

**“The Mother of All Deadlines”:
A Discourse Analysis of News of Treaties on Global Warming
in China, India and the US**

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Studies show the media plays a contributing role in affecting how countries address environmental issues. This article examines how the media in developed and developing countries present their ideological positions through their coverage of global warming. This cross-cultural comparison on journalistic practices in three key countries involved in the debate over climate change: India, China and the US, will show how the media portrays this issue in light of recurring themes that frame power. Applying Agenda-setting, Framing and Critical Discourse Analysis, stories were analyzed to uncover the dominant narratives in news coverage.

Introduction

India, China and the US are among the largest producers worldwide of greenhouse gasses that cause global warming, yet all three disagree on how to provide solutions to the problem. This article examines how the elite news media in these countries portray their own nation's ideological positions on the topic. The study identifies rhetorical patterns in news coverage by comparing efforts in international diplomacy on climate change under the Bush and Obama administrations. The purpose is to provide a cross-cultural comparison of news coverage of global warming.

This study analyzes data collected during the annual meetings of the United Nations Conference on Global Climate Change in which India, China and the US were all attendees. It examines the portrayal of 'claims-makers' involved in international events, such as these kinds of global conferences, and the "overall themes (or 'frames') that emerge in the media treatment, or routines, toward an issue (Sigal, 1973; Tuchman, 1978; Gans, 1979; Gitlan, 1980; Entman, 1993; Trumbo, 1995). In a study on HIV/AIDS in India, de Souza notes that frames are the interpretive contexts that help to deconstruct a media message (2007; Goffman, 1974). Claims-makers are those who gain representation in the media (Trumbo, 1995). Analysis of the media as they function to construct social reality (Gurevitch and Levy, 1985) serves as an important tool for the discussion of solutions to the ecocrisis associated with global warming.

Conferences, such as those held in Bali (2007) and Copenhagen (2009), provide a forum for global agreements on ratification of an international treaty whose goal is meant to reduce worldwide emissions of greenhouse gasses (particularly carbon dioxide-CO₂) as outlined in the 1997 Kyoto Protocol. Thus far, communications research on cross-

cultural media representations of this environmental issue are limited, especially in the comparison of news from developed and developing countries involved in the controversy (Bell 1994; Gooch, 1995; Reis, 1999; Broussard, Shanahan and McComas, 2004). This study seeks to fill that gap to the literature.

Disagreements between countries are traditionally portrayed in the world press, which serves the role of informant and educator to elite decision-makers, as well as the general public. In terms of climate change, world leaders operate under intense pressure to forge a global deal on the problem as soon as possible. The Kyoto agreement set standards to cut emissions of greenhouse gasses that are said to lead to global warming. To date, the US is the only industrialized nation that has refused to sign the agreement causing consternation among the international community. Debates on where to go from here, portrayed in the press, may contribute to an increase in tensions between nations at a time when they are trying to forge diplomatic solutions. How then do the world media cover such a desperate morality play as this without contributing to cross-cultural misunderstandings?

The Social Construction of Global Warming in the News Media

Researchers have shown that the media plays a contributing role in affecting how environmental issues are addressed since coverage leads to public concern for the environment (Mazur, 1998; Riffe, Lacy and Reimold, 2007). Agenda setting theory suggests that when particular points of view are given more attention than others, their public salience increase and thereby alter the public debate (McCombs and Shaw, 1972). In terms of global warming, Trumbo's longitudinal analysis of the problem examined the media's participation in raising or limiting awareness of the issue (1995). As written in

Trumbo and others' in-depth account of the history of global warming as covered in the news media, the acceptance of the climate change as a topic worthy of journalistic attention has been an arduous undertaking (Trumbo, 1995; Mazur, 1998; Ungar, 1992). Researchers note that may be because the phenomena is slow in its development (vs. traditional hard news events), filled with scientific jargon, and must address scientific uncertainty. These factors make the topic difficult to communicate to the general public (Corbett and Durfee, 2004). Consequently the bulk of early news coverage on the issue inspired little public action.

Although scientists first detected carbon dioxide in the atmosphere over 250 years ago, the measurement of global temperatures dates back to the Industrial Revolution in 1870. In present day, scientists warn that a doubling of carbon dioxide in the earth's atmosphere will lead to an increase in temperatures of three degrees Celsius. If this occurs, the change in global temperature is predicted to lead to rising ocean levels (one to two inches), severe droughts, and violent weather changes. Researchers have examined media coverage of the acceptance of the anthropogenic aspect of global warming as it has been framed in the US and Britain (Boykoff, 2007; Boykoff, 2007). Anthropogenic (human-made) activity, such as the burning of fossil fuels, is said to cause atmospheric warming, which will lead to dire consequences for the planet, including the melting of the polar ice caps, floods in low lying countries like Bangladesh, and the extinction of a variety of species, including polar bears. Early media coverage of the greenhouse effect contested the aspect of human-caused global warming, presenting the story as a political conflict (Wilkins and Patterson, 1991). To complicate matters, the public became confused over stories on the destruction of the ozone layer and climate change, viewing

the problems of global warming and the banning of chlorofluorocarbons (CFCs) -- one greenhouse gas among many -- as one and the same.

