



**“Science: What’s It Up To?”**  
***The Daily Show* and the Social Construction of Science**

PAUL R. BREWER  
University of Delaware

*See the companion work to this article*  
*“Cloudy with a Chance of Heat Balls:*  
*The Portrayal of Global Warming on The Daily Show and The Colbert Report”*  
*by Lauren Feldman in this Special Section*

*The Daily Show with Jon Stewart*, a satirical television news program, often addresses scientific topics and features scientists as guests. To develop a theoretical framework for examining how the program portrays science, this article synthesizes research on satirical television coverage of public affairs and research on portrayals of science in other media. It then uses textual analysis to illuminate how the program challenges a political “war on science,” subverts the journalistic practice of balancing in coverage of scientific controversies, and critiques how traditional television news covers science. The analysis also explores how the program provides a forum for deliberation about the relationships between science and broader society as well as how it may reinforce a scientific mystique constructed by other media outlets.

On October 26, 2011, *The Daily Show with Jon Stewart*, a satirical “fake news” program on the cable network Comedy Central, ran a segment titled “Science: What’s It Up To?” Correspondent Aasif Mandvi introduced the piece with a discussion of recent controversies involving science and politics, interspersed with sound bites from candidates for the 2012 Republican presidential nomination:

*Mandvi*: Science claims it’s working to cure disease, save the planet, and solve our greatest mysteries, but what’s it really up to? From global warming . . .

*Herman Cain*: I don’t believe global warming is real.

*Mandvi*: . . . to evolution . . .

*Rick Santorum*: Absolutely not, I don’t believe in that.

*Mandvi*: . . . to the HPV vaccine . . .

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Paul R. Brewer: [prbrewer@udel.edu](mailto:prbrewer@udel.edu)  
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*Michelle Bachmann:* Her daughter suffered mental retardation as a result of that vaccine.

*Mandvi:* . . . it seems science is up to something.

*Rick Perry:* There are a substantial number of scientists who have manipulated data so that they will have dollars rolling into their projects.

*Mandvi:* Could these Republican candidates be right?

Mandvi then interviews Republican strategist Noelle Nikpour, who argues that scientists are "scamming the American people." She also says,

It's very confusing for a child to only be taught evolution—to go home to a household where their parents say, "Wait a minute, you know, God created the Earth." . . . We need to offer them every theory out there. It's all about choice.

Mandvi pretends to agree with her, saying, "It should be up to the American people to decide what's true," but he undermines Nikpour's claims via an ironic portrayal of Columbia biology professor (and Nobel Prize winner) Martin Chalfie. For example, the correspondent's description of Chalfie's "luxurious palace of science" is undercut by a shot of a modest-looking laboratory. Similarly, Mandvi's characterization of Chalfie as a "notorious swindler" is belied by the absurdity of his accusation that the scientist is running "the oldest grift in the book—the old nematode switcheroo." The segment ends with Mandvi's visit to a science fair, where he warns the young participants against getting "hooked on that grant money."

*The Daily Show's* focus in this segment reflects a broader tendency on its part to cover science. In the years since comedian Jon Stewart became the program's host in 1999, it has run stories on numerous scientific topics, including climate change, evolution, stem cell research, space exploration, cloning, and genetically modified foods. As a result, *The Daily Show* has, despite its humorous tone, become a leading source of scientific coverage (Feldman, Leiserowitz, & Maibach, 2011). One study found that it devoted 2.6% of its "news hole" to science and technology—a modest percentage, perhaps, but more than twice the figure for the traditional press (Project for Excellence in Journalism, 2008). *The Daily Show* also reaches a sizable audience for a cable television program. For each year from 2006 to 2010, it averaged between 1.5 and 2 million viewers (Good, 2010). In April 2012, it averaged 2.2 million viewers (Freierman, 2012). With all of this in mind, the following account analyzes how *The Daily Show* has covered science, scientists, scientific controversies, and science journalism itself.

The theoretical framework for this analysis builds on two bodies of research: one that examines satirical television coverage of public affairs and another that examines portrayals of science in other forms of media. The former literature focuses on the ways in which programs such as *The Daily Show* and its spin-off, *The Colbert Report with Stephen Colbert*, satirize both politicians and traditional news media coverage of politics. The research here suggests that these programs not only provide extensive coverage of politics and the news media (Brewer & Marquardt, 2007; Fox, Koloen, & Sahin, 2007; Wise & Brewer, 2010) but also offer distinctive ways of communicating about and understanding public affairs. *The Daily Show* differs from both traditional news and traditional entertainment in how it "discursively integrates" the two—that is, in how it "continuously places and replaces" the "styles, standards, and assumptions" of

these “at times incompatible discourses . . . in new and often momentary arrangements” (Baym, 2010, p. 18). Moreover, the program is distinctive in how it challenges political authorities, critiques traditional news media, and provides an alternative model of democratic deliberation (Baym, 2010; Jones, 2005; Young, 2008). Research on *The Daily Show’s* audience, in turn, has demonstrated that many Americans, particularly young people, acquire information through watching it (Cao, 2008; Young & Hoffman, 2012). Indeed, one study found that *The Daily Show* and *The Colbert Report* serve as gateways to scientific engagement by promoting attention to science and technology news in general as well as attention to specific scientific issues such as global warming (Feldman et al., 2011).

The second literature on which the present study builds is rooted in research on the social construction of science and technology—that is, on “the way in which social interests, values, history, actions, institutions, networks, and so on shape, influence, structure, cause, explain, inform, characterize, or coconstitute the content of science and technology” (Hess, 1995, p. 82). Seminal works in the field of science studies illuminated how these social contexts shape the production of scientific knowledge (Haraway, 1991; Latour, 1987; Latour & Woolgar, 1979; Pickering, 1984). A related body of scholarship also challenged traditional top-down models of science communication by emphasizing the ways in which social contexts shape how citizens understand and engage with science (Irwin & Wynne, 1996). Subsequent research along these lines has demonstrated how social, cultural, and political forces and institutions shape both public discourses about and public understandings of science (McCright & Dunlap, 2000; Trumbo, 1996). Of particular relevance here, media institutions can play key roles in providing citizens with the words, images, metaphors, and frames that they use to make sense of what science is “up to,” as *The Daily Show* puts it (Gamson & Modigliani, 1989; Nelkin, 1995; Nisbet, Brossard, & Kroepsch, 2003). At the same time, these media institutions—and the people who work for them—are themselves influenced by an array of social contexts, ranging from economic pressures to journalistic norms and practices to broader values (Hornig, 1990; Nelkin, 1995).

