David M. Lawrence MASC 611 Annotated Bibliography

Curtin, P.A., and Rhodenbaugh, E. (2001). Building the news media agenda on the environment: A comparison of public relations and journalistic sources. *Public Relations Review*, 27, 179-185.

Curtin and Rhodenbaugh reviewed research on agenda setting and the environment and noted that most of the past research was focused on the media's agenda-setting role. They noted that the role of the public relations industry had received relatively little attention and – finding inspiration in a 1995 book, Toxic Sludge Is Good for You: Lies, Damn Lies, and the Public Relations Industry, which alleged that the public relations industry as a rule peddled misinformation that recklessly promoted corporate interests at the expense of environmental and public health concerns – decided to examine the effect of public relations practitioners. Curtin and Rhodenbaugh selected the membership of the Society of Environmental Journalists (of which I am a member) as a microcosm of the environmental journalism world and compared the content and reception of "information subsidies" from both public relations and journalistic sources. The items compared were press releases and media kits mailed to members using SEJprovided mailing lists and biweekly SEJ tipsheets sent to members by the SEJ itself. All materials sent to SEJ members over the course of a calendar year were analyzed. The study's authors tested five hypotheses: 1) that SEJ tipsheets would be more likely to cite government or education sources while press releases would be more likely to cite corporate and trade association sources; 2) that SEJ tipsheets would be more likely to focus on policy and health and safety issues; 3) press releases would be more likely to omit funding information; 4) SEJ tipsheets would be more neutral in tone; and 5) that SEJ members would find the tipsheets more newsworthy and useful. The results of the content analysis supported the first four hypotheses,

but only partially supported the fifth – SEJ tipsheets were more newsworthy, but materials provided by public relations practitioners were more useful to reporters.

Borah, P. (2009). Comparing visual framing in newspapers: Hurricane Katrina versus tsunami. *Newspaper Research Journal*, 30(1), 50-57.

This study evaluates framing – or how we organize and make sense of what we see in the world around us – in the context of visuals from news coverage of two natural disasters that occurred in the first decade of this century. It begins with the line "Visuals used after the Indian Ocean tsunami in 2004 and Hurricane Katrina in 2005 have gathered heated discussions because the images horrified audiences across the world." The line sounds good, but the rest of the text does little to support it – it does nothing in the case of the tsunami images. The study is a content analysis of images from *The New York Times* and *Washington Post* in the first week following the respective disasters. The author and an assistant performed a content analysis of hundreds of photos from each paper, evaluating them in terms of five frames: loss versus gain (lives lost, or dead bodies, versus lives saved, or people being rescued), pragmatic (image showing the extent of the damage), human interest (grieving, suffering, and pain), and political (politicians visiting the site and "... doing a heck of a job."). They also looked at portrayal of the dead and type of camera shots used. Chi-square tests revealed significant difference in the coverage of the two disasters in the lives lost and human interest frames, but not the others (the political frame was not tested because of the lack of relevant images following the tsunami). The Post's coverage was more visual – but that should not have been much of a surprise given the differing design practices of the two papers, something the author failed to mention. Both papers were more restrained in their depiction of the dead in the Katrina disaster as opposed to those in the tsunami disaster, again not surprising given the higher likelihood of a body being recognized by a reader here in the U.S. In many ways, this proved an underwhelming study in terms of significance and

revelations. Nevertheless, it is a useful tutorial on how to analyze the use of graphics in the media.

Valenti, J.M. (1998). Ethical decision making in environmental communication. *Journal of Mass Media Ethics*, 13(4), 219-231.

Environmental journalists have often been accused – often by special interest groups – of a pro-green bias. Sensitivity to such charges often leads to nasty arguments on Society of Environmental Journalists' listservs on the whether posts by members are neutral enough or not. (I am a frequent combatant in those arguments.) This study analyzed how ethical considerations guided SEJ members in their editorial decision-making. Among these decisions are: 1) selection of stories; 2) selection of issues and sources; and 3) handling of scientific uncertainties. The study invokes social judgment theory – that frames of reference guide how individuals process information. They applied an ethical motivation scale (EMS) to measure whether environmental journalists shared mainstream values and whether they responded in a similar fashion as other types of journalists studied. Rather than have the subjects fill out a survey, they employed a game-like scenario using cards blank on one side, but with an EMS statement on the other. Respondents would read the statement, then place the card on one of seven piles, each of which represented a position on a Likert-like scale. They analyzed these results using factor and cluster analysis. From among that study group, volunteers were invited to submit samples of their work for content analysis. The predominant motivation among SEJ members was the idea that the public has a right to know the truth. Extrinsic [moral] guides and personal motivations were also important motivations. Government experts and/or documents were the primary source used, followed by experts. The author uses their results to call for an ethical communication protocol in which informing a "public debate and discussion that leads to appropriate individual actions and/or policy outcomes," is the primary goal of the environmental journalist.