Research shows that news language tends to legitimate a particular social reality and that mass media are structured as an integral part of the corporate economy (Herman and Chomsky, 1988). Following the first moonwalk, it was the visual images in media coverage of the horror of the Santa Barbara, California, oil spill in 1969 that rallied US public concern for the environment, in part also because the eco-crisis had a visceral effect on the local economy. Public reaction cemented a ban on oil drilling along California's coastline, at least until present day when pressure from industry lobbyists inspired government to revisit the possibility. Historically, it has been through media coverage of disasters like the one in California that eventually led to strong public support for environmental protections. Following the spill, the first Earth Day was held in 1970 and continues to this day to provide a forum for the media to educate the public on environmental issues through coverage of the work of eco-friendly non-governmental organizations. Such public concern has led to legislation, including the Clean Air Act and the Clean Water Act, providing broad protections to the environment within US borders.

The accidents at the Three Mile Island (1979) and Chernobyl nuclear power plants (1986) (Gamson and Modigliani, 1989), and the 1989 Exxon Valdez oil spill in Alaska led to a peak in media coverage of the environment (Hansen 1991). By 1990, Time magazine dubbed Earth as the "Planet of the Year." New events, along with anniversaries of environmental disasters, such as the 1984 Bhopal, India gas leak, helped to serve as a reminder to the international community that the environment was becoming a critical issue of our time (Friedman 1990, Reis, 1999).

In its infancy, the issue of a warming climate was viewed as just a theory, which led to the scientific topic becoming highly political in nature (Wilkins, 1993; Mazur and Lee, 1993). A limited number of skeptics declared the data modeling that implied a connection between rising Co2 levels and weather too limited to make such assertions. This position was in contrast to a consensus among the over 2400 members of the Union of Concerned Scientists that global warming was a very real threat. The media representation of balance and fairness actually created a “Bias as Balance,” according to Boykoff and Boykoff (2004), in which journalists undermined the significance of mainstream scientific findings on climate change in their attempt to follow the professional traditions of objectivity in reporting.

The New York Times was the first news source to cover the problem (Trumbo, 1995). By the 1980s the debate made it to the front page of The New York Times, which covered a Science journal article written by a rising star in the controversy, NASA’s Goddard Institute for Space Studies James Hansen, a scientist (Shabacoff, 1988). Other respected scientists from the National Oceanic and Atmospheric Administration (NOAA) raised the issue as well. Hansen provided testimony to the US Senate, along with the data presented by the Union of Concerned Scientists. The testimony delivered during the summer of 1988, a period of the greatest drought on record, created real salience in the media of global warming as an environmental problem. The issue was framed as an unusual weather story in which the large fires in Yellowstone National Park turned the slowly unfolding feature into hard news. Reports relied upon expert sources from the US Meteorological Organization, as well as others. Since then, dramatic weather events have driven media coverage of climate change into a topic worthy of public opinion (Ungar,

1999). American concern was especially fueled by Hurricane Katrina in 2005, which confirmed prior predictions on global warming that resultant floods would even effect southern portions of the United States. As McComas and Shanahan concluded, dramatic considerations drive the cyclic nature of media narratives on climate change (1999).

Meanwhile environmental concerns continued to gain importance on the global level as well. Climate change headed to the top of the political agenda since it potentially impacted all nations. Environmental conferences of the international community through the United Nations (such as the 1972 Stockholm conference and the Earth Summit in Rio, Brazil in 1992) provided events the media could use to cover the environmental story as hard news. UN reports and treaties fueled coverage as well. These included the Brundland Report (Our Common Future, 1987), the 1987 Montreal Protocol (an international agreement designed to ban certain greenhouse gasses, such as chloroflorocarbons-CFCs, in order to repair the growing hole in the ozone layer), and the 1997 Kyoto Protocol. Meetings in Kyoto, Japan, produced a treaty between nations that called for the collective reduction of greenhouse gases (such as carbon dioxide) to 5.2 percent of 1990 levels by 2012. According to the United Nations Framework Convention on Climate Change (UNFCCC), 37 industrialized nations (called “Annex 1” countries) became legally bound by the agreement to meet this target. One hundred and eighty seven countries have signed and ratified the protocol. Since then, the Protocol risks collapse as a newer deal supported by the United States threatens its implementation and renewal (Reuters, 2010).

As the deadline for the Kyoto Protocol neared in 2012, a continuation of global conferences drew the world’s attention closer and closer to the issue. Yet it was not until Vice President Al Gore’s popularizing of the problem in his world famous documentary

in 2006, “An Inconvenient Truth,” that the debate seemed to really gain momentum. The documentary fueled a sense of public outrage not yet fully expressed until that time. For his efforts on raising public awareness of the crisis, Gore, along with the UN Intergovernmental Panel on Climate Change (IPCC) – an organization established in 1988 comprised of top scientists from around the world, were awarded the Nobel Peace Prize in 2007. The award was given at the same time the United Nations Conference on Climate Change was being held in Bali, Indonesia. It was Gore’s star power when he then attended the conference that helped to legitimize worldwide concerns over global warming. Consequently, these events led to a tipping point of international media coverage of the issue.

In their study on French and American coverage of climate warming, Brossard, Shanahan and McComas assert that cultural context is an important factor in examining journalistic practices in coverage of environmental issues (2004). In Bendix and Liebler’s seminal study media coverage of deforestation in the Brazilian rainforest, researchers suggested that there is a complex range of explanations for the construction of news in the region, especially when geographers were cited as news sources (1991). As a way to explain the framing of international coverage of issues, critical discourse analysis (CDA) (which serves as both a theory and a method) takes into account the societal contexts in which news texts are developed (Bell, 1994). The approach identifies the selection of actual practices of talking, writing or visual imagery that can be formed into a text and constructed into patterns of social reality (van Dijk, 1988; Fairclough, 1995). These patterns can represent the projection of dominant and subordinate power relationships through discourse, and also identify contradicting ideological positions. For instance, in

Liebes' study on the first Gulf war, discourse analysis helped facilitate an examination of propagandistic speech by coding war news into binary oppositions. This showed how news framed the debate as one of "us" vs. "them" along with good vs. evil (1992).