In applying insights from the two literatures to the topic at hand, the present study draws on a textual analysis of *The Daily Show’s* coverage of science from July 1, 2005, to July 1, 2012. As described below in more detail, this seven-year span encompasses high-profile public controversies about two scientific topics, evolution and climate change, which provide useful cases for studying how the program addresses such controversies. The coverage to be analyzed was obtained from the program’s official website ([www.thedailyshow.com](http://www.thedailyshow.com)) using the site’s video tagging system; thus, the selection process was dependent on the way in which videos were tagged for the site. The analysis examined all 98 video clips (excluding Web-only clips) tagged for “science.” Given the focus on the two aforementioned issues, the analysis also included clips tagged for “evolution” or “global warming.” Among these were 31 clips tagged for evolution, 21 of which were not tagged for science, and 50 clips tagged for global warming, 35 of which were not tagged for science. In all, then, the analysis examined 154 video clips. These included standard news segments delivered by Jon Stewart from his anchor desk, correspondent segments, recurring segments (e.g., “Back in Black,” featuring commentary by comedian Lewis Black), and guest interviews, along with brief episode introductions by Stewart and short concluding clips. The guests interviewed included politicians, authors, academics, news media professionals, and actors.

The analysis involved a close viewing of each clip for a number of themes. In exploring these themes, the analysis considered not only the program's verbal signifiers but also its visuals, editing, and guest selection. The examples presented below were selected to illustrate broad patterns in coverage; given the qualitative method used here, however, the study does not address the specific frequencies with which the themes of interest occurred. The analysis initially focused on three themes. One, suggested by the "Science: What's It Up To?" segment, is how the program challenges communication efforts, particularly by Republicans and religious conservatives, to politicize science (e.g., Mooney, 2005). Another theme, building on accounts of how traditional news "balances" scientific controversies (Boykoff & Boykoff, 2004; Mooney & Nisbet, 2005), is how the program frames the competing sides of the public battles over evolution and climate change. Yet another theme is the program's critique of television journalism (Baym, 2005, 2010; Wise & Brewer, 2010) as it applies to science coverage. Two other themes emerged during the course of analysis. The first is the way in which the program uses its guest interviews to provide a forum for deliberation (see Baym, 2005, 2010) about the interplay between science and the social contexts surrounding it. The second is the way in which the program may reinforce a "scientific mystique" (Nelkin, 1995; see also Hornig, 1990) constructed by other forms of media, particularly science media and traditional news media. Taken together, the findings speak to how *The Daily Show* may shape public understandings of science as well as what role the program could play in enhancing public deliberation about and engagement with science.

### **Challenging a "War on Science"**

The outcomes of the scientific process often carry substantial stakes for various political actors, including parties and interest groups. Consequently, these actors may possess considerable motivations to influence what scientists do as well as how—or even whether—scientific findings are presented to broader audiences. Several accounts have argued that Republican politicians, religious conservatives, and other ideologically conservative actors have played particularly crucial roles in politicizing various fields of science, including evolutionary biology (Miller, Scott, & Okamoto, 2006) and climate science (McCright & Dunlap, 2000, 2003, 2011). Within popular discourse, perhaps the most prominent such account is journalist Chris Mooney's *The Republican War on Science*. In this 2005 book, the author argues that the Republican Party has grown increasingly adversarial toward science. He attributes the party's hostility to not only its philosophical roots but its political calculations, especially those arising from its alliances with industry and the "religious Right." Mooney catalogues various ways in which the Republican administration of U.S. President George W. Bush and its allies politicized science through their policy approaches and communication efforts.

Mooney's critique of the Republican Party and its allies resonates with *The Daily Show's* broader challenge to the same actors. Stewart and his team have satirized politicians and interest groups across the political spectrum, but they have focused much of their attention on "interrogating" the communication efforts of actors from the political Right (Baym, 2010). During George W. Bush's presidency, for example, the program offered a "critical counterpoint to the Bush administration and its aggressive efforts to manipulate public information" (Baym, 2010, p. 104; see also Jones, 2005). In keeping with this pattern, *The Daily Show* challenges what it—like Mooney—characterizes as a "war on science." Consider the show's March 16, 2009, coverage of President Barack Obama's lifting of the

restrictions his Republican predecessor had placed on embryonic stem cell research. After presenting a series of sound bites from critics of Obama's decision, Stewart mocks their use of catchphrases such as "fetus farms." Correspondent John Oliver then sarcastically castigates the Obama administration:

Bravo. Oh, congratulations. He ends the war on science—the one war we were actually winning. We've slashed science funding. More and more species were becoming endangered. [Imitates Bush] Science was on the ropes. It was trapped in a cave.

The October 26, 2011, segment "Science: What's It Up To," follows this same pattern by presenting and then satirically undermining Republicans' efforts to frame scientific issues through accusations of "scamming" and calls for "choice."

Several *Daily Show* guests also critique the ways in which Republican leaders and their allies have worked to politicize science. Most obviously, Mooney himself presents such a critique in a September 12, 2005, visit to promote his book. After allowing the author to present his case that the Bush administration went "farther than previous administrations in misusing science," Stewart turns to the question of how and why such misuse takes place:

*Stewart:* Science seems rife for this kind of abuse because it is very difficult to know if people are lying to you with science. Is that why it's so easily manipulated?

*Mooney:* The debates are complex, so it's quite easy to create confusion, and it's especially easy to highlight scientific uncertainty because science is always full of uncertainty.

In the same vein, December 6, 2006, guest Eve Herold debunks some of the key arguments that conservatives have advanced against stem cell research, and March 2, 2009, guest Harold Varmus contrasts the Bush administration's approach to science ("we didn't have a leader who paid attention to science") with the Obama administration's approach. In interviewing Herold, Stewart suggests that research advocates should rename stem cells "freedom kernels" or "happy-time people savers." The host's comments on what he calls the "linguistic" problems of science echo a broader argument advanced by some observers (e.g., Nisbet & Mooney, 2007): that defenders of science must fight their critics' framing efforts through their own efforts at "counter-framing."

