors. For instance, Jürgen Trittin—Minister of the Environment in Germany—commented, 'The American president has closed his eyes to the economic and human damage that natural catastrophes such as Katrina—in other words, disasters caused by a lack of climate protection measures—can visit on his country' (Bernstein 2005: D5).

The Downs Model helps to make sense of how this unprecedented and dramatic event generated so much public interest, and gave way to discussions of socio-economic inequality and risk. Moreover, the model helps to trace how initially urgent discussions of funding allocation and rescue efforts have given

way to continued and protracted assistance to reduce vulnerability to future environmental events. The Public Arenas Model enables further considerations of how various political, institutional and cultural factors—as well as actor networks, or 'claims-makers'—have competed for the framing and selection (as well as deselection) of these considerations within arenas such as environmental politics. This more expanded perspective thus provides tools for a more critical approach to both internal and external factors shaping mass media representations of the hurricane event itself, as well as the relevant and ongoing contested spaces of policy action. Overall, Forsyth has stated, 'assessments of frames should not just be limited to those that are labelled as important at present, but also seek to consider alternative framings that may not currently be considered important in political debates' (Forsyth 2003: 78).

### CONCLUSION

Nisbet et al. point out in research on media coverage of stem cell research that, 'the events that take place in the policy sphere and the groups that compete in the political system are not only mirrored (or covered) in the media but also shaped by the media' (2003: 38). Through time, both internal (e.g. journalistic norms) and external (e.g. political economic) factors shaping media representations have dynamically refigured the terms of ongoing interactions in the arena of environmental politics. These have then also influenced ongoing considerations as well as challenges in environmental governance and policy action (Liverman 2004).

The parameters bounding this essay survey remain partial—a short essay such as this is inherently selective, thus privileging certain themes. However, topics discussed here can be placed further into context in a number of ways, thus considering them within a wider landscape. For instance, to consider the various facets of these complex processes of media coverage and environmental politics, it could be useful to consider the 'circuits of communication' model, developed by Carvalho and Burgess. This model illustrates three 'moments' or 'circuits' through which communications pass over time (Carvalho and Burgess 2005). Media communications first originate and second disseminate into the public sphere before, third, entering the private sphere of individual engagement. Stories and reports are assembled, compete for attention, are taken up to varying degrees in our personal lives, and feed back again through ongoing interactions over time. These feedbacks shape news framing in subsequent moments, and inform ongoing environmental science, policy and practice interactions. While this essay has focused on movements in environmental politics in the public sphere, there is a rich literature (beyond this scope) that addresses facets of individual understanding and engagement with media and environmental issues. For example, Lorenzoni and Pidgeon analysed 15 years of climate-change perception polling and research and found that 'perceptions of climate change are complex, defined by varied conceptualizations of agency, responsibility and trust. Successful action is only likely to take place if individuals feel they can and should make a difference, and if it is firmly based upon the trust placed in government and

institutional capabilities for adequately managing risks and delivering the means to achieve change' (Lorenzoni and Pidgeon 2006: 88).

Overall, as outlined above, the public arena of mass media and environmental politics contains particularly dynamic and contested interactions with high stakes. The process of media framing involves an inevitable series of choices to cover certain events within a larger current of dynamic activities. Resulting stories compete for attention and thus permeate ongoing interactions between science, policy, media and the public in varied ways. This essay has sought to outline commonalities and trends within emergent research of mass media and environmental politics, and by so doing, point to opportunities for future, and needed, research undertakings.

### Acknowledgements

The author thanks editor Chukwumerije Okereke for his outstanding work in pulling this volume together. He also thanks Mike Goodman for his useful comments and suggestions on the essay at various stages. He also thanks the James Martin 21st Century School research group at the University of Oxford for their support, as well as J. Timmons Roberts, Monica Boycoff, Emily Boyd and Diana Liverman.

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