Demonizing the enemy was one technique used, along with the absence of close-ups, which dehumanized one's opponent, making it easier to criticize other countries.

Likewise, in research on The New York Times' construction of post-cold war Russia it was found that through linguistic choices, events were presented in a sensationalistic fashion, as nothing more than the same old rivalry between hard-core communists and reformers (Wang, 1995). Concerns were simplified into factions representing either a state-controlled or a free market economy.

Studies on the discourse of environmental media may reveal how lexical patterns help construct a lack of understanding of an environmental issue due to the stereotyping of the identities of those affected by it. Critical discourse analysis observes what is said, implied, and not said, along with who benefits from the given account (Starosta, 1999). Each news text entails representation of the issues and people in question, which contribute to the construction of the identities of these groups (Pietikainen and Hujanen, 2003). For example, in Farbotko's study of Tuvalu, a small island nation directly effected by climate change (2005), the author was able to use discourse analysis to explore various representations of the people of Tuvaluan islands showing how the *Sydney Morning Herald* emphasized differences between Australia and Tuvalu. Coverage portrayed claim-makers as one-dimensional in scope, thereby limiting representations of Tuvalu people as nothing more than powerless victims of global warming.

As Bell noted in his study on the miscommunication of the facts on climate

change, each piece of information in a news story is presented as a proposition (1994). In the case of events that relate to global warming, news narratives between rich and poor countries could reinforce culturally-embedded propositions, such as anti-colonialism and cultural imperialism, especially in the case of nation-states that have gained independence from colonialist powers (Parameswaran, 2004). Some of these frames bolster Said's argument that "Orientalism" is a factor at play in media coverage of foreign policy issues, such as climate change (1978). Orientalism embraces the assumption that the Western media present exotic representations of people from the traditional societies (like those in Asia or the Middle East) that perpetuate racist stereotypes (Rice, 2000). Orientalist discourses serve to 'explain' non-Western society and cultures as essentially inferior, backward and irrational.

Against this backdrop, Ungar suggests that the realization that the extreme impacts of climate change, such as its effect on weather, are global, rather than just national, will likely increase concern about climate change (1999). But domestic needs may override these insights, and stereotyping in the news may serve as an explanation for such a position. At the start of the 2009 Climate Change conference on global warming held in Copenhagen, changes in ideology between the Republican and Democratic-led government in America became highly anticipated by the international community, as leaders expressed their cautious optimism in the press. It was hoped that the American president, Barak Obama, perceived to be pro-environment, would create a strong US policy directed at addressing the problem of greenhouse gas emissions, which in turn would translate into real progress on Kyoto's promises. Yet at the start of the conference, no energy Bill had passed through Congress. Perception that the US would continue to

follow its old trend of protectionism and expansionism into foreign territory (through US wars for oil), was eventually reinforced through the press coverage of the event.

In terms of policies on global climate change, stereotyping could clearly hinder efforts at diplomacy. For instance, as Rowe noted, an area of tension for international agreements is a historical suspicion of “the other” as the enemy (2009). This could be noted in the case of Brazil, as Rowe states in his study on framings of global warming agreements within Russia, where Brazilian policy makers felt that Western science would serve to benefit Western interests alone (2009). Perhaps more significantly, it would promote Western dominance.

Rowe identified several foci that motivated framing in his research. Among these, the theme of responsibility provided a compelling notion for analysis of international debates on the issue. “Who is obligated to take action?” is a highly charged question driving global climate change politics (Rowe, p. 598), especially in the sense that inaction leads to the theme of blame. Also, in Burch’s study of an environmental controversy in India, arguments presented in the Indian press became constrained into two categories: environmental sustainability versus economic development (Burch, 2002). These kinds of constructs as reinforced in global media coverage may help explain the difficulty nations are having in forming consensus on global warming policy today.

Research Questions

Q1: How do the national media in India, China and the US differ or are similar in their construction of the conferences on passing a treaty agreement on climate change?

Q2: How do India, China and the US differ or are similar in their news coverage on the climate change conferences between the Republican (George Bush) and Democratic (Barak Obama) administrations in the US?

Q3: During the conferences are sources stereotyped by the different countries, thereby possibly hindering treaty agreements?

Q4: Do certain themes dominate over others that may harm the debate?

Q5: Whose voices were silenced (left out of the debate) or minimized?

Research Hypotheses

H1: Opposing sources are portrayed as negatively stereotyping each other (Orientalizing) during the conferences in both the Bush and Obama administrations.

H2: An economic development bias dominates coverage during the Bush and Obama administrations, minimizing the debate on environmental sustainability and a treaty agreement.

Method

The study examines the universe of on-line newspaper articles from web sites from *The Times of India*, *the China Daily* and *The New York Times*. These English-language papers were chosen because government leaders in charge of setting policy and environmental law are their typical audience. The sample was systematically collected during the climate change conferences in 2007 in UN Bali, Indonesia (the Republican Bush era) and 2009 in Copenhagen (under the Democratic President Obama). The study examines the nature of power relationships that have been personified through the press.

Forty-eight articles were coded representing a cross section of news stories from the two periods of the 2007 and 2009 climate change conferences (10 percent of the

approximately 500 articles collected). These included feature and hard news stories. Article headlines exemplified the main issues under negotiation at the conferences. These were examined which helped motivate selection of the sample under study.

