

The battle for 'Trayvon Martin':
Mapping a media controversy online and off-line
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Abstract

One of the biggest news stories of 2012, the killing of Trayvon Martin, nearly disappeared from public view, initially receiving only cursory local news coverage. But the story gained attention and controversy over Martin's death dominated headlines, airwaves, and Twitter for months, thanks to a savvy publicist working on behalf of the victim's parents and a series of campaigns off-line and online. Using the theories of networked gatekeeping and networked framing, we map out the vast media ecosystem using quantitative data about the content generated around the Trayvon Martin story in both off-line and online media, as well as measures of engagement with the story, to trace the interrelations among mainstream media, nonprofessional and social media, and their audiences. We consider the attention and link economies among the collected media sources in order to understand who was influential when, finding that broadcast media is still important as an amplifier and gatekeeper, but that it is susceptible to media activists working through participatory or nonprofessional media to co-create the news and influence the framing of major controversies. Our findings have implications for social change organizations that seek to harness advocacy campaigns to news stories, and for scholars studying media ecology and the networked public sphere.

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Background

On 19 February 2012, 17-year-old black male Trayvon Martin and his father traveled to Sanford, Florida to visit his father's fiancée in the Retreat at Twin Lakes housing development. The gated community had recently experienced a string of burglaries. During the halftime of the NBA All-Star Game on 26 February, Martin walked to a nearby convenience store to get an iced tea and a bag of Skittles for himself and his stepbrother-to-be. It rained that evening, and Martin wore a hooded sweatshirt. Martin caught the eye of Neighborhood Watch volunteer George Zimmerman, a 28-year-old Hispanic man, as he drove his car on an errand.

Zimmerman had previously reported suspicious individuals to the Sanford Police Department on five occasions, including an incident on 2 February 2012, when he reported two young black men, who went on to burglarize a house four days later.

Zimmerman called the Sanford Police Department to report Martin. As Zimmerman called the police, Martin was on the phone with his girlfriend, and told her that someone was following him. While Zimmerman spoke to the police dispatcher, Martin fled, and the dispatcher asked him not to pursue him. Zimmerman pursued Martin anyway. An altercation occurred between the two, which Zimmerman has claimed was initiated by Martin. Zimmerman sustained injuries to his nose and the back of his head. A witness called 911; cries for help and a gunshot can be heard on the call audio.

Sanford Police officers arrived, followed by Sanford Fire Rescue. Martin was pronounced dead at the scene, and Zimmerman admitted to shooting Martin. The police took Zimmerman in for evidence collection, but eventually freed him at 1:00 AM that night. Police Chief Bill Lee cited Florida's Stand Your Ground law and claimed he lacked the evidence necessary to negate Zimmerman's claim that he shot Martin in self-defense. On 11 April, Zimmerman was charged with second-degree murder by Angela Corey, a Florida prosecutor. On 13 July 2013, Zimmerman was found not guilty of all charges. Our study ends with the reactions to Zimmerman's arrest through 30 April 2012 and does not consider his trial and acquittal.

Context for the study

News coverage about the killing of Trayvon Martin started as a short-lived, local news piece, but through strategic activation of traditional broadcast media and participatory media activism eventually became the most widely covered story with a strong racial component over the last five years (Anderson, 2013). Because of the scale of coverage by professionals and nonprofessionals alike and of engagement with the story online and off-line, Trayvon Martin's story offers a potent case study for examining the role and influence of participatory media on media agendas and across complex media ecosystems.

Scholars have understood news media in terms of environments and ecology since the 1960s thanks to theorists including Marshall McLuhan and Neil Postman, who saw media as interconnected to each other and to society (Strate, 2004). The blogosphere's emergence as a space for citizen journalism and influential political discourse has transformed media ecology as a field by pushing the concept of a media environment toward a simultaneously online and off-line ecosystem of people, information, and new and old communication technologies (Hiler, 2002; Bowman and Willis, 2005; Naughton, 2006), and by developing the practice of

interlinking and the co-creation of news by professionals and nonprofessionals (Drezner and Farrell, 2004; Adamic and Glance, 2005; Wallsten, 2007; Kelly, 2010).