### **"Unbalanced" Coverage of Scientific Controversies**

*The Daily Show's* critique of Republican leaders and their allies for politicizing science reflects a broader willingness on the part of the show's creative team to take sides on controversial issues. In this regard, the program stands in contrast to more traditional news outlets, whose reporters typically strive to uphold the norm of objectivity (Bennett, 2011; Tuchman, 1978). Journalists working for such outlets often try to maintain neutrality through "he said, she said" reporting that presents two sides of a debate without evaluating the merit of either side's argument. This practice of *balancing* extends to news coverage of various controversial issues involving science, including the debates about the teaching of evolution and intelligent design (Mooney & Nisbet, 2005) and the existence of global warming, particularly

anthropogenic (human-caused) climate change (Boykoff & Boykoff, 2004). In public interviews, Stewart has criticized how traditional journalism implements the norm of objectivity through balancing. Specifically, he has admonished reporters for merely repeating "talking points" from each side in a given debate and failing to say when one side's arguments are "BS" (Young, 2008, p. 246). *The Daily Show's* coverage of politics uses the program's comedic license to put its host's critique into practice through segments that subvert the norm of objectivity (Baym, 2010). Applying the same approach in the domain of science, the program presents "unbalanced" coverage of the controversies surrounding evolution/intelligent design and climate change.

### ***Evolution Schemevolution: The Evolution/Intelligent Design (ID) Controversy***

The first of these controversies reflects the long-standing tension between the scientific consensus in favor of evolution and religious beliefs in the divine creation of humanity. The public debate surrounding the teaching of evolution in public schools dates back to the (in)famous 1925 Scopes Monkey Trial (*State of Tennessee v. John Thomas Scopes*), in which the state prosecuted John Scopes, a science teacher in Dayton, Tennessee, for violating a law banning the teaching of evolution. A more recent clash in this debate revolved around a 2005 federal court case addressing the teaching of evolution and intelligent design in public schools (ID proponents assert that the complexity of life implies the existence of an intelligent agent who created it). The previous year, the school board of Dover, Pennsylvania, had voted to change the biology curriculum, mandating that "Students will be made aware of the gaps/problems in Darwin's theory and of other theories of evolution including, but not limited to, intelligent design." The American Civil Liberties Union filed a lawsuit on behalf of several parents, arguing that intelligent design was nothing more than a new guise for religiously derived "creation science." On December 20, 2005, a U.S. District Court judge struck down the policy as unconstitutional.

Research suggests that traditional news media engaged in balancing when covering this controversy. Mooney and Nisbet (2005) analyzed how a range of outlets—including broadcast and cable television news programs as well as newspapers—covered evolution in the 17 months preceding the Dover trial, finding that coverage from "[p]olitical reporters, generalists, and TV news reporters and anchors . . . often provides a springboard for anti-evolutionist criticism of [evolutionary] science, allotting ample quotes and sound bites to Darwin's critics in a quest to achieve 'balance'" (p. 32). Coverage of this sort abets the strategy of ID proponents who argue that schools should "teach the controversy" (Mooney & Nisbet, 2005).

Unlike much of the traditional news coverage of the Dover case and the broader evolution/ID controversy, *The Daily Show* presents an unbalanced perspective in its four days (September 12–15, 2005) of special coverage labeled "Evolution Schmevolution Week." This coverage consistently frames the evolution side of the battle as correct and the intelligent design side as wrong. For example, in a September 12 segment, Stewart briefly explains evolutionary theory and describes it as being "widely accepted by nearly all scientists." In contrast, he characterizes ID as one of a host of "creation myths," calls the teaching of it "crazy-claim magic fun hour," and satirizes Bush for endorsing a "teach the controversy" approach. Subsequent segments further violate the convention of balancing by mocking critics of evolution and ID proponents. In the same episode, correspondent Ed Helms visits Dayton,

Tennessee, and pretends to mistake contemporary evolution skeptics for Scopes Trial re-enactors. Likewise, comedian Lewis Black uses his September 14 segment of "Back in Black" to lambast ID texts such as *Of Pandas and People* ("They're blinding you with NOT science!") and proponents such as "Dr." Kent Hovind (who, Black observes, holds, not a doctoral degree, but a certificate from Patriot Bible University).

A special panel discussion of evolution on September 14 is particularly interesting for how it challenges the convention of balancing through both its content and structure. Instead of including two panelists in the standard "he said, she said" format, it includes three: an evolution proponent, an ID proponent, and a proponent of "metaphysical creation theory" named Ellie Crystal. After the first two speakers make their arguments, Crystal presents hers:

Creation is like a ball of energy. That's how I see it, OK? It's a consciousness . . . from there, there are grids formed. . . . Twelve grids around one, it's called—it's part of psychogeometry. . . . It forms grids of energy, like electromagnetic energy. . . . It's virtual reality through the projected eye.

Stewart then turns to the ID proponent and asks, "Why shouldn't *that* be taught in schools?" Thus, the segment simultaneously echoes a common charge leveled at ID proponents (i.e., that they wish for their supernatural explanation of human origins to be taught in public schools but do not wish the same for alternative supernatural explanations) and challenges a premise that underlies much of the traditional news coverage of the debate: that it involves two perspectives warranting equal consideration in public discourse.

### ***World of Warcraft: The Climate Change Controversy***

Just as the evolution/ID debate revolves around an effort by religious conservatives and their political allies to challenge a scientific consensus, the climate change debate revolves around the efforts of a conservative movement to challenge an emerging scientific consensus that humans have contributed to global warming. During the 1990s, conservative think tanks, industry interests, and Republican politicians worked together to promote counterclaims to the growing body of scientific evidence for anthropogenic climate change (McCright & Dunlap, 2000, 2003). The clash between the dominant scientific perspective and climate change skeptics continued through the next decade. It received a new burst of attention with the release of *An Inconvenient Truth*, a 2006 documentary featuring former U.S. Vice President Al Gore's case for the existence of anthropogenic climate change along with his call to action on the issue. Three years later, climate change skeptics such as U.S. Senator James Inhofe, a Republican from Oklahoma who has called "man-made global warming . . . the greatest hoax ever perpetrated on the American people" (2003), seized on the contents of numerous e-mails leaked from the Climate Research Unit of the University of East Anglia to bolster their counterclaims.