Articles were scrutinized through a close reading. Patterns were identified in the texts using qualitative, thematic analysis, which enabled an exploration of how accounts of national climate change were organized and constructed, and what discursive effects they may have accomplished. Following Hubbard et al. (2002), attention was focused on simplified and selective representations of rhetoric portrayed through each nation's news coverage. Critical discourse analysis helped to conceptualize identity in terms of a nation-states' expression of its power-holders. Utterances (quotes), metaphors and binary oppositions were analyzed. Discourse patterns of story sources (claims-makers) were noted as they were categorized into power-holders, victims, villains, stars, or those silent in the debate. This was demonstrated through various expressions including blame, demonizing, isolationism, fears of regional conspiracies, self-defense, and denial (Liebes, 1992).

Themes

Environmental Sustainability vs. Economic Development Frames

Environmental Sustainability was operationalized as:

- **(1) Focus on consequences:** (future and current)
an insecure planet (fear)
unusual statistics (dire predictions on percent of rising temperatures, abnormal records in weather patterns, disasters-floods and droughts, Time (2050!!) is up!!
energy security (rising gas prices).
Future of children and Endangered Species Act (polar bears) and the melting of ice shelves.
- **(2) Acceptance of anthropogenic causes:** Human made pollution
- **(3) Diplomacy:** binding treaty agreements (agreeing with Kyoto Protocol)
- **(4) Green energy:** Carbon credits (to offset emissions)
- **(5) Third World financial support**

Economic Development was operationalized as:

- **(1) Slow or no action on treaties** (opposition to Kyoto Protocol)

- (2) **Legitimizing claims of skeptics:** not enough data, IPCC data inaccurate
- (3) **Cost of treaty agreement:** US can't afford to care for 3rd World, Western jobs come first.
- (4) **Self-regulation/voluntary regulation** (over required emission agreements), liberalization

Findings

Q1: How do the national media in India, China and the US differ or are similar in their construction of the conferences on passing a treaty agreement on climate change?

Coverage of conference topics were somewhat similar, although The New York Times and The Times of India were more oriented toward discussing environmental sustainability themes than the China Daily, in terms of consequences (citing dire statistics on the effects of global warming if left unchecked). All three countries' policies were portrayed as more environmental development oriented on its face in that their biggest concerns were voiced through the themes of self-regulation of emission cuts and actual costs of the treaty agreement. China and the US included minimal coverage of India's concerns, while The Times of India saw India itself as very important in the debate, given its dubious place as the 3rd largest emitter of greenhouse gasses behind the US and China. China and India formed a strong alliance, which was covered in both papers. This was portrayed though blaming on an almost daily basis of the US for being obstructionist to an agreement.

The style of coverage was the greatest difference to be noted between the newspapers especially in terms of how the information was relayed. Source use was qualitatively different between the three papers, although typically Indian reporting is more similar to the US in that the reporters follow the democratic tradition and routines of providing balanced information. Still, whether sources were quoted (or paraphrased) or

used at all remained the most discernable difference in coverage between the papers. The New York Times relied on a mix of quotes of government and scientific officials, while the China Daily wrote in a press release style, citing primarily official party line information in some cases. The Times of India on the other hand, seemed to take the conferences as an opportunity to break from that tradition relying in this case on academic and NGO experts to often author opinions and analysis during the conference. Presentation of hard news and conference developments was typically relayed as in a wire story style in The Times of India, as a simple statement of the events as they unfolded.

Q2: How do India, China and the US differ or are similar in their news coverage on the climate change conferences between the Republican (George Bush) and Democratic (Barak Obama) administrations in the US?

China and India were portrayed as becoming closer allies from 2007 to 2009. This was manifested in their blaming and demonizing of the US for taking little or no action “regardless of Obama,” in 2009, one TOI article reported. The countries became more isolationist and The NYT reported a greater sense of a natural growing regional alliance between India and China in stories from the 2009 period in particular. The NYTs reported China’s actions on a regular basis giving salience of the importance of that country to the US. All three papers reflected India and China as “victims” of global warming in both 2007 and 2009, thus there was no change in that construct over the time period other than that it was intensified (many articles used the victim statement). In 2007, under a Republican-led administration, the TOI openly made a point of expressing its deep sarcasm of anything related to a US-proposed environment deal. By its 2009

coverage, the sense of hostility reached a tipping point. While India's government was somewhat pro-Bush in 2007, especially as it related to anything regarding India's nuclear policy, the TOI wrote numerous stories in 2009 reminding readers that India was the victim here, along with China and the G77 countries.

In contrast to US reporting, the China Daily presented China in 2009 as genuinely sincere, open to friendship and seeking harmony. In 2007, China did not bring such an offer to the table, nor could it hold it over the US. Throughout the 2009 coverage, the China Daily repeatedly referenced the country's promise to reduce emissions and its "innocence" compared to the West in its part in creating to the problem. In 2009, the China Daily portrayed the growing tension between the US and China, noting the US's "insensitivity" through insulting comments its chief negotiator made about China (in its view). The statement was made that the US would not pay for China to cut emissions. China took this as an insult, stating that it had not expected funding.