Propen, A. (1007). Visual communication and the map: How maps as visual objects convey meaning in specific contexts. *Technical Communication Quarterly*, 12(2), 233-254.

Propen's analysis evaluates maps as a tool in rhetorical discussions: namely, how are maps used to convey information and contribute to the construction of "meaning." The analysis is based on what I would call a postmodernist theory of cartography – that maps cannot be understood as representations of a physical reality, but instead can only be examined in terms of the social and political dynamic in which they are created. As a map-maker whose career began in physical, as opposed to cultural, geography, I am inclined to find much of the philosophy underpinning this analysis a bit ridiculous. Nevertheless, there are some valuable insights to be gained from the point-of-view Propen embraces – not as much as most proponents of that pointof-view proclaim, but some. Where these ideas are most valuable are in examinations of the selection and presentation of information to be included in a map. Propen chooses her analytical subjects wisely: two maps used in a court case involving the Navy's use of a SONAR that (despite government claims) has proven to be harmful to marine mammals. The maps, one prepared by the National Marine Fisheries Service, and the other prepared by the National Resource Defense Council were key pieces of evidence in the case in which the NRDC sought to ban the use of the SONAR. (While the SONAR arguably violates the Marine Mammal Protection Act, the NRDC eventually lost the case in a Supreme Court decision that cited the primacy of national defense over other concerns.) In this case, the maps were clearly rhetorical devices suited for such a study. Propen compares and contrasts the maps in terms of projection, information included, use of legend, and other characteristics. Conceptually, it is a useful primer. Nevertheless, it is short on actual measurement and statistics. The small sample size, however, condemns the paper to a life of little utility for producing broader generalizations about the nature and use of maps in mass communications.

MacDonald, B.H., Cordes, R.E., and Wells, P.G. (2007). Assessing the Diffusion and Impact of Grey Literature. *Publishing Research Quarterly* 23(1), 30-46.

This study evaluated the means and effectiveness of the diffusion of "grey literature" – research publications by government organizations, non-governmental organizations, and educational institutions that are not published in peer-reviewed outlets. Using the Gulf of Maine Council on the Marine Environment (GOMC) as an example, the authors sought to: determine what GOMC published and how; used citation analysis to determine how widely GOMC literature was dispersed; examined other methods to test the dispersal of GOMC publications; looked for trends applicable to grey literature as a whole; and determine the effectiveness of these publications with respect to the health the marine environment of the Gulf of Maine and adjoining Bay of Fundy. The authors found that GOMC has produced more than 300 publications, including a newspaper, newsletters, a Web site, special publications on specific topics relevant to the region, and press releases. By consulting a number of citation databases, their citation analysis revealed that GOMC publications are used worldwide, but most frequently in the Gulf of Maine region itself (no surprise there). GOMC publications are in general receiving more and more citations each year, but those citations tend to be in other grey literature than by refereed scientific publications. That literature also appears to be used by policymakers, but citation analysis is a rather poor tool for the measurement of such use. The authors found that the GOMC Web site is increasingly important in getting its message out. While their methods were inadequate to achieve all of their goals, I found that MacDonald et al.'s study offers useful insights into the effectiveness of institutional public information efforts.

Das, J., Bacon, W., and Zaman, A., (2009). Covering the environmental issues and global warming in Delta land. *Pacific Journalism Review 15*(2), 10-33.