Contemporary media ecosystems are characterized by the persistence of analog media formats alongside a proliferation of new digital formats and platforms, filled with professional and amateur content produced on a wide range of platforms. We use the term ecosystems rather than environments to emphasize that they are not monolithic or strictly hierarchical — instead, they are dynamic networks of media linked together by transmedia audiences coalescing around particular stories at particular times, as well as by literal hyperlinks seeking the most influential source at a given moment.

We based our conceptualization of this news and information space on the “networked public sphere,” which Benkler describes as an Internet-enabled shift away from a mass-mediated public sphere “based on the increasing freedom individuals enjoy to participate in creating information and knowledge, and the possibilities it presents for a new public sphere to emerge alongside the commercial, mass-media markets” [2]. The implications for this view of a media ecosystem are that participatory media have potentially equal standing as gatekeepers and agenda-setters with mainstream media sources.

Critics of the pure networked public sphere view have pointed out that less than democratic hierarchies still evolve (Hindman, 2008). In network science, this takes the form of power laws and/or preferential attachment, by which early actors are more likely to enjoy an elite status. Rather than take sides on this theoretical discussion, we refer to our collection of stories and interactions with stories as a media ecosystem, respecting the idea that a networked public sphere exists in that every media source may act on the other media sources in particular ways. We then look at measures of attention and interconnection to understand where authority or power lies topographically and temporally within the network/ecosystem.

Moreover, we argue that media controversies represent exceptional media events in which some of the traditional dynamics of gatekeeping and framing are undermined by the effects of a networked public sphere and mainstream, alternative, and participatory media’s need to fill a widening newshole with both coverage and meta-coverage. This vicious/virtuous cycle creates opportunities for power shifts around agenda-setting via networked gatekeeping and networked framing.

We use Barzilai-Nahon’s (2008) theory and language for networked gatekeeping, which considers information ecosystems in terms of networks that are sometimes connected at gates to form subnetworks, which may be bounded in their ability to distribute information to the larger network. *Gates* represent individuals, media sources and institutions, or cultural boundaries that act on information at the gates in some way, such as displaying or repeating versus withholding or deleting; these acts constitute *gatekeeping*. The *gated* are those nodes in the network affected by gates and gatekeeping. Networked gatekeeping is governed by the *salience* of the gated from the perspective of the gatekeeper. Importantly, this theory of gatekeeping does not view gatekeepers as monolithic, instead it respects the inequities of power that exist in contemporary media ecosystems and theorizes the dynamic mechanisms of gatekeeping power.

To talk about how a controversial story like Trayvon Martin changes in the way it is told, we use Meraz and Papacharissi’s (2013) concept of networked framing. In looking at Twitter use during the 2010 Egyptian Revolution, they found that “the practice of refraining popular statements on [the hashtag] #egypt blended conversational and broadcasting practices, or oral and print traditions, in a way that introduced plurality and hybridity to the framing process” [3]. This is the idea that framing is crowdsourced and arrived at through iteration and discussion. While this works particularly well in Twitter’s fast-paced and centralized ecosystem, we argue the exceptional conditions of a national controversy similarly afford *ad hoc* emergent framing as networked media sources insert their frames into the coverage and meta-coverage.

Studying this contemporary, networked media landscape demands multi-methodological and multiple media source analysis. Recent studies and theories of media framing and gatekeeping have argued for the need to look both at multiple media sources as well as the dynamic and interactive relationships between news producers, political institutions, and social movements (Oliver and Maney, 2000; Ferree, *et al.*, 2002; Shoemaker and Vos, 2009). In particular, some agenda-setting research has focused on measuring the salience of an agenda item in terms of attention or visibility calculated by summing the number of stories that address it in total as well as in prominent locations like the front page of the newspaper (Kiousis, 2004). Additionally, some scholars of contemporary social movements have observed the need for new theories and methodologies to comprehend new forms of media activism using attention as a critical resource (Tufekci, 2013; Costanza-Chock, 2012).

In order to analyze these aspects of media ecosystems and media activism, we have been developing Media Cloud [4] and Controversy Mapper with colleagues at Harvard’s Berkman Center for Internet and Society. Media Cloud is a toolset for rigorous, quantitative study of media agendas and frames. Media Cloud offers a very broad view of online media, collecting stories from a corpus of more than 27,000 mainstream media and blog sources, and using a link-following methodology to expand the corpus to other relevant sources.