As with the evolution/ID debate, the traditional U.S. news media have responded to the controversy through balanced coverage. Analyses of coverage in newspapers (Antilla, 2005; Boykoff & Boykoff, 2004) and broadcast television news (Boykoff, 2008) reveal a common pattern of stories

presenting arguments from both the dominant scientific perspective and climate change skeptics. In constructing balanced coverage, reporters have highlighted scientific uncertainty and relied on climate change skeptics with clear ties to industry to rebut statements reflecting the scientific consensus (Antilla, 2005). Thus, the "institutionalized and professional journalistic practice of balanced reporting has served to amplify a minority view that humans' role in climate change is debated" by scientists (Boykoff, 2008, p. 8).

For its part, *The Daily Show* consistently deviates from the practice of balancing in its coverage of global warming, instead presenting the reality of anthropogenic climate change as a settled matter (for evidence on the same point from a quantitative content analysis, see Feldman, 2013, in this issue). On numerous occasions, Stewart highlights the scientific consensus on the topic. In an October 4, 2005, segment on Arctic ice melting, he observes that "there is near-universal consensus that the melting is due in part to global warming." A little over a year later, in a February 5, 2007, segment, he presents a dubbed "warning" from groundhog Punxsutawney Phil: "There will be cataclysmic climate change of anthropogenic origin. The ice caps will melt at an ever-accelerating rate. . . . I speak the truth!" Stewart agrees (saying, "He speaks the truth") and goes on to describe a report from the Intergovernmental Panel on Climate Change (IPCC): "To sum up, the report states that global warming is happening and that it's all but certainly a man-made phenomenon." He then criticizes the Bush administration for being slow to act on the overwhelming evidence. Stewart even uses a December 1, 2009, story about the alleged scientific fraud in "Climategate" to reinforce the dominant scientific position on climate change. After discussing leaked e-mails suggesting that climate researchers manipulated data, he says, "Now, does it disprove global warming? No, of course not."

The program repeatedly subjects climate change skeptics to mockery (again, for evidence on the same point from a quantitative content analysis, see Feldman, 2013, in this issue). In a June 14, 2006, segment, Stewart targets two televised advertisements that the Competitive Industry Institute released in response to *An Inconvenient Truth*. The first points out that breathing produces carbon dioxide; the host responds, "I know what you're driving at, but I really don't think scientists and liberals are going to outlaw breathing." The second works to construct uncertainty by presenting footage of a melting glacier run forward and then backward, accompanied by a voice-over: "The glaciers are melting. We're doomed. That's what several studies supposedly found, but other studies found exactly the opposite." "Yes," Stewart replies, "it's amazing what results you get when you run the film backwards." Other segments mocking climate change skeptics include a June 29, 2006, segment in which Lewis Black questions Inhofe's position on the Senate committee in charge of the environment ("That's got to be a hoax") and a December 14, 2009, segment in which Stewart compares skeptic Christopher Monckton ("not a scientist per se") to the one dentist in five who "recommends sugared gum" in sugar-free gum commercials.

Here, again, *The Daily Show* explicitly challenges the notion that the two sides of the debate at hand merit equal consideration. An April 19, 2007, segment satirizes a case in which a parent's complaint prompted a Seattle school to instruct a teacher screening *An Inconvenient Truth* to present the opposing viewpoint. Correspondent Jason Jones talks to the teacher:



*Jones:* It is your obligation as a teacher to show the other side.

*Kay Walls, seventh grade science teacher:* I'm teaching science.

*Jones:* You name a concept; I'll show you the other side.

*Walls:* Gravity.

*Jones:* [Wads up piece of paper and throws it.] You forgot one very important thing: the laws of magic. [Paper hits him in the head.]

*Walls:* I don't teach the laws of magic. I teach science.

Likewise, the aforementioned December 14, 2009, segment concludes with Stewart ridiculing climate change skeptics' attacks on "fat-cat scientists with their easy double-blind study money" and summarizing the two sides of the argument as follows: "On the one hand, 90 to 95% of the scientific community believes global warming is real and humans are causing it, but on the other hand it gets cold in winter and scientists are paid."

The program's rejection of balanced reporting on climate change extends to its guest interviews. Gore, undoubtedly the most prominent proponent of the argument that humans have contributed to global warming, appeared on the program twice during the period under the study: on June 28, 2006, and November 4, 2009. In both appearances, he takes the opportunity to emphasize the scientific support for his position. Stewart himself echoes this point; in the second interview, for example, he tells Gore, "You have the science on your side." Secretary of Energy Steven Chu receives similarly congenial treatment during his July 21, 2009, visit to promote the Obama administration's cap-and-trade approach to climate change. In contrast, Stewart repeatedly challenges Christopher Horner, a global warming skeptic from the American Enterprise Institute. At the beginning of the interview, the host compares Horner's book (*The Politically Incorrect Guide to Global Warming and Environmentalism*) to the IPCC report: "Yours is more interesting. The graphs and all of the other things in the other one—the data—I didn't care for it." Toward the end of the unusually contentious interview, Stewart asks his guest, "Have you ever killed a hobo?"

### **A Critical Look at Science Journalism**

*The Daily Show* is not only a fake news show; it is also a show *about* news. In addition to covering public controversies such as the ones surrounding evolution and climate change, the program frequently covers the news media, especially television news (Brewer & Marquardt, 2007). Specifically, it presents an often critical perspective on news coverage of politics by highlighting inaccuracies, oversimplification, bias, sensationalism, and trivialization in such coverage (Baym, 2005; Wise & Brewer, 2010). Along with this explicit critique of conventional political journalism, the program offers an implicit critique by parodying the form and structure of television news (Baym, 2010). "The parody pieces ask us to consider just what a reporter's job *should* be," observes Baym (2005, p. 270). "As such, they ultimately play a diagnostic function, identifying much that is wrong with news in its current form."