Both Chinese and Indian coverage, presenting official government viewpoints verbatim, became more oriented toward economic development in 2009 than in 2007, refusing to commit to a legally binding agreement toward emission cuts. This was the case especially as the US offered little on this key point, as expressed through The NYT coverage. In 2009, The New York Times repeatedly reminded its readers of this fact regarding the US. In 2009 reporting on the US remained negative (as it had been during the Bush administration). Both the Indian and Chinese papers reported that officials thought the West (noting the US in particular) should take historical responsibility for the problem and in fact even agree to reparations. The NYT reported that the US refused to do so, instead noting officials in turn blamed China for refusing to be transparent in its

offer to cut emissions by signing a binding treaty. The NYT did not cover the irony of this aspect (the tit for tat between nations that the US refused to sign the Kyoto Protocol but expected China to prove it would keep its promises).

The NYT provided in-depth coverage of many aspects of both conferences, far outdoing the Indian and Chinese press in terms of length of articles in both 2007 and 2009. Also, The NYT was much more critical than the Chinese press of its own nation's policies on global warming. In one article it even disclosed the bias of its main reporters covering the conference toward a belief in the anthropogenic causes of climate change and that the authors felt action to deter global warming needed to be taken and taken now on the issue.

Finally, in terms of difference in coverage quantitatively, there was a dramatic increase in terms of the number of articles produced on the conference within all three papers, from 2007 to 2009, with India producing the largest number of articles in total in 2009 (173) compared to 42 articles it published in 2007. This may be due in part because of the growing sense of significance of the 2009 conference since actions taken in Copenhagen were regarded as directly effecting the possible renewal of the 2012 Kyoto agreement. By the conclusion of the conference, the Kyoto agreement was portrayed "on life support, if not dead," according to participants. This was presented as a big disappointment since Obama was billed as Kyoto's expected savior. Yet with limited difference in US policy between 2007 and 2009, coverage remained similar as well.

Q3: During the conferences are sources stereotyped by the different countries, thereby possibly hindering treaty agreements?

Coverage in all three papers was uniform in regard to vilifying the US's position, or lack thereof, on global warming. In 2007, the US was booed on the conference floor, which made front-page coverage around the world. In 2009, the country was again repeatedly portrayed as obstructionist in all three papers, especially as it stood by its position as the only remaining industrialized nation not to ratify Kyoto. This position was a surprise to some, who expected the Obama administration to break the deadlock. In the China Daily, only one article in 2009 mentioned the debate over its own nation's refusal to provide proof to the international community on how it would meet its emissions targets. All of the rest of its coverage instead condemned the West for the conference's failure to take action. This was the continuing theme (mantra?) in Copenhagen. In the 2009 dataset, one editorial in The NYT published at the end of the conference blamed China for the actual failure of the nation to come to an agreement, despite China's actions being the stated reason Obama would not agree to a binding treaty. This one article disputed all former claims in The NYTs that the US had hampered diplomatic action.

Q4: Do certain themes dominate over others that may harm the debate?

The stories of these conferences were constructed through certain themes or myths that were repeated and parroted in the press. They were represented by binary oppositions (environmental sustainability vs. economic development). Environmental sustainability, represented through funding of the Third World was an important recurring theme presented in coverage of the conference. Other environmental sustainability themes discussed included the consequences of global warming, diplomacy through the ratification of Kyoto and green energy (referred to as the cap and trade

market of global emissions). Anthropogenic causes of global warming were virtually ignored as a theme in coverage of both conferences among all three newspapers.

The coverage that dominated, however, focused on rhetoric related to economic development. Most important among these were the issues of self-regulation of emission cuts (vs. legally binding treaties) and the financial costs of the treaty to each nation. By 2009, the US reportedly made offers to cut emissions by 17 percent by 2015? back to its 2005 level, a promise viewed by most developing countries as meaningless in its impact, especially because there would be no agreement to the cuts in writing. Lacking strong support from Congress 'at home', US offers to contribute to a Third World fund were mitigated by concerns of the costs to the US, especially when it was in the middle of paying for two wars and was in a state of economic collapse. Even when a political star like Secretary of State Hilary Rodham Clinton arrived toward the end of the 2009 conference to revitalize talks offering a significant sum to a global fund, world leaders were not convinced she had the power to actually produce the money. The impact was minimal.

Coverage of the conference in all three papers focused on the lack of action in developing a treaty, or even continuing the principles laid out in the Kyoto Protocol. This was interpreted to be an economic development theme, since the lack of action focused on funding, not the environmental impacts. Reporting emphasized on the endless bickering between negotiators. To create a break in the frustrating lack of progress in the 2009 conference, the TOI and the China Daily both included many articles that emphasized poverty as a key issue in the debate. The poor were not to be "sold out" for

any climate deal, as leaders were quoted as saying in the papers. This again emphasized the focus on costs of any solution.

The theme of skeptics is viewed in this study as an economic development theme since much of the scientific research presented by this group is funded by energy industry interests with a real financial stake in any outcomes of a binding treaty. There were limited reports on any debate over the accuracy of the predictions of scientists studying global warming. Articles were published that covered the leaking of the Intergovernmental Panel on Climate Change (emails that claimed the data on the impacts of global warming had been exaggerated on the day of the leak). Articles also reported that a parallel conference was being held by skeptics who see global warming as an unproven theory. These reports were followed by coverage of newer IPCC data that reportedly refuted skeptics' claims. This had the effect of weakening industry arguments against the process.

Q5: Whose voices were silenced (left out of the debate) or minimized?

In 2007, the so-called skeptics (deniers) were ignored completely in coverage, although this changed slightly in 2009 with the controversy that the IPCC data on melting glaciers in the Himalayas was incorrect and there was a possible cover-up of this incident. This scandal provided interesting copy among all three papers for just one day. Skeptics' claims had traditionally been included in coverage of global warming up to this time as a means for the US press to avoid bias. It was therefore significant that these points of view no longer dominated the international debate. The 2007 lack of coverage on skeptics' claims most likely reflected recent IPCC reports at the time that definitively concluded that global warming was not just a theory but a fact.