The first major analysis to use Media Cloud’s tools for the purposes of “controversy mapping” considered the emergence in nontraditional, online media of opposition to proposed SOPA-PIPA legislation. Using network maps of interlinked stories from mainstream media and blogs in the Media Cloud corpus, Benkler, *et al.* (2013) traced the development of the story over time and found that new digital media — in the form of online communities (*e.g.*, Reddit), technology blogs (*e.g.*, Techdirt), and newly created sites for online activism (*e.g.*, AmericanCensorship.org) — were the most influential sources in the media ecosystem as ranked by incoming links, overshadowing the impact of traditional media sources. However, the story of SOPA-PIPA may have simply played out in online participatory media because the issue at hand was the Internet itself, and the activism that ensued was organized and performed online.

In contrast to SOPA-PIPA, the Trayvon Martin story occurred and unfolded substantially off-line: the shooting of a black teenager eventually sparked a national debate across multiple media channels, in rallies and marches, and in the speeches and actions of major political figures. Initially, the story passed with little notice, but the efforts of a small *pro bono* team of lawyers and publicists attracted the national limelight. From there, the Trayvon Martin story spread to broader audiences through a widely signed online petition, 24x7 cable news coverage, multiple activist campaigns including competing political agendas pushed by participatory media, a deeply emotional response from President Obama, and a widely televised criminal trial.

To understand the full arc of the Trayvon Martin story, we extended and refined Benkler, *et al.*’s Web site-focused methodology. First, we considered a wider range of media sources, collecting data from a diverse range of social and professional media sources to analyze the story, looking at the volume of references to the story: in hashtags and individual tweets on Twitter; on television news’s closed caption transcripts; in Google searches for the two main subjects; in front page coverage in national newspapers; and, through online actions by the public in the form of Change.org petition signatures. Conceiving of the media ecosystem as a network demanded a network analysis approach to influence, for which we used the PageRank algorithm (Page, *et al.*, 1999) because it allowed us to add a measure of influence through network topology rather than using a simple count of incoming links, and has been shown to be robust against spam blogs (Java, *et al.*, 2006) and “stable” across variable network topologies (Ng, *et al.*, 2001) [5]. We complemented and informed the direction of our quantitative analysis by interviewing media activists involved in the early stages of the Trayvon Martin controversy.

Our goal was to thoroughly document the spread of the Trayvon Martin story in broadcast and participatory media and to understand the role activists had in spreading different interpretations of the story. We offer a history of the story’s spread that

differs from contemporary narratives like Anderson's (2013) argument that social media came first and mainstream media followed slowly, and offers insights that may apply to a broader range of media activism campaigns.

Methods and data

Interviews and timeline construction

We corresponded with Change.org about the launch of the petition to prosecute George Zimmerman, and the actions taken by their employees to promote the cause through social media. We interviewed Ryan Julison, the public relations consultant who worked to promote the call for George Zimmerman's arrest on behalf of Trayvon Martin's parents and their counsel. These interactions with key informants helped us construct a timeline of events after Trayvon's death, some of which received little media coverage. We also benefitted from reading professional news interviews conducted with key actors like the family's lawyer Benjamin Crump and members of the Howard University community who organized early online actions around the Trayvon Martin story.

Quantitative data collection

To create our stories dataset, we used Media Cloud [6], a platform that continually collects stories (articles and blog posts) from a growing list of RSS feeds from sources around the world. We collected stories from 26 February 2012 to 30 April 2012 through three existing U.S.-centric Media Cloud corpora: "Political Blogs," "Popular Blogs," and "Top 25 Mainstream Media," which together comprise 3,992 feeds from 1,570 media sources [7]. Benkler, *et al.* (2013) describe the composition of these corpora in their paper. We took the automatically collected stories in those corpora and searched for the string 'Trayvon Martin' and the common misspelling 'Treyvon Martin,' to create a subset of relevant stories, finding 5,665 stories from 359 sources (before data cleaning).

We then used Media Cloud to identify the hyperlinks in each story and crawl the Web, downloading those linked-to stories, identifying their links and spidering again. We cleaned the data through automatic de-duplication based on query strings in the URLs, hand de-duplication to correct for unusual URLs or incorrectly processed posting dates, and removal of irrelevant stories in which our string query matched text outside of the article body or the date of the article was parsed incorrectly. This produced the final subset of Media Cloud data, which comprised 8,643 stories from 681 sources.