Given the environmental threats facing Bangladesh – in particular sea-level rise and other issues related to global warming, the dissemination of accurate environmental information is vital to the nation's government and public efforts to prepare for potential disaster. Given those concerns, Das et al., present a content analysis of environmental news coverage in three Bangladesh newspapers in June 2007. They note that Western scholarship often ignores the developing world and hoped to fill that gap; nevertheless, they chose three English-language newspapers for their content analysis. After offering a primer on Bangladesh, its newspaper history, and primary environmental issues, the authors layout their primary assumption: that journalists construct their version of the truth (as a natural scientist, I have trouble with the concept of "constructing" truth) through the selection of and choice of quotes used from their sources. They searched a database for relevant stories from the three papers they studied, coding each story by topic, length, type of article (news, feature, etc.), and type and attribution of sources. The predominant type of environmental story published by all three papers was news. In general, news stories were twice as numerous as non-news (features, commentary, etc.). The three papers varied in their selection of topics somewhat, though stories about land predominated at all three. Two of the papers had a shocking tendency to not quote sources – 70 percent of stories at one and 66 percent at another quoted no sources. The other paper failed to quote any sources only 20 percent of the time. (I did not notice a breakdown of these statistics by story type, which would be instructive.) When sources were quoted, they tended to be representatives of the government. The rest of the article presented case studies of the coverage of specific events. In all, I found Das et al., to offer a valuable perspective on the practice of environmental journalism in an important part of the developing world.

Archibald, E., (1999). Problems with environmental reporting: Perspectives of daily newspaper reporters. *Journal of Environmental Education 30*(4), 27-32.

Archibald began her study by noting that while there had been a number of studies of the quality of environmental reporting at that time, few studies had actually attempted to investigate how environmental journalists did their jobs. She set out to learn what environmental reporters themselves identified as the primary problems of and difficulties in covering their beat, particularly with respect to story selection, deadlines, limited space, and the desire to be as accurate, fair, and balanced as possible. She conducted in-depth interviews with 20 environmental reporters for daily newspapers in the United States – most of the interviewees were members of the Society of Environmental Journalists. She followed an interview guide, but the interviews were largely open-ended. She employed the grounded theory approach – in which theory is constructed from observation rather than being conceived in advance (which never truly happens in science anyway) and tested. She coded interview transcripts line-by-line and phraseby-phrase to look for identify and delineate theoretical concepts and determine the relationships among them. She also conducted a content analysis of stories written by the interviewees. Among the problems found were complexity of environmental issues, uncertainty in relevant science, the desire to frame issues in terms of two clear and opposing sides. Lack of scientific/environmental training was not perceived to be a handicap by the journalists interviewed. The journalists tended to view scientists as no more credible than other sources with respect to environmental matters. Most of the interviewees believed that ideology should not color their coverage. The content analysis revealed that the reporters were confronting, and sometimes overcoming, the problems they had identified with their beat.

Brossard, D., Shanahan, J., McComas, K., (1999). Are Issue-Cycles Culturally Constructed? A Comparison of French and American Coverage of Global Climate Change. *Mass Communication & Society* 7(3), 359-377.

The main thrust of this article was to determine whether the concept of the "media-attention cycle" so commonly referred to in terms of U.S. media outlets transcends borders and cultures. To do so, the authors conducted a content analysis of climate change coverage by two newspapers, The New York Times and France's Le Monde. The concept of the issue-attention (or media-attention) cycle proposes that interest in an issue passes through five phases: 1) preproblem; 2) alarmed discovery and readiness to respond; 3) realization of costs associated with said response; 4) decline in interest; and 5) post-problem. The authors chose climate change coverage because, although climate change will affect all nations equally, public attitudes toward science and the politic environment may differ greatly between the two countries. The papers were selected because they hold similar status as the "paper of record" in their respective nations. The authors proposed four hypotheses: 1) the *Times* would be more alarmist; 2) *Le Monde* would place more emphasis on international relations and diplomacy (and emphasize disagreements between the European Community and the U.S. more); 3) the Times would present a broader range of viewpoints; and 4) Le Monde's coverage would be less cyclical in nature. Using the period 1987-1997 when the issue of global warming rose to prominence, stories referring to climate change, global warming, or the greenhouse effect were coded with respect to the following themes: 1) new research or evidence; 2) scientific background; 3) consequences; 4) economics; 5) domestic politics; 6) international relations; and 7) current weather. Their data supported all four of the authors' hypotheses. The authors concluded that culture affects news coverage and that cultural differences must be accounted for before any global generalizations regarding media behavior are drawn.