NGOs and protestors' concerns were marginalized in both conferences over both time periods, although coverage was included as hard news stories when there were arrests. These demonstrations reflect non-governmental organizations and environmental groups. In these kinds of conferences, non-conference participants are typically excluded. This defies the strong history of the environmental movements in both India and the US, who traditionally try to interject themselves into the debate through non-violent protests. The media chose to stay with the main event, covering protests only as they reflected evidence of the strong opinions of non-governmental organizations. These groups would typically move the debate onto the issue of consequences on the environment and endangered species. Lacking their inclusion, impacts of global warming were limited in the coverage.

In 2009, the concerns of G77 countries were included, but overshadowed in comparison to those of the large developing economies of India and China. G77 countries, lead by the Sudanese ambassador to the UN in 2009, represent the most vulnerable countries involved in the crisis, and they are those most likely to first experience the effects. Their stories were considered of limited importance in the US, Indian and Chinese press, as reflected in the data. Small countries wanted global temperature limits to stop at 1.5 degrees centigrade and were desperately lobbying India and China to get on board. They were met with little success. In 2009, a story of the G77 boycotting talks for a short time did receive media attention, but in-depth coverage of the consequences of global warming upon these countries was clearly missing from the overall narrative in any substantive way. Had the G77 countries banded together with the other marginalized groups (protestors outside the conference for instance) they may have

found more strength in numbers. A few unusual stories on the first islands to be immersed by growing oceans were included in the newspapers. This hardly explicates the full array of concerns of the most vulnerable nations. Upon conclusion of the conference, the G77 leader noted the deal was nothing short of suicide for Africa.

The study shows that in both conference periods, no discernable discussion emerged from Middle Eastern countries (oil producing nations) in the coverage of all three country's papers, although many Middle Eastern countries are signatories of the Kyoto Protocol. This lack of coverage may speak volumes in terms of the lack of viability of implementation of any working treaties. It also ignores the concerns raised briefly by the Indian press about terrorism or "rouge states" that may violate agreements for their own means as they are feared to do so from a stereotypical standpoint. Finally, while industry was a de facto part of the debate in discussions of technology transfer, it is worth noting that insurance lobbyists remained noticeably silent in the discussion of future predictions of floods.

Discussion

A cross-cultural comparison of the media representations of discourse of the sample's nations is highly relevant given the path of development since the signing of the Kyoto protocol in 1997. While the United States produces over 25 percent of the world's greenhouse gases the country has yet to take any action that substantively addresses a response to the problem. In kind, the growing populations of the emerging economies of India and China will impact the world greatly in terms of energy use and consumption, yet the decision of who will pay for the greening of industry in these countries has caused disagreement and stalemate on progress. According to The New York Times, "There is a

dispute between rich and poor nations over how to set targets, and who should bear the brunt of the responsibility” (Stolberg, 2008, p. 2). These concerns continue to culminate as the world heads toward the 2012 deadline to reduce greenhouse gasses. Thus it is extremely important to analyze the competing news-related narratives on climate change and how they may shape a future version of consensus.

Ever since the UN organized its first meeting of world leaders in 1972 to address the growing concerns for the environment expressed in the 1960s, conferences on environmental issues have been used as a way for the world to form consensus on what action to take to cover the negative effects on the environment of industrialization. As noted in the 1987 Bruntland Report—Our Common Future, the United Nations Environmental Program has begun to try to coordinate global solutions that include an agreement between countries, all of whom will be effected by its outcome. The media coverage of these events have helped to interpret the agendas of nations-states toward this mission educating the public about the decisions. Therefore, how the media portray the development of environmental policy agreements is crucial in understanding where the world will go from here in addressing global climate change.

World conferences addressing the effects of global warming are ambitious undertakings to say the least. In kind, the media’s role on helping the various publics understand the stakes cannot be underestimated. Does the media coverage between countries help or hinder developments? Do they foster greater cross-cultural understanding or simply contribute to the disagreements as leaders of nations see them?

Hypothesis one states that opposing sources are portrayed as negatively stereotyping each other during the conferences in both the Bush and Obama

administrations. This study found this to be the case in a variety of ways. Stereotyped coverage intensified in 2009, especially when Obama was viewed as ‘weak’.

Hypothesis two states that an economic development bias dominates coverage during the Bush and Obama administrations, minimizing the debate on environmental sustainability and a treaty agreement. This study also confirms this finding.

Cost of the treaty and self-regulation dominated coverage during both periods, although funding for the Third World was also key issue and could be viewed as a theme related to environmental sustainability. Future conferences scheduled will likely see a full discussion of “cap and trade” agreements, which today are being held out as a panacea in view of any lack of measured emission reductions. This is the case despite the analysis of critics, such as climate scientist Hansen, who said this solution just gives a license to rich countries to pollute.

In both 2007 and 2009, media coverage was dominated by reports on the costs of agreements and who will pay for the solutions. Other issues that will continue into future debates will surely include discussion over technology transfers vs. the ethics of the development of local technology, the viability of nuclear power as an energy source (who will have it and how they will use it) and the concerns of large developing nations such as India and China not to sell out the poor in the name of the environment.