We collected two complementary measures of mainstream media coverage: national front page newspaper stories and broadcast television news mentions. While the daily volume of stories published online about the controversy gives us a sense of the attention paid by the whole of online mainstream media and major blogs, the professional media's prioritization of the story is better approximated by the willingness of a newspaper to give it space on the front page of their print edition. Using PageOneX (Rey, 2012), a tool that allows human coders to produce visualizations of media coverage on a newspaper's front page, we calculated the percentage of front page coverage, as a percentage of total physical column-inches on the front page of the *New York Times*, *Los Angeles Times*, *Washington Post*, and *New York Post* during the period of analysis.

Broadcast television mentions were collected using Archive.org's TV News archive, which hosts both video and closed captioned text (Stempeck, 2013). The closed caption corpus contains 410,000 news programs collected over three years from national U.S. networks and local stations in San Francisco and Washington, D.C. Our corpus represents all broadcasts that mention 'Trayvon/Treyvon/Travon/Trevon' + 'Martin' to account for the cases of transcriptionists using common misspellings, which would not be corrected in subsequent edits as they would in online and print stories.

To better account for popular interest in the story, we also measured three forms of online engagement with the story: Google searches, Twitter updates ("tweets"), Change.org petition signatures, and clicks on bitly links for our Media Cloud stories. Using Google Trends, we collected Google Search volume for two key queries, 'Trayvon Martin' and 'George Zimmerman,' over our target date range. Google Trends expresses daily volumes relative to the one-day peak of the query with the most "search interest" over the period, which in this case was 'Trayvon Martin.' That peak is given the number 100, and the others volumes are expressed as numbers out of 100, essentially percentages. We used the commercial tool General Sentiment [8] to collect all tweets mentioning either 'Trayvon Martin' or related hashtags in our target date range (see [Appendix 1](#) for full list of Twitter queries). Change.org provided us with petition signature volumes by day, including total page traffic and breakouts of social media referrals. Finally, bitly provided us with click analytics for any URLs in their system associated with our Media Cloud stories. A summary of all data collected can be viewed in [Appendix 2](#).

Visualization of media attention measures

In order to directly compare volumes of attention to each other and appreciate the general pattern of ebbs and flows in attention paid to the story, we normalized the volumes of each media type per day according to their own peak and then graphed them along a timeline (see [Figure 1](#)). There is the potential for distortion when normalizing and comparing data, particularly when data are on significantly different scales. However, we justified the risk of exaggerating the prominence of a media source like front page newspaper coverage — which had a small sample size — because our interest was in relative trends over time, as well as using the attention volumes as guides to further quantitative and qualitative analysis of the raw data and content.

Using the normalized histogram and our timeline of events as a reference, we segmented the arc of the controversy into five "acts" based on identifying pivotal events as catalysts of following events and the content of the most heavily cited stories in our Media Cloud corpus. We will examine those five acts in the [Chronological analysis](#) section of the paper.

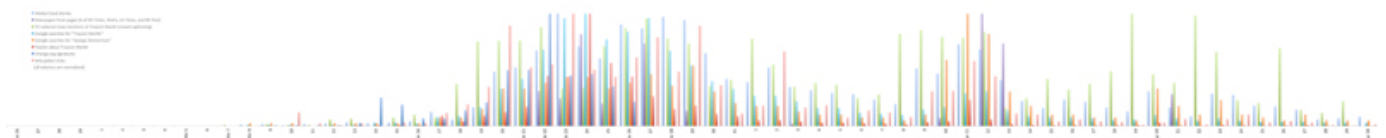


Figure 1: Normalized histogram of collected data. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure1.png>.