Peters, H.P., (1995). The interaction of journalists and scientific experts: Co-operation and conflict between two professional cultures. *Media, Culture & Society 17*, 31-48.

For much of the twentieth century, the notion that science and technology would cure all of society's problems was rather naively by the public and media alike. As a result, journalistic coverage of scientific advances often veered toward cheerleading, with nothing but good outcomes assumed. That assumption began to erode in the latter parts of the century as adverse effects of formerly praised advances such as nuclear energy, Thalidomide, and DDT were realized. The loss of faith was accompanied by evolution of a more adversarial relationship among scientists and journalists. Some journalists understand how science works and carefully report the nuance and uncertainty inherent in the scientific method. Other journalists report haphazardly and at times inaccurately on scientific advances. Conversely, some scientists take their public education responsibilities seriously and work well with journalists to increase awareness – if nothing else, they appreciate the importance of good publicity in getting their research funded. Other scientists resent anything (including teaching) that diverts their attention from their precious projects. This study looked at the cultural differences between scientists and journalists. The author administered a survey to a sample of journalists and scientists. The survey addressed three main areas: 1) the function of journalism; 2) preferred methods of risk reporting; 3) expectations of the ways in which scientists and journalists interact. Significant differences were found among scientists and journalists. Journalists were more likely to see their role as serving as a check to the power of elites, whether they be in politics, business or science; likewise, journalists were more likely to see it their duty to take the part of the powerless and to serve as a watchdog. Scientists, on the other hand, were more likely to believe that coverage should be unbiased, unemotional, objective, non-sensational, and sticking to the scientific "truth." Scientists were also more likely to see little value in the entertainment aspects of news

coverage. When it comes to risk reporting, scientists were more likely to argue for deference to expert opinion and for the media's role in supporting experts in communicating risks. Experts were more likely to have a "paternalistic" view toward the public. Other significant differences appeared in control of the content of stories – experts, for example (and not surprisingly) were more likely to believe that they should be allowed to review copy prior to publication. The study, albeit dated, accurately measures many of the main complaints scientists and journalist still have about their respective cultures.

Dudo, A.D., Dahlstrom, M.F., Brossard, D., (2007). Reporting a Potential Pandemic: A Risk-Related Assessment of Avian Influenza Coverage in U.S. Newspapers. *Science Communication* 28(4), 429-454.

One of the concerns about news coverage of any potential health or environmental threat is the accuracy of information presented to the public. Coverage can range from hysterical to comatose depending on the information conveyed by experts and policymakers and the perceived "sexiness" of the story by the news media. Quality of the coverage can likewise be uneven depending on the professionalism and skill of those reporting it. Assuming that public perception of a risk depends to some extent on the quality of news coverage of it and that the elite media outlets are likely to influence how other outlets cover the risk, Dudo et al., decided to analyze the quality of media representations of risks from the H5N1 strain of avian influenza – a strain of particular concern because of its potential to trigger a devastating pandemic. The authors noted that quality of information presented does not guarantee wisdom in response by those receiving that information. Noting that a definition of "quality information" does not exist, the authors proposed that such information should contain: 1) quantitative information presented in context of other risks; 2) specific information on how to avoid or minimize exposure to the risk; 3) comparisons with similar risk issues; 4) minimal sensationalism; and 5) equal amounts of thematic and episodic (not explained, but I assume anecdotal) content. They proposed the

following hypotheses: 1) that newspaper coverage would tend to be more qualitative than quantitative; 2) that risk information would more likely be presented without context; 3) that the coverage offer minimal discussion of comparable risks; 4) that newspaper coverage would be more likely to sensationalize avian flu risk; and 5) that newspaper stories would be more likely to use episodic frames than thematic frames. In order to test these hypotheses, the authors performed a content analysis of avian flu stories (of at least 175 words) from four newspapers – *Washington Post, New York Times, Los Angeles Times*, and *Atlanta Journal-Constitution* – from Jan. 1, 2000, through Jan. 31, 2006. The stories were coded for whether or not they met the authors' quality criteria. They found that avian flu was covered heavily in all four papers, with the amount of coverage increasing over time – particularly in light of epidemic threats in 2004 and 2006. The results failed to support the first three hypotheses, but they did support the other two. They also found that the stories more often than not failed to include information on symptoms and prevention. The authors concluded that, on the whole, the newspapers did present quality information.