In keeping with this approach, *The Daily Show* presents a critical look at television news coverage of science. In some instances, the program pokes fun at newscasters for exhibiting scientific illiteracy. For example, a March 1, 2010, segment mocks CNN anchor Rick Sanchez for asking a scientist what "nine

meters in English is," and a March 7, 2011, segment ridicules Fox News Channel's Steve Doocy for saying that "the problem" with a portable DNA scanner "is that it would be really easy to fake—all you gotta do is put someone else's DNA in your mouth." In other instances, the program criticizes television commentators for sensationalism and fear-mongering. An October 15, 2009, segment accuses Fox News Channel talk show host Glenn Beck (whom Stewart sarcastically calls "Dr. Glennifen Beck") of fanning paranoia about a flu vaccine, and a March 23, 2011, segment (titled "When Reporters Attack") presents HLN anchor Nancy Grace as "refus[ing] to take science for an answer" when a scientist on her program explains that a nuclear reactor accident in Japan is unlikely to affect the United States. Reflecting Stewart's public condemnation of traditional political journalism for falling into an "objectivity trap" (Young, 2008), his program also criticizes traditional television news for failing to distinguish between sound scientific arguments and unsound ones. In an April 30, 2009, segment on the Large Hadron Collider, the world's largest particle accelerator, correspondent John Oliver says that there is "only one way to find out" whether it will destroy the planet: "let the media decide." The segment then cuts to a series of clips from major news organizations, each featuring the spurious claim that the collider could create a black hole threatening the Earth.

Stewart's commentary on news about Climategate epitomizes his program's critical take on television news coverage of science. He begins a December 8, 2009, segment on the topic by saying, "The point was, if you're getting into the global warming debate, you gotta have your numbers straight. Otherwise you risk compromising your hard-won credibility." He then presents a Fox News Channel clip in which Steve Doocy discusses the results of a poll asking respondents whether they thought scientists had falsified research. As Stewart observes, the figures reported in the clip are obviously wrong: "So, in attacking scientists for falsifying data to support their theories on global warming, you've cited a poll that adds up to 120%." An October 26, 2011, segment revisits the controversy by reporting on a new study confirming climate scientists' conclusion that the Earth is warming. "Climategate was a huge news story," says Stewart. "I'll bet debunking Climategate is going to be huger." The segment immediately cuts to a series of clips from cable news shows discussing the reintroduction of the McRib sandwich by McDonald's. The host concludes:

Y'know, they reintroduce the McRib every [bleep]ing year. It's not big news. Y'know, reintroducing the McDLTer—shamrock shakes all year long—that's big news. I don't get this, man. Climategate was huge news. The debunking of Climategate got a total of 24 seconds of cable news coverage. Liberal media—d'oh!

Thus, the show criticizes television news not only for how it *covers* science but also for how it *fails to cover* important scientific stories due to its short attention span and focus on trivialities.

In addition to satirizing the substance of television news about science, *The Daily Show* also parodies its style. Just as it bestows a parade of important-sounding titles on its correspondents in political stories (Baym, 2010), so does it give them titles such as "Senior Envirospendent" in its science stories. And, just as the program's parodies of political coverage on television highlight its vacuity (Baym, 2010), so do its parodies of science coverage. In a September 23, 2009, segment titled "Our Dead Planet," correspondent Mandvi interrupts a geo-engineer's explanation of a method for counteracting

global warming by saying, in a voice-over, "Unless this guy can succeed in boring the Earth into submission, I was going to need other options." Both this segment and another in the "Our Dead Planet" series (from January 10, 2008) also parody the overuse of dramatic editing and graphics in television news by using fiery explosions as transitions and by presenting graphics of the Earth being eaten by a shark mouth's and melting into a laughing skull.

### **A Forum for Discussing Science and Society**

Whereas much of *The Daily Show's* scientific coverage focuses on satirizing what political, religious, and media actors say about the topic and how they say it, the program's interview portion also serves as a forum for exploring in more depth the relationships between science and the social contexts surrounding it. The guest interviews are "hybrid affairs, melding the lighthearted sociability of entertainment chat with the serious topical concerns of more traditional public affairs programming" (Baym, 2010, p. 115). Stewart uses them to create opportunities for the sort of "reasoned conversation" that reflects his program's underlying model of deliberative democracy (Baym, 2010, p. 119). Consistent with this model, the interviews provide varied and competing perspectives on how science and other elements of broader society reflect, shape, and sometimes clash with one another.

A number of the interview segments address ways in which social and cultural values, on the one hand, and science, on the other, speak to one another. In his January 27, 2010, appearance, neuroscientist Ethan Waters argues that the United States is exporting its ideas about mental health to the rest of the world. His comments emphasize the social and cultural construction of the science surrounding human health (see Brown, 1995):

The rest of the world, I think, reaches out to us on these things. They expect innovation from the U.S. They expect our science to be good. But when it comes down to science like the science behind the antidepressants, it's really quite problematic. Drug companies are creating this science to a huge degree . . . we get it over to another country, and it looks like science, but the truth is, it's much more problematic than that.

Whereas Waters discusses how scientific understandings can *reflect* social and cultural values, author Sam Harris suggests in his October 4, 2010, appearance that science can and should *inform* such values (his book is titled *The Moral Landscape: How Science Can Determine Human Values*). Raising the question of how we can "create a global civilization based on shared values," Harris argues that the "only way forward I see to do that is to begin to talk about morality and human values very much in the context of our growing scientific understanding of ourselves and the world." Stewart takes the role of translating the guest's argument into simpler terms: "I guess the real message of this book is: get off your ass, scientists."

Stewart and his guests also explore the potential for scientific and religious worldviews to clash—or coexist—with one another. Harris challenges what he sees as an unwarranted monopoly on moral truths held by "religious demagogues," arguing that "these domains fall within the purview of science." In her

October 26, 2011, appearance, physics professor Lisa Randall emphasizes how the epistemology of science differs from that of religion:

*Stewart:* I don't think we'll ever get to the point where we know everything, therefore there's no room for God, or faith, or anything. Why are they incompatible?

*Randall:* . . . In terms of room for God, people can think whatever they want. . . . But science actually tells us a very definite way for moving forward. It doesn't say that we know the answer to everything. It says, "This is what we know. This is the degree of precision with which we know it, and this is how we move forward."

Author Marilyn Robinson presents another perspective in her July 8, 2010, visit:

*Stewart:* Who do you think is more afraid: do you think science fears religion more than religion fears science, or is there equal mistrust to go around?

*Robinson:* I'm really not sure about the nature of the controversy, because I know lots of religious people who love science, and I know lots of scientists who seem to be completely at ease with religion. It's the quality of science and the quality of religion that determines the nature of the conversation.

In each of these interviews, Stewart encourages his guests to weigh the nature—or even existence—of a "competition between worldviews" (see Nisbet, 2005).