We used PageRank (Page, *et al.*, 1999) with the default probability of 0.85 and forced it to factor in edge weights (links between multiple stories from two media sources) to calculate authoritative nodes within the network of hyperlinks between stories from Media Cloud. We aggregated the individual blog and mainstream media stories into sources, like “*The New York Times*,” based on either known names and URLs in our Media Cloud corpora or simply using the root URL in the case of new sources identified through spidering. The PageRank algorithm produced eigenvector centrality scores for each media source based on the network topology, which we used as proxies for their authority (influence). We created subgraphs of the source nodes and their links for each act according to their date ranges, and for several secondary search queries to understand usage of keywords and phrases associated with particular framings that we had found while doing close readings of highly cited stories. We used Gephi to perform our analyses and visualize the networks [9]. Nodes were colored to indicate the source’s media type: Alternative Digital Media (dark purple), Individual or group blog (light green), Mass Media (dark green), News Aggregator (pink), Organization’s Web site or blog (light purple), Race-specific media (blue), Social Linking Site (brown), User-generated content platform (red), Tech Media (peach), and Uncategorized (gray) [10].

We used our network visualizations to find the most authoritative nodes indicated by their prominent size, as well as to trace the links back from these authoritative sources to hub-like sources and then on to lesser authorities. In our networks, major blogs and mainstream media sources serve as both authorities and hubs and fulfill key roles in the hyperlinked chains of reference across the ecosystem. This is based on the assumption that online media ecosystems generally conform to the scale-free network characteristics of the Web — *i.e.*, a few sites receive the bulk of attention while a long tail of sources receive much smaller attention according to a power law distribution of preferentially attached links (Shirky, 2003; Barabási, 2009). Consistent with our view of media ecosystems as evolving and ever-changing, tracing these networks was an attempt to locate authority on a topic in the moment versus authority purely as a function of accrued in-directed edges, which will always be skewed toward established sources like the *New York Times* with a history of preferential attachment, *i.e.*, pre-existing authority.



Chronological analysis

Act I: Not a story (26 February–6 March)

The day after Trayvon Martin was shot by George Zimmerman, 27 February, the shooting death was covered, like many crime stories, by a local television news channel. It appeared on Fox 35 Orlando’s news program, which reaches approximately 20,000 viewers [11]. On 29 February, the *Orlando Sentinel* ran a story [12] for their circulation of 520,000 [13]. On 2 March, the *Miami Herald* picked up the story [14] and published it to a circulation of 500,000 [15]. After that, nearly a week passed without any additional press mentions. These stories covered the basic facts of the shooting, but lacked many of the details that became central later, such as the possibility of racial profiling or the local police department’s reliance on controversial Stand Your Ground laws to determine that they should not arrest Zimmerman.

The news story, initially framed as a fight between two people in an area known for occasional violence, stood little chance of attracting significant media attention. The region’s media attention the day of the shooting was consumed by the NBA All-Star Game, taking place in nearby Orlando, and its positive economic impacts (Julison, 2012). The Trayvon story did not travel far in this competitive news cycle, similar to other cases where major sporting events crowd out competing stories (Eisensee and Strömberg, 2007).

After this small amount of local coverage, we would expect the story to be over, as the news cycle had moved on. News attention typically follows a distinctive shape: “a very rapid rise followed by a relatively slow decay”. [16] As a result, we would expect the Trayvon story to disappear from media after this initial exposure. But as will become apparent over the course of the remaining four acts, the Trayvon Martin case took on a very different shape, and received vastly more attention long after most breaking news stories would have disappeared from view.

Act II: Building pressure (7–15 March)

