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Claims and frames: How the news media cover climate change

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How the news media cover climate change

Overview

Climate change has been called "the greatest environmental challenge facing our planet" (President Obama, BBC News 2015), and also "the greatest hoax ever perpetrated on the American people" (Sen. James Inhofe 2012). How could the science of climate change on the one hand be so clear, yet the response by society on the other be so contested? The answer, in part, is in the way the media have reported the issue.

This lesson aims to provide students with insights into how the news media cover climate change. First, the students are introduced to key concepts in media and journalism studies as they relate to climate change. Then, working in groups, they are required to follow a specific climate change-related story in the news in order to collect data on the levels of coverage (i.e., the number of stories or mentions). They then analyze the content of the coverage. Students present their findings to their peers and class instructors in a formal presentation and write a follow-up, 1000-word paper on their learning experience.

For those instructors who wish to introduce students to this topic without devoting such a large amount of teaching and seminar time to it, an abbreviated lesson plan consisting of two lectures, two seminars, and a shorter assignment is also provided. For instructors who wish to teach this lesson, but whose area of expertise lies outside journalism studies or media studies, some lecture notes are also included.

People get most of their information about science from the media (Nelkin 1995). They cannot visit the icecaps, measure the glaciers or monitor atmospheric CO2 themselves; they rely on the news media to tell them.

Also, people equate high levels of media coverage with salience (Ungar 2000). If something is in the news a lot, the public thinks it must be important. "News confers legitimacy," as Michael Schudson (1989) puts it. The converse is also true: when a topic disappears from the media, most people forget about it.

So ***whether*** the media cover climate change in the first place is important. But we also know that ***how*** they cover it matters too. For example, when climate change is described as a looming apocalypse, people may respond differently than when it is described as an economic and social opportunity. The media's "framing" of climate change is therefore a key factor in promoting public engagement with the issue (Nisbet 2010).

Another factor that has an impact on climate change coverage is how the media themselves operate. Reporters' work conditions, how much they know about the subject, the amount of pressure they are under in their newsrooms, the number of calls they make or resources they consult all affect how they write about climate change (Boykoff & Boykoff 2007).

Reporters and editors work in a field that has its own rules, norms, and values. These help them to decide what is news and what isn't, which stories will make it into their newspapers, bulletins or websites and which won't (Harcup & O'Neill 2001; Schultz 2007). Often, climate change does not align with "news values" (defined in "key terms" below) for a variety of reasons.

Rationale

Academic studies of media coverage of climate change generally fall into three categories:

- Those which measure the levels of media coverage (or "attention") (e.g., Schmidt et al. 2013);
- Those which analyze the content of this coverage (e.g., Asplund 2014; see Riffe & Freitag 1997 and Matthes 2009 for an overview).
- And those which seek to place the media's coverage in a wider arena of "press-politics" or media-policy in which various claims-makers seek to define and dominate the debate over climate change by imposing their frames on the media (Nisbet et al. 2013; Nisbet et al. 2002).

This lesson will require students to critically analyze this "frame competition" (defined in "key terms" below) in the news media through the lens of key climate change news events. By researching the approaches of journalists, scientists, skeptics, politicians, and ENGOs, students will be able to discern the forces at play in the news media.

In the lectures accompanying the assignment, students will become familiar with the following key terms:

Media attention: The level of media coverage given to a certain topic, and why this is important.
News Values: The values inherent to the production of news (Galtung 1965; Harcup & O'Neill 2001) and how these lead to the inclusion of certain events and the exclusion of others.
News routines: A branch of journalism studies which looks at how the working practices of journalists affect the content of the news they produce (Cottle 2007).
Framing: The selection of certain salient aspects of a story and the exclusion of others (Nisbet & Mooney 2007).
Frame contest or competition: The contest between interested parties to set the media agenda on a particular story and to establish their perspective as the dominant and pervading media narrative.

The assignment associated with this lesson plan requires students to develop a sophisticated awareness of the processes of the news media and, in particular, their agenda-setting role in promoting issues such as climate change in the policy agenda (Lindquist 2009).

Timeline

This plan is intended to form part of a larger course on media literacy, mediated climate change, media studies, or journalism. Ideally, the lesson would form part of a course that combined

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lectures and seminars. Instructors could use the lecture time to introduce students to the key concepts, to introduce course materials, and to present academic literature on the subject.