Still other guest interview segments consider limitations on the public's understanding of science or problems with scientific research itself. Michael Specter (December 3, 2009), author of *Denialism: How Irrational Thinking Hinders Scientific Progress, Harms the Planet, and Threatens Our Lives*, addresses the former topic in his December 3, 2009, appearance. As the title of his book suggests, he highlights what he sees as the dangers posed by the public's "paranoia" about scientific advances such as vaccines and genetically modified foods. He suggests that "denialism" can be found "on the left, on the right, [and] in the middle," noting that he "was accused of epistemological blindness the other day" for defending the use of genetically engineered foods. Meanwhile, Simon LeVay, author of *When Science Goes Wrong: Tales from the Dark Side of Discovery*, provides a critical look at the process of scientific research in his April 1, 2008, appearance. Specifically, LeVay discusses mistakes and ethical lapses on the part of several scientists that resulted in losses of life. He then cites these cases as justifications for regulatory oversight of science. Describing the "pressure to get results" that scientists face, he also argues that "science is basically just like everything else . . . in the sense that people have careers; they want to get famous."

### **The "Scientific Mystique"**

As it happens, LeVay's comment that science is "just like everything else" goes against a common discourse about the subject. Although media discourses in the United States have long presented multiple and sometimes contradictory portrayals of science, many media messages reinforce scientific authority and present scientists as holding elite status (Long & Steinke, 1996). For example, popular science television programs such as *NOVA* cast scientists as "high priests" who explain the mysteries of

the universe to ordinary people (Hornig, 1990). Similarly, Nelkin (1995) concludes that journalists help construct a "scientific mystique":

Science still appears in the press as an arcane and incomprehensible subject, far from organized common sense. And scientists still appear to be remote but superior wizards, culturally isolated from the mainstream of society. Such heroic images are most apparent in press reports about prestigious scientists, especially Nobel laureates. But the mystique of science as a superior culture is also conveyed in the coverage of scientific theories, and even in stories about scientific misconduct and fraud. (p. 14)

The author observes that such depictions may benefit both scientists seeking funding for research and journalists seeking authoritative sources for discussing complex issues. She also argues, however, that these depictions may "contribute to the obfuscation" of the substance and process of science as well as "perpetuate the distance between scientist and citizen" (Nelkin, 1995, p. 30).

Given its satirical tone and its often critical take on other social institutions—including political, religious, and media institutions—one might expect *The Daily Show* to challenge this mystification of science. At first glance, the program seems to do just that by making fun of science and scientists. Consider an August 5, 2009, segment narrated by John Oliver that presents two scientists as eccentric "geeks" engaged in an obscure debate about which species, orangutans or chimpanzees, is more closely related to humanity:

*Professor Jeffrey Schwartz:* Now, what's interesting is if you look at these fossils, human fossils, they have the same orang features of the face.

*Oliver:* Does "interesting" mean something different in the scientific field than it does in other life?

The segment concludes with a look at what Oliver calls "the academic life cycle":

*Professor Todd Disotell:* I think the arguments are very easy to counter, and it's going to let me write a counter-paper.

*Oliver:* What will he do then—write a counter-paper to your counter-paper?

*Disotell:* Yeah.

*Oliver:* Then you'll publish a counter to that, he'll write a counter paper saying that he's right and you're wrong, and no one will read any of them.

*Disotell:* Probably true, unfortunately.

Similarly, an April 30, 2009, segment calls a physicist working on the Large Hadron Collider an "evil genius" who is "clearly . . . up to something"—namely, "destroy[ing] the Earth."

Note, however, that this sort of humor at the expense of scientists can still reinforce the image of science as "an esoteric activity, a separate culture" (Nelkin, 1995, p. 30). In each case, the show presents the scientists in question as different and apart from ordinary people. Furthermore, *The Daily Show* often works at a deeper level to reinforce the special status of science and scientists. For example, the story

about the Large Hadron Collider ultimately contrasts the scientific authority of "Dr. John Ellis, PhD, theoretical particle physicist," who dismisses concerns about the accelerator, with the absence of authority possessed by "science teacher" Walter Wagner, who claims that there is a one in two chance that the accelerator will destroy the Earth. "So who was right," asks correspondent Oliver, "the world-renowned particle physicist, or Walter?" Likewise, Stewart's November 30, 2010, interview of Susan Casey, author of *The Wave: In Pursuit of the Rogues, Freaks, and Giants of the Ocean*, casts scientists as literally "heroic" in their pursuit of knowledge:

*Stewart:* The thing I really like about this book is, it's split into these two factions. You have these surfers that are trying to hit these seventy-foot waves . . . and these scientists in these ships, and the scientists almost seem more heroic in a way . . .

*Casey:* Well, a lot of the times they're grappling with these mysteries that they don't understand . . . so maybe it is more heroic, you know, sitting in front of a computer terminal and figuring this stuff out about how the planet works.

*Stewart:* . . . The scientists are putting themselves in this position to further our knowledge.

Even the program's coverage of Climategate presents alleged scientific fraud "in a manner that further idealizes science as a pure and dispassionate profession" (Nelkin, 1995, p. 26). Stewart concludes the December 1, 2009, segment on the topic with an appeal to climate scientists: "Don't cut corners! It's disheartening for people inclined toward the scientific method."

The host's interviews of frequent guest Neil DeGrasse Tyson are particularly interesting in how they mystify science even while trying to demystify it. Tyson, an astrophysicist, planetarium director, and host of the science television program *NOVA scienceNOW*, made five visits to the show during the period under study. An enthusiastic speaker, he engages in humorous banter with Stewart (who has also visited Tyson's own program) while discussing his efforts to communicate scientific information to a wide audience. In a July 23, 2007, appearance, Tyson describes his program as "science for the shorter attention span." Similarly, in a March 1, 2010, visit, he explains how he has been using Twitter to discuss the universe:

*Stewart:* I don't think that it's good for you to discuss things in 144 characters—you need a longer form.

*Tyson:* I discuss the distilled essence of the conflicts.

Although part of Tyson's mission is to make science more accessible to the public, the interview segments sometimes capture him playing the role of a high priest explaining the "sacred mysteries" of science—much like the scientists portrayed on the television program *NOVA* (Hornig, 1990). In his January 18, 2011, appearance on *The Daily Show*, Tyson describes the research process in exclusive and rarified, almost mystical, terms:

Allow me to say that when you are on the frontier of knowledge, between what is known and unknown, reaching out into that abyss, sometimes you do actually have to "make

stuff up” that might be true, so that you can organize a research plan to find out whether or not it is . . . *this is the creativity of discovery that not everyone has* (emphasis mine).