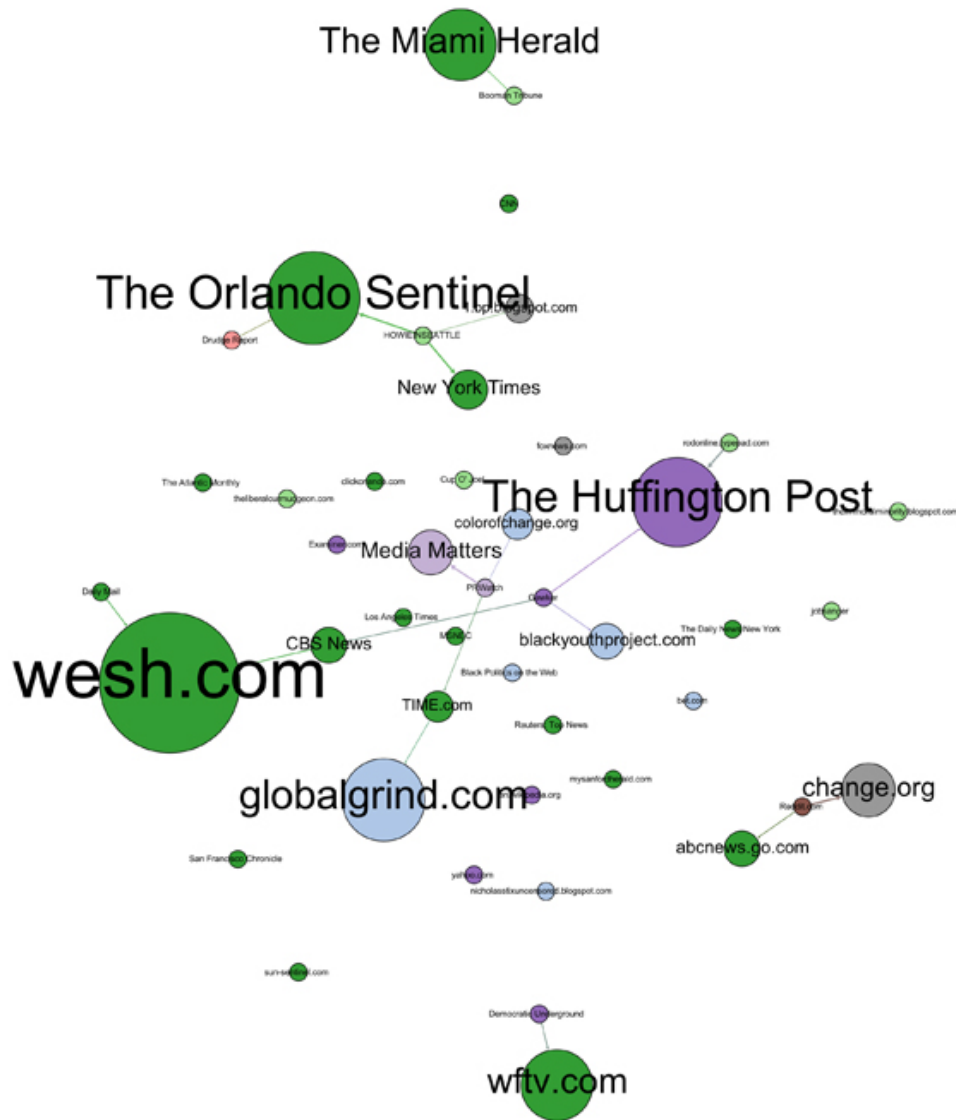


Figure 2: Network of interlinked media during Act II. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure2.png>.

The second “act” of the story begins on 7–8 March, ten days after Martin’s death, when the story received a new wave of media attention from two of the national media’s largest outlets: the Reuters newswire (1.3 million daily Web site visitors [17], in addition to syndication to most major U.S. news outlets) and the CBS program *This Morning* (2.6 million daily viewers) [18]. This resurgence in interest was the direct result of efforts to publicize the story. Martin’s family was able to enlist the legal services of civil rights attorney Benjamin Crump on a *pro bono* basis. Crump had taken on a previous civil rights case and failed to convict, which he attributed to an inadequate media strategy prior to the trial itself (Caputo, 2012). Crump brought on local lawyer Natalie Jackson, who enlisted the *pro bono* services of publicist Ryan Julison.

Julison’s pitch did not emphasize the racial element to the story, but underscored agreed upon facts: a neighborhood watch vigilante, who was carrying a gun, shot an unarmed teenager, and was not arrested. Julison was particularly struck by the fact that a neighborhood watch captain would be carrying a firearm with no training of any kind other than a concealed weapons permit (Julison, 2012). Our manual analysis of stories confirmed that this detail had not appeared in most of the local coverage following Martin’s death. Later, Crump, when interviewed about the case, introduced racial framing around the story as the national media began to pay attention (Boedeker and Comas, 2012).

Within a day of joining the effort, Julison attracted significant media coverage. He began reaching out to the largest national media sources (as measured by audience reach) and worked his way down until he found interest from Reuters and CBS *This Morning*. The mainstream media coverage helped Julison and Crump generate additional stories (Julison, 2012), but also brought the story to the attention of an activist online audience. One reader, Kevin Cunningham, saw the Reuters piece shared on a listserv, “Men of Howard,” comprising fellow members of an informal fraternity at Howard University, where he attended law school (Leitsinger, 2012). Frustrated by the relative paucity of media coverage and incensed by the lack of justice, he began a Change.org petition on 8 March. One of his first updates on the petition page explicitly cited the lack of media attention to date. The initial signatures came from sharing the petition with other members of the Howard University community over e-mail [19].