The assignment associated with this plan – in which students are asked to measure and analyze media coverage of key climate change news events – may be more successful towards the middle of an undergraduate degree when students have already taken foundation modules in the science of climate change, media, and communications theory and have already begun analysis of media texts. As will be explained later, this assignment requires students to prepare oral presentations for delivery in seminars. Ideally, these presentations would commence mid-semester, so that they can be completed before the final week of term. Students will thus be able to learn from the presentations of their peers, and assess points of agreement and difference between the different presentations.

Lectures weeks 1-4: Module introduction and overview, key terms and concepts for assignment introduced (see list above). Lectures continue on other topics to end of semester.
Seminars weeks 1-4: Assignment explained, students divided into teams, topic for each team decided upon, dates given for presentations.
Seminars weeks 5-15: Students deliver oral presentations. Roughly five minutes per student allowed for presentations totaling 20 minutes. No more than two teams should present during any one seminar, in order to allow time for question and answer session afterwards.

Lesson Plan

This lesson builds on research done into the extent and nature of media coverage of climate change. It introduces students to the complex frame competition evident in coverage of the topic. It is *critical* in that it demands that students develop a sophisticated awareness of media production and texts. It is *creative* in that it requires students to communicate their research and their conclusions in a meaningful and accessible way to their peers.

The assignment requires students to incorporate key findings from academic research on media coverage of climate change, such as the "balance as bias" concept (Boykoff & Boykoff 2004), the idea of "ideological cultures" in news organizations (Carvalho 2007), and/or the influence of skeptic voices (Oreskes & Conway 2010).

In addition to incorporating concepts introduced in class, students are asked to assemble illustrative materials for inclusion in their oral presentations. These may include news stories, screen shots, graphs and charts, video footage etc.

This assignment can be used as the sole means of assessment for a module or may form part of the overall assessment together with essays or a final examination. For modules that do not have a lecture-plus-seminar structure, the assignment may be modified. For example, instructors could have students to submit a longer essay or a reflective journal on their research and learning, rather than present their work orally.

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Lesson directions

As outlined above, lectures 1-4 deal with the key concepts of media and journalism studies as they relate to media coverage of climate change. More detailed lecture notes are provided elsewhere. Seminars 1-4 prepare students for the assignment. Ideally the class is divided into six teams. Each team is assigned a climate change-related news event to analyze. These events may be global in nature, or more locally focused. Examples of specific global events might include:

- COP21, the Paris climate change talks (December 2015)
- Papal Encyclical on climate change, *Laudate Si* (May 2015)
- President Obama's Clean Power plan (August 2015)
- Naomi Klein's book, *This Changes Everything* (September 2014)
- Climate change concerns in Florida (January 2016-present)
- US-Canada climate change agreement (March 2016)

More general and less time-specific climate events of the kind that appear regularly in the media may include:

- Release of local temperature data
- Local extreme weather event(s)
- Publication of a climate change report, scientific paper, or book
- Release of data or reports by bodies such as the National Aeronautics and Space Administration (NASA) or the Intergovernmental Panel on Climate Change (IPCC)
- Local environmental campaigns

Each team is then asked to track and analyze the news media coverage of their chosen event and prepare a presentation based on their findings. They must cover several key aspects of the coverage, ideally delegating one team member to each aspect. The areas to be covered include:

1. ***Amount of coverage in traditional news media.*** This involves tracking coverage of the event in at least two national news media outlets and one local outlet over the period of one month.
2. ***Amount of coverage in social and digital media.*** This involves tracking reaction to the event on social media and on scientific and environmental blogs, while also tracing "below the line" (comment section) reaction on the websites of news organizations over a similar period.
3. ***Analyzing how the news event is framed.*** Drawing on their understanding of framing strategies covered in lectures, students are asked to analyze how the news media frame these events.
4. ***Taking into account journalistic practices***. This involves noting the kind of reporter assigned to the story (e.g., science or environment correspondent, feature writer, opinion writer, general news reporter, political reporter etc.) and carrying out an analysis of the sources used in the media coverage. Students could focus, for instance, on how many sources are used, the nature of the sources (scientist, policy-maker, politician, NGO etc.). Encourage them to pay special attention to the presence of skeptic or denier voices.

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5. ***Appreciating scientific representation.*** This involves tracking the representation of scientists and scientific organizations in the coverage of the news event and assessing the level of scientific literacy of journalists for such sources.
6. ***ENGO representation in the media.*** This involves tracking the reporting of inputs and reactions from environmental non-governmental organizations within specific media coverage.

(Note: depending on class size, the number of climate change-related events can be increased or decreased. Likewise, the number of topics to be covered by each team [see below] may also increase or decrease. More recent or more locally meaningful and topical events may be substituted into the list).