Stewart plays two roles in these interviews. First, he asks questions that cast him as a comic foil to Tyson, who then plays the part of the scientific authority by providing the answer. For example, in a January 18, 2011, discussion of the difficulties in traveling between Earth and Mars, Stewart asks, “Why don’t they give the rocket a steering wheel?” Tyson responds by explaining the issues involved in planetary alignment. Second, Stewart reinforces Tyson’s special authority and status through exaggerated—but evidently sincere—praise. Consider the following exchange during Tyson’s July 23, 2007, appearance:

*Stewart:* Isn’t that unknowable? Isn’t the trouble with your job the not knowing?

*Tyson:* That is not the trouble; that is the seduction.

*Stewart:* You just blew my mind. . . . You are at the level of scientist where you’re pushing their knowledge.

Later in the same interview, the host asks, “Why is it that when you talk about science I get horny?” Stewart’s comments to Tyson may be humorous in nature, but they also reflect an unironic idealization of the guest as a scientific authority.

### ***The Daily Show, Science, and the Public***

One recent account argues that *The Daily Show* and its spin-off, *The Colbert Report*, can foster greater public attention to science by making the subject more accessible and entertaining (Feldman et al., 2011). The present study suggests other ways in which Stewart’s program may contribute to public understanding of and engagement with science. For example, its departure from—and subversion of—“he said, she said” reporting on topics such as evolution and climate change may serve as at least a partial corrective to traditional news coverage that balances the scientific consensus on these topics with viewpoints held by small minorities in the scientific community. Furthermore, *The Daily Show’s* approach to science may foster not just attention but also *critical engagement* among viewers. The program’s dissection of how political actors have sought to distort scientific discourse could help viewers actively weigh these actors’ communication efforts. Similarly, its examination of traditional television news coverage of science could encourage critical scrutiny of such coverage. Last, but by no means least, the way in which the program provides a forum for reasoned conversation about science and society could provide citizens with a model of deliberation about the relationships between the two.

At the same time, the analysis here suggests that in some ways *The Daily Show* may echo, rather than challenge, broader media constructions of science. In particular, Stewart, his team, and his guests sometimes reinforce the scientific mystique that both traditional news media (Nelkin, 1995) and science media (Horning, 1990) construct. Like these other forms of media, *The Daily Show* can convey a “sense of awe about science” (Nelkin, 1995, p. 30), but it says less about the process of science. Thus, the program may reinforce the deference to scientific authority common among the U.S. public (Brossard & Nisbet,

2007) as well as the perceived social distance between scientists and citizens (Hornig, 1990; Nelkin, 1995). All of this might work to the interests of scientists and the scientific community, at least in a narrow sense (see Nelkin, 2005), but it will not necessarily lead to a more participatory scientific process in which citizens play active, engaged roles.

In broader terms, one should keep in mind that *The Daily Show* is subject to its own constraints in how it covers science. Particularly important among these may be the constraints that derive from the economic and ideological contexts surrounding the production of political satire programming (see Young, 2011). As a program airing on a for-profit network driven by advertising revenues, *The Daily Show* is subject to economic pressures to draw ratings. In addition, its content may be shaped by the social and political values of its producers and, ultimately, its target audience. It is also important to note that other media outlets can, and do, perform some of the same functions that *The Daily Show* performs. For example, Mooney & Nisbet (2005, p. 32) found that science writers—unlike “political reporters, generalists, and television news reporters and anchors,” but like *The Daily Show*—“generally characterize evolution in terms that accurately reflect its firm acceptance in the scientific community.” In the context of climate change, both prestige newspapers (Boykoff, 2007) and cable news networks (specifically, CNN and MSNBC; Feldman, Maibach, Roser-Renouf, & Leiserowitz, 2012) have paralleled *The Daily Show* in emphasizing the scientific consensus rather than balancing the two sides of the battle.

Future research could shed more light on both how televised political satire programs portray science and how audience members respond to these programs' portrayals. For example, content analysis of *The Daily Show's* science coverage could complement this study's textual analysis approach—which focused on providing an in-depth look at the complexities of this coverage—by providing a more systematic and (given the potential limitations of the video tagging system used here to select clips) more representative portrait of the same material. Feldman's (2013) analysis of how the program has covered global warming illustrates the virtues of such an approach. Given the present study's focus on one program, additional research could apply its approach to how other satirical television programs (e.g., *The Colbert Report*) cover science. In terms of the audience, little research to date has analyzed how viewers react to and make sense of the ways in which satirical news programs depict science. One notable exception is Feldman et al.'s (2011) research, which uses survey methods to examine the role that such programs can play in fostering public attention to science. Future research could use this same approach and/or experimentation to examine the effects of watching satirical television news on public perceptions of science. The multifaceted portrait of coverage that emerges in the present account, however, suggests that qualitative approaches would be helpful in examining audience responses to “fake news” about science. Research along these lines could involve in-depth interviews of viewers, focus groups in which participants watch and then discuss coverage, and/or analysis of comments posted by users on the programs' websites and on social media sites. In the end, the role of televised political satire programs in the social construction of science may depend not only the messages presented by the programs themselves but on the meaning-making practices of their audiences.