As portrayed in the coverage of the 2009 conference, China and India wanted the US to take the lead, not just get out of the way, but a focus on economic concerns kept that from becoming a possibility. They also demanded an admission of guilt and an apology, urging sensitivity to post colonial modernization. This continued as a recurring theme in the debate.

As in the study on the 1992 Earth Summit, newspapers around the world rely heavily on official government sources as a key channel of information (1999). These leaders have focused their concern for the environment on the economic aspects of the controversy as a means for international agreement on the ethical problems related to environmental sustainability and economic development, particularly as the conversation relates to developing countries. Poverty remains the major issue to solving environmental problems, and climate change as an environmental crisis is no different. If countries can mitigate the economic impacts they may move closer to a plan of environmental protectionism. Lacking that, nation-states remain separated by local and regional concerns and endless finger pointing. The media serve as a vehicle for this strategy.

This study showed how the media reflected similar patterns across three very different cultures, each harboring its own agenda. As prior research has shown, global warming remains a challenging issue for reporters since it is a slowly developing problem that cannot be easily illustrated except through inference to storms. It does not lend itself as well as other environmental issues to the visual media. Data modeling on future predictions continue to be challenged, especially by the media who can't resist a sensational hard news angle to cover, such as the climate-gate (as it was referred to in the Western press). Lacking pictures of protestors adding visual interest to the story by dressing up as polar bears in need, or stars such as Al Gore or Bishop Desmond Tutu declaring the planet in a state of immediate crisis, reports continue to rely heavily on the rhetoric of those official sources in government involved in the debate. Those individuals by proxy present the evidence of established international scientific organizations, as well

as industry. It is only through their colorful accusations blaming each other for the past and the future that the public can attempt to form a basis for the claims.

In the case of these reports, American coverage was similar to Indian and Chinese reporting in that it simply presented the day-by-day developments of the conferences as constructed news events, focusing predominately on the statements of invested stakeholders. Each covered the same events, more or less, in a similar fashion and especially those that were new or unusual. For instance in 2007, the announcement of Australia to finally sign the Kyoto Protocol, leaving the United States as the only industrialized country yet to agree to its conditions and the awarding of the Nobel Peace Prize to Al Gore and the IPCC was hard news and provided interesting copy on a rather academic debate. So too was the scandal of the leaked emails from IPCC scientists or the arrival and departure “11 hours” later of President Obama in 2009. In this sense, stenographers could have authored the stories instead of the press. They provided no challenges to the claims of power-holders.

Differences did occur in coverage between countries, especially in the way the China Daily repeated the government’s official stance throughout the 2009 conference seeming to refuse to provide analysis or question charges that China’s promises of emission reduction lacked transparency (except in one article). This may have been a factor of censorship in China, or self-censorship, as more recent studies on the condition of Chinese media suggest today (Tong, 2009). Instead, the Chinese media seemed hyper-focused on a party perspective, for instance, in the papers presentations of the negotiators’ views that the Americans sorely lack in diplomacy skills. The news repeated daily stories on the Chinese government’s “sincerity” in seeking a “harmonious” solution.

In this way the China Daily, affirmed the nation's perspective of the country being victim at the conference and the media of following the official government account of the conference.

Maybe not surprisingly, it was The Times of India that provided the richest analysis and criticism of the assumptions of the conference, as this kind of coverage would keep in step with the Indian tradition of free speech under a democracy. This did provide variance in coverage between countries. Noteworthy was the fact that the majority of articles published in the paper were written by outside experts discussing the ramifications for the trend of a hurried modernity upon impoverished nations. The TOI presented its nation's agenda as critical in the debate, even while the US and China essentially ignored India altogether in the bulk of its coverage. China especially sidestepped India, except in reference to India as a regional ally and equal victim of the American position. As far as the Chinese press was concerned, India remained the exotic younger brother in the controversy.

Interest was created in the articles across all three papers by focusing on the differences between the "rich and poor nations," which was illustrated through sarcasm and disdain filled quotes between leaders. India was the most likely to bring up the positions of the Group of 77 poor nations who felt the promises made would not go nearly far enough to secure their survival. As stated, of particular concern of small developing countries was the plan to limit global temperatures to no higher than 3 degrees Celsius. G77 countries repeatedly reminded the delegation that 1.5 degrees Celsius in warming was critical if low-lying nations were not to be submerged in the ocean. Yet, these voices were virtually silenced in comparison with the concerns of the

newly emerging “BASIC” countries of India, China, South Africa and Brazil, however, who in the end forged a private deal with the US.

There was little discernable difference in coverage between the periods of the Bush and Obama administrations, other than a limited optimism from the China Daily and The New York Times that a democratic US Congress would perhaps be more inclined to agree to text in the international agreement that set binding targets to the control of greenhouse gas emissions. Only The Times of India, traditionally suspicious of colonial and neo colonial powers, held out little optimism that the Obama administration would be willing to supply the funding needed for developing countries to limit their carbon footprint. Interestingly, it was not until the end of the 2009 conference, that The New York Times published a lyrical editorial presenting any cross-cultural perspective on the outcome of the conference. This article summed up the major differences explaining the nations’ inability to come to an agreement. The editorial, written by an Indian analyst, warned that as long as rich countries refused to acknowledge their imperialistic approach to change in traditional societies, diplomacy would never work.