Guidelines for oral presentation

As outlined, each team of up to six students presents its findings in a group presentation of not more than 20 minutes. Students should use visual aids (PowerPoint, Prezi, Keynote, or Google Slides) and incorporate examples of coverage (text, screenshots, video clips etc.) where possible.

The first speaker should also introduce the event in general terms, and the last speaker should draw the conclusions of the various team members together. The students should be encouraged to make their presentation as engaging as possible and should be informed of the grading rubric, which is supplied in the teaching materials.

Students should present their data first (i.e., the number of stories or items mentioning climate change), then present their analysis. They should be encouraged to refer to relevant academic sources to which they were introduced in the lectures.

Time should be allowed to facilitate responses from other students and teachers. The presentation should be marked according to the rubric supplied in the teaching materials.

Peer feedback

The importance of feedback by peers and instructors should also be emphasized. Presentations can often be a one-way form of communication. All students must attend each presentation and be prepared to ask questions and critique the arguments being put forward. The presenting team must likewise be prepared to answer questions from their peers and from the course instructors. Developing the ability to communicate with an audience of their peers, and to tease out their arguments, are important learning outcomes of this lesson.

Follow-up written paper

Each student is asked to compose a 1,000-word written reflection on their learning, which should be handed in no more than one week after the presentation takes place. In this paper, students should summarize their research process, reflect on their learning, and assess their presentation (noting both positives and negatives). A more detailed guide to the structure and content expected in the written paper is provided in the Assignment Handout in the teaching materials.

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Teaching materials

Assignment Handout

Assignment: group oral presentation and follow-up individual paper

Points value: (to be decided by instructor)

Due date: oral presentations to take place on dates given in seminars; follow-up papers to be delivered one week after the final presentation

Purpose: In asking you to measure the *levels of coverage* for climate change in the media, this assignment encourages you to think about the *impact* that the levels of coverage have on public awareness of climate change. In asking you to note the claims-makers featured in the coverage, you are encouraged to note the "frame contest" taking place in the media over the framing of climate change. Finally, this assignment asks you to bring some of the concepts learned in class to your final analysis.

Description: Working in teams, you must prepare an oral presentation on the media coverage of the climate change-related news event assigned to you. The presentation format should conform to general university guidelines. Each individual team member is also required to submit a 1,000-word follow-up paper to be delivered to the instructor within one week of the final presentation. The paper should conform to general academic standards and should include a list of sources, a discussion of the research process and key findings, and a reflection on how the presentation itself went (positives and negatives).

Details: Together with the members of your team, you are required to track coverage of your assigned climate change story in the media over the period of one month. It is recommended that you set up RSS feeds, Google News Alerts, or other alerts to track coverage. Each member of the team will monitor a media platform as follows:

> ***Member 1: Traditional news media*** – This member will monitor two national and one local media outlet. These can be newspapers or broadcast media.
> ***Member 2: Social and digital media*** – This team member will track reaction to the event on social media and on scientific and environmental blogs, while also tracing "below the line" (comment section) reaction on the websites of news organizations over a similar period.
> ***Member 3: News framing*** – Drawing on an understanding of framing strategies covered in lectures, this member will analyze how the news media framed the event in the various media outlets studied by the team.
> ***Member 4: Journalistic practices*** – This team member will note the kind of reporter assigned to the story (e.g., science or environment correspondent, feature writer, opinion writer, general news reporter, political reporter etc.) and carrying out an analysis of the sources used in the media coverage. You may focus, for instance, on how many sources

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are used, the nature of the sources (scientist, policy-maker, politician, NGO etc.). Pay special attention to the presence of skeptic or denier voices.

Member 5: Representation of science - This team member will track the representation of scientists and scientific organizations in the coverage of the news event and assessing the level of scientific literacy of journalists for such sources.

Member 6: Activists and lobby groups - This team member will track the reporting of inputs and reactions from environmental non-governmental organizations within specific media coverage.

Procedure: Your group will be assigned your climate-related news event in your seminars. Together, you will then select the range of media outlets you will monitor. Selecting your traditional media outlets should be relatively straightforward. However, choosing which social media outlets, micro-bloggers, or bloggers you will follow is less so, so please do some research before you decide on your sources. Please put a range of alert systems into place (Twitter lists, Google News Alerts, RSS feeds, and email alerts) and meet you're your group regularly – at least once a week - to discuss trends and findings.

Presentation: Your team presentation will take place during one of our seminars at a time already assigned to you. The presentation will take 30 minutes, with 20 minutes for the presentation and 10 minutes for questions and feedback from your audience.