### References

- Antilla, L. (2005). Climate of scepticism: U.S. newspaper coverage of the science of climate change. *Global Environmental Change, 15*(4), 338–352.
- Baym, G. (2005). *The Daily Show*: Discursive integration and the reinvention of political journalism. *Political Communication, 22*(3), 259–276.
- Baym, G. (2010). *From Cronkite to Colbert: The evolution of broadcast news*. Boulder, CO: Paradigm Press.
- Bennett, W. L. (2011). *News: The politics of illusion* (9th ed.). New York, NY: Pearson Longman.
- Boykoff, M. T. (2007). Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006. *Area, 39*(4), 470–481.
- Boykoff, M. T. (2008). Lost in translation? United States television coverage of anthropogenic climate change, 1995–2004. *Climatic Change, 86*(1–2), 1–11.
- Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the U.S. prestige press. *Global Environmental Change: Human and Policy Dimensions, 14*(2), 125–136.
- Brewer, P. R., & Marquardt, E. (2007). Mock news and democracy: Analyzing *The Daily Show*. *Atlantic Journal of Communication, 15*(4), 249–267.
- Brossard, D., & Nisbet, M. C. (2007). Deference to scientific authority among a low information public: Understanding U.S. opinion on agricultural biotechnology. *International Journal of Public Opinion Research, 19*(1), 24–52.
- Brown, P. (1995). Naming and framing: The social construction of diagnosis and illness. *Journal of Health and Social Behavior, 35*(Extra Issue), 34–52.
- Cao, X. (2008). Political comedy shows and knowledge about primary campaigns: The moderating effects of age and education. *Mass Communication & Society, 11*(1), 43–61.
- Feldman, L. (2013, this special section). Cloudy with a chance of heat balls: The portrayal of global warming on *The Daily Show* and *The Colbert Report*. *International Journal of Communication, Vol. 7*.
- Feldman, L., Leiserowitz, A., & Maibach, E. (2011). The science of satire: *The Daily Show* and *The Colbert Report* as sources of public attention to science and the environment. In A. Amarasingam (Ed.), *The Stewart/Colbert effect: Essays on the real impacts of fake news* (pp. 25–46). Jefferson, NC: McFarland.
- Feldman, L., Maibach, E. W., Roser-Renouf, C., & Leiserowitz, A. (2012). Climate on cable: The nature and impact of global warming coverage on Fox News, CNN, and MSNBC. *International Journal of Press/Politics, 17*(1), 3–31.
- Fox, J. R., Koloen, G., & Sahin, V. (2007). No joke: A comparison of substance in *The Daily Show with Jon Stewart* and broadcast network television in the 2004 presidential election campaign. *Journal of Broadcasting & Electronic Media, 51*(2), 213–227.
- Freierman, S. (2011, May 9). Popular demand. *The New York Times*. Retrieved from <http://query.nytimes.com/gst/fullpage.html?res=9A04E0DB133AF93AA35756C0A9679D8B63>

- Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, 95(1), 1-37.
- Good, C. (2010, October 29). Colbert's ratings climbing, while Stewart's on slight dip. *Atlantic Monthly*. Retrieved from <http://www.theatlantic.com/politics/archive/2010/10/colberts-ratings-climbing-while-stewarts-on-slight-dip/65441/>
- Haraway, D. J. (1991). *Simians, cyborgs, and women: The reinvention of nature*. New York, NY: Routledge.
- Hess, D. J. (1995). *Science studies: An advanced introduction*. New York, NY: New York University Press.
- Hornig, S. (1990). Television's NOVA and the construction of scientific truth. *Critical Studies in Mass Communication*, 7(1), 11-23.
- Inhofe, J. M. (2003). The science of climate change. Retrieved from <http://inhofe.senate.gov/pressreleases/climate.htm>
- Irwin, A., & Wynne, B. (1996). *Misunderstanding science? The public reconstruction of science and technology*. New York, NY: Cambridge University Press.
- Jones, J. P. (2005). *Entertaining politics: New political television and civic culture*. Lanham, MD: Rowman & Littlefield.
- Latour, B. (1987). *Science in action*. Cambridge, MA: Harvard University Press.
- Latour, B., & Woolgar, S. (1979). *Laboratory life: The construction of scientific facts*. Beverly Hills, CA: SAGE Publications.
- Long, M., & Steinke, J. (1996). The thrill of everyday science: Images of science and scientists on children's education science programmes in the United States. *Public Understanding of Science*, 5(2), 101-119.
- McCright, A. M., & Dunlap, R. E. (2000). Challenging global warming as a social problem: An analysis of the conservative movement's counter-claims. *Social Problems*, 47(4), 499-522.
- McCright, A. M., & Dunlap, R. E. (2003). Defeating Kyoto: The conservative movement's impact on U.S. climate change policy. *Social Problems*, 50(3), 348-373.
- McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public's views of global warming, 2001-2010. *Sociological Quarterly*, 52(2), 155-194.
- Miller, J. D., Scott, E. C., & Okamoto, S. (2006). Public acceptance of evolution. *Science*, 313(5788), 765-766.
- Mooney, C. (2005). *The Republican war on science*. New York, NY: Basic Books.
- Mooney, C., & Nisbet, M. C. (2005). Undoing Darwin. *Columbia Journalism Review*, 44(September/October), 30-39.
- Nelkin, D. (1995). *Selling science: How the press covers science and technology*. New York, NY: Freeman.
- Nisbet, M. C. (2005). The competition for worldviews: Values, information, and public support for stem cell research. *International Journal of Public Opinion Research*, 17(1), 90-112.
- Nisbet, M. C., Brossard, D., & Kroepsch, A. (2003). Framing science: The stem cell controversy in an age of press/politics. *International Journal of Press/Politics*, 8(2), 36-70.

- Nisbet, M. C., & Mooney, C. (2007). Framing science. *Science*, 316(April 6), 56.
- Pickering, A. (1984). *Constructing quarks: A sociological history of particle physics*. Chicago, IL: University of Chicago Press.
- Project for Excellence in Journalism. (2008). Journalism, satire, or just laughs? *The Daily Show with Jon Stewart*, examined. Retrieved from <http://www.arecentstudy.com/studies/daily-show-methodology.pdf>
- Trumbo, C. (1996). Constructing climate change: Claims and frames in U.S. news coverage of an environmental issue. *Public Understanding of Science*, 5(3), 269–283.
- Tuchman, G. (1978). *Making news: A study in the construction of reality*. New York, NY: Free Press.
- Wise, D., & Brewer, P. R. (2010). News about news in a presidential primary campaign: Press metacoverage on evening news, political talk, and political comedy programs. *Atlantic Journal of Communication*, 18(3), 127–143.
- Young, D. G. (2008). *The Daily Show* as the new journalism. In J. C. Baumgartner & J. S. Morris (Eds.), *Laughing matters: Humor and American politics in the media age* (pp. 242–259). New York, NY: Routledge.
- Young, D. G. (2011). Political entertainment and the press' construction of Sarah Feylin. *Popular Communication*, 9(4), 251–265.
- Young, D. G., & Hoffman, L. H. (2012). Acquisition of current events knowledge from political satire programming: An experimental approach. *Atlantic Journal of Communication*, 20(5), 290–304.