In sum, the discourse was dominated by debates on the actual financial costs to nations of any agreements. All three nation’s papers demonstrated an economic development bias focusing the majority of their coverage on how to self regulate their emissions, instead of sign a legally binding treaty. China and the US are global economic competitors with China starting to take the lead, especially during the recent US economic crisis. Thus it was not really a surprise that an economic development frame was the focus of most of the coverage. As a mode of self-defense, the China Daily noted repeatedly that the conditions of Kyoto did not call for Third World countries to stick to

actual targets in reductions of greenhouse gasses. In kind, The Times of India wrote that India should not succumb to the pressure of a UN agreement, putting the poverty of its citizens second behind global environmental protection.

Ironically, in its coverage on how to fund the Third World adapting to climate change through technology transfer (an environmental sustainability issue), all three papers failed to provide in-depth discussion on green energy policy. Instead, all placed great emphasis who was to blame and who was historically accountable. The US did not win any favors in coverage, making what was viewed in the developing world as weak promises to reduce emissions and offers to fund just a small share of a global fund for Third World support to counter the crisis.

All three papers also covered the protests that occurred during the conferences to a limited extent. These stories served as a kind of relief from the negative rhetoric that editors may have worried were boring readers. Each showed pictures of costumed demonstrators holding signs that voiced statements from outside the conferences. One placard showed the words: “Blah blah blah, Act Now,” while another stated, “There is no Planet B”. Yet all presented the information in an oversimplified, uniform manner, portraying the protestors as law breaking ‘anarchists.’ While police officials were quoted, demonstrators’ voices were left out. Clearly lacking was coverage on the context of the protests and the actual concerns of the participants. They were portrayed as apart from the event, somewhat insignificant, if not an expected annoyance, during the ‘real’ talks.

Indian coverage evoked the metaphor of Mahatma Gandhi in noting that foreign transfer of technology would be a slap in the face to its country’s stance on self-reliance, bringing in a neo-colonialist frame into the debate. Actual substantive discussion on what

technology transfer would really look like was limited in the papers. This may have been due to a reticence of world leaders to openly discuss the issue of India's nuclear power program, especially in a post-September 11 world. Traditional tensions between India and Pakistan and the current alliance between the US and that country in fighting the war in Afghanistan made diplomacy on environmental issues of lesser concern, at least in the public sphere as represented by the news media.

Although the 2009 conference was billed as a chance to finally make a bit of progress on environmental issues while the US had a 'pro-environment' president, Obama, was portrayed as ineffectual across the board in all three papers. In fact, to illustrate the point, mention was made of Obama's inability to secure the Olympics in Copenhagen months back, as if to serve as a metaphor that nothing has changed in the US despite the change in administration. This condition may remain the case as long as any US president comes to the international table with hands empty of a firm US energy bill. World leaders are portrayed as savvy enough to know this.

Regarding stereotypes, orientaling clearly prevailed. The US is portrayed in all three nation's papers as obstructionist to the principles of the Kyoto Protocol. Developing countries demand an apology from the industrialized world in creating this predicament. At the minimum, US acknowledgement of this concern might help leaders of poor countries provide a justification to their citizens for compromises over economic development they might make now that would perhaps only benefit future generations. Instead, the papers published statements that negotiators viewed untrustworthy and needing to prove in "measurable and verifiable ways" that their promises will be kept. As long as the debate remains frozen on the West's refusal to "make reparations" by taking

greater responsibility, little progress can be made on real deals for emissions controls, critics argue.

As the media presented it, the answer to the problem of global warming remains a focus on the marketability of a cap and trade system. When these discussions dominate the debate in the media, the public's imagination remains stifled. They are fed a diet of back biting commentary. It is entertaining but lacks the inspiration needed for any new ideas. The media parrot the weeping of protestors or the blaming of nation states. The reporting of the cold, hard science of consequences of global warming remains in the background noise, serving as wallpaper for the dramatic leads on disagreements. In short, the news media serve to maintain a status quo of inaction.

Perhaps it is the nature of these kinds of constructed events that led to the uniformity in coverage. With over 2000 participants from almost 200 countries, one Chinese reporter noted in a short article analyzing the media coverage in the 2009 data, the media frenzy took over as the approximately 3500 reporters at the event sought out the stories of the day. They seemed almost gleeful, he noted, at insults lobbed at the Chinese team in 2009, implying at least it was something interesting to report during the weeks of meetings in dull conference rooms. Publication of leaked documents of the working texts of the agreement also fed the media's appetite for news, despite the fact that it fueled discontent between negotiators who felt they were being snubbed in the process. The media seemed to develop an insensitive pack mentality, the reporter suggested, especially in light of having to decode complex scientific jargon discussed on a daily basis. "It was hard to know what to cover," he noted.

Conclusion

As an attempt to negotiate a complex deal on global climate change, leaders of over 197 countries have embraced the mission to attend conferences that allowed for in-depth debate on this issue. They come to try to form consensus. How these countries' media report on the issue may be an important factor in understanding why attempts at diplomacy are at a standstill. Thus far, agreements that were meant to stop the planet from warming are stalled. The disappointing results of attempts at worldwide diplomacy on this issue are important indicators that climate change is imminent if nation-states continue their inaction by choosing national interests over multilateral concerns. By the year 2050, scientists predict that weather created by the earth's warming will lead to greater and greater loss of life. Negative effects will be felt most strongly among developing countries, which already face daunting challenges in terms of addressing the needs of the poor. How the international media continue to portray the decisions of power-holders in this environmental crisis may turn out to be the biggest news story yet. Critical discourse analysis facilitates a cross-cultural comparison of papers depicting the climate change debate through assessing power relationships between nations. Cross-cultural comparisons between news organizations allow for the analysis of the function of the media within the larger international community as it serves or detracts attempts at diplomacy: As a vehicle of information, propaganda or both.

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