The following will be taken into account when grading the presentation:

- Oral presentation skills (eye contact, pace, volume, levels of engagement, timing)
- Organization (structure, transitions, turn taking, introduction and conclusion)
- Content (originality and creativity, coherence, use of visual aids, arguments and ideas presented, issues raised)
- Demonstration of reading/research
- Group effort
- Standard of response to questions/feedback.

Written paper: As part of the assignment, you are required to write a 1,000-word paper outlining your experience, approach, findings and reflections on the media analysis you carried out. The paper should contain the following elements:

- Context: Why media coverage of climate change is an important topic/issue
- Background: Details of the team's chosen climate-related news event
- Method: What the team did to measure and analyze coverage of this event
- Conclusions: What the team learned about this event in particular and climate change in general
- Reflection: Critical reflection on the process (how the team worked, how decisions were arrived at, problems encountered) and the outcome (how effective the presentation was, any difficult questions asked or challenging feedback given)
- Bibliography

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Assignment Evaluation Form

Group name: **Date:**

Oral presentation skills: *(Eye contact, pace, volume, levels of engagement, timing)* **Comments:**	5	4	3	2	1

Organization *(Structure, transitions, turn taking, introduction and conclusion)* **Comments:**	5	4	3	2	1

Content: *(Originality and creativity, coherence, use of visual aids, arguments and ideas presented, issues raised)* **Comments:**	5	4	3	2	1

Demonstration of reading/research: **Comments**:	5	4	3	2	1

Group effort: **Comments**:	5	4	3	2	1

Standard of response to questions/feedback: **Comments**:	5	4	3	2	1

General/additional comments:

Total score: _____

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Outline lecture plan

For those instructors who are unfamiliar with the scholarship of media studies and journalism studies, the following outlines may be useful. A series of four lectures is set out; these are intended to introduce the key concepts of media theory and journalism studies to the students in a structured and accessible way.

Lecture 1 – how the media works
This introductory lecture is intended to introduce the students to the idea of media systems and ways of thinking about the media in general. The instructor could begin by introducing the idea that, for a long time, people have been thinking about what role the media *ought* to play (Dewey 1922; Lippmann 1922; Schudson 2008), and that different countries and parts of the world have different media systems and models (Siebert 1956; Hallin & Mancini 2004). This could lead to a consideration of the perceived failings of the media, for reasons of ideology (Herman et al. 1988) or economic competition (Hesmondhalgh 2006).

Lecture 2 – how newsrooms and journalists work
This lecture confronts the idea that news is a social construct, and that newsrooms are constrained by social, economic, and other factors in what they decide to cover. Although individual journalists may bring their own subjectivities to news selection (White 1950), they are more often influenced by the policy stance of their news organization (Reese & Ballinger 2001). Journalists are also influenced by professional norms and values about what constitutes news (Harcup & O'Neill 2001; Deuze 2005).

Lecture 3 – climate change in the media, part 1
In this lecture, students are introduced to media treatments of climate change. The subject came to widespread attention first in 1988, when NASA scientist James Hansen testified to the US Congress about the "greenhouse effect." The contrast between 1988 and 2012 is instructive for students (Ungar 2014). Early analyses of media coverage focused on whether journalists reflected the scientific consensus in their reporting (Antilla 2005).

Lecture 4 – climate change in the media, part 2
In more recent coverage, skeptic representations have diminished, and the scholarly focus has moved to how various stakeholders have sought to impose their favored interpretation of climate change. Discourse analysis, content analysis, and frame analysis have become the dominant methods of looking at media texts relating to climate change. Students could be introduced to a well-accepted typology of media frames, such as that devised by Matthew Nisbet (Nisbet 2009, p.18), and encouraged to discover other, more local frames in the coverage they examine for their presentation.

Abbreviated lesson plan

It is possible to introduce students to the concepts involved in this lesson in a shorter timeframe. Devoting two lectures, two seminars, and setting a more modest assignment will serve to increase greatly the students' ability to think critically about media coverage of climate change.

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In cases where instructors do not wish to devote so much time to this topic, the following structure is proposed:

Lecture 1: Introduction to media theory and journalism studies
Lecture 2: Introduction to frame analysis and typologies of climate change media frames
Seminar 1: Discussion of local and national media systems
Seminar 2: Discussion of local climate change-related issues and events

Individual Assignment: each student picks a news media outlet, preferably a local one, and researches how it covers climate change over a period of one month. The student must present a written report outlining the extent of coverage (e.g., how many stories or items mentioning climate change) and show how at least two of the prevalent climate change news frames have been used.

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