Our graphs show that alongside local coverage of the now national story — most prominently NBC affiliate WESH [20] — Race-based media led by Global Grind [21], and to a lesser extent activist outlets ColorOfChange [22] and the Black Youth Project, played key roles during this act. Black Youth Project [23] and *Huffington Post* [24] were both important early amplifiers, and both

misreported that Zimmerman was white and that the shooting occurred within a private gated community. 'Trayvon Martin' appeared on Google Trends on 8 March for the first time. The Change.org petition (the most prominent gray node in the graph) gained a significant increase in signatures following this continued interest for the story (indicated by the searches), making it an early leader in relative media attention according to our normalized histogram. Cunningham's petition grew from 217 signatures the first day to over 2,492 the following day, and continued adding over 2,000 new signatures daily for the next three days, and then another 12,859 on 13 March.

On 14 March, while other media channels were still relatively quiet on the story, there was a strong increase in signatures on the Change.org petition (116,391). The surge continued on 15 March. Using Change.org's petition traffic data, we were able to link this surge of interest back to supportive tweets from a number of celebrities. Starting around 14 March, Change.org employee Timothy Newman brought the Trayvon petition to the attention of a cadre of targeted celebrities with potential for interest in the story and asked them to share the petition with their fans. Newman's activity elicited supportive tweets from celebrities such as Talib Kweli, Wyclef Jean, Spike Lee, Mia Farrow, and Chad Ochocinco, creating a 900 percent spike in social media traffic to the petition between 12 March and 15 March (see [Table 1](#); Change.org), suggesting that targeted lobbying of celebrities led to increased online action in the form of petition signing.

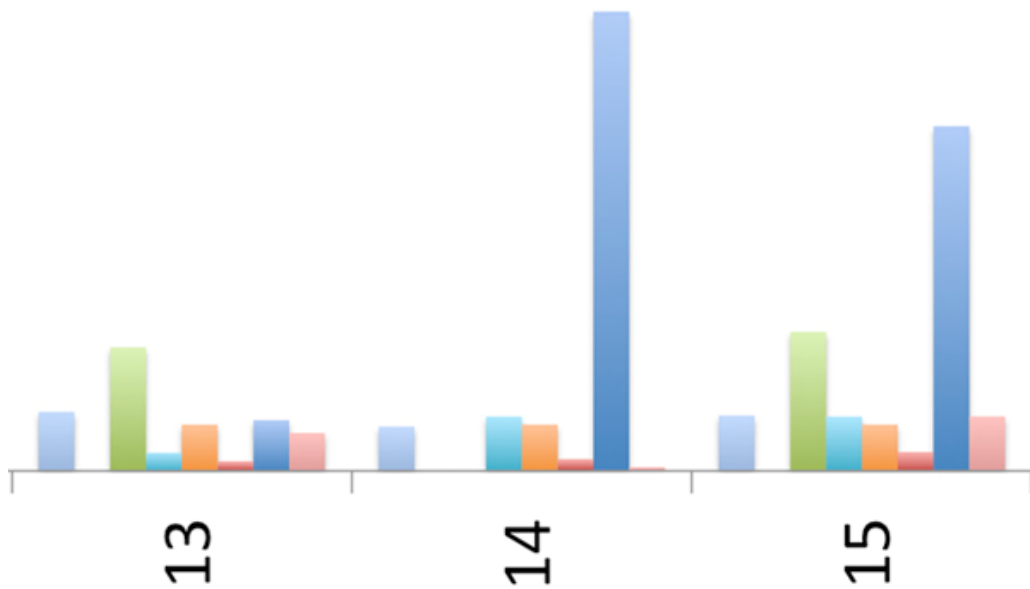


Figure 3: Celebrity-driven surge in Change.org signatures (dark blue) while the story begins to gain traction in other media. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure3.png>.

Table 1: Traffic to the Trayvon Martin Change.org petition page.		
Date	Change.org petition traffic	Amount of petition traffic referred by social media
12 March	11,141	7,486
13 March	34,345	20,712
14 March	305,672	45,952
15 March	190,354	72,165
16 March	80,268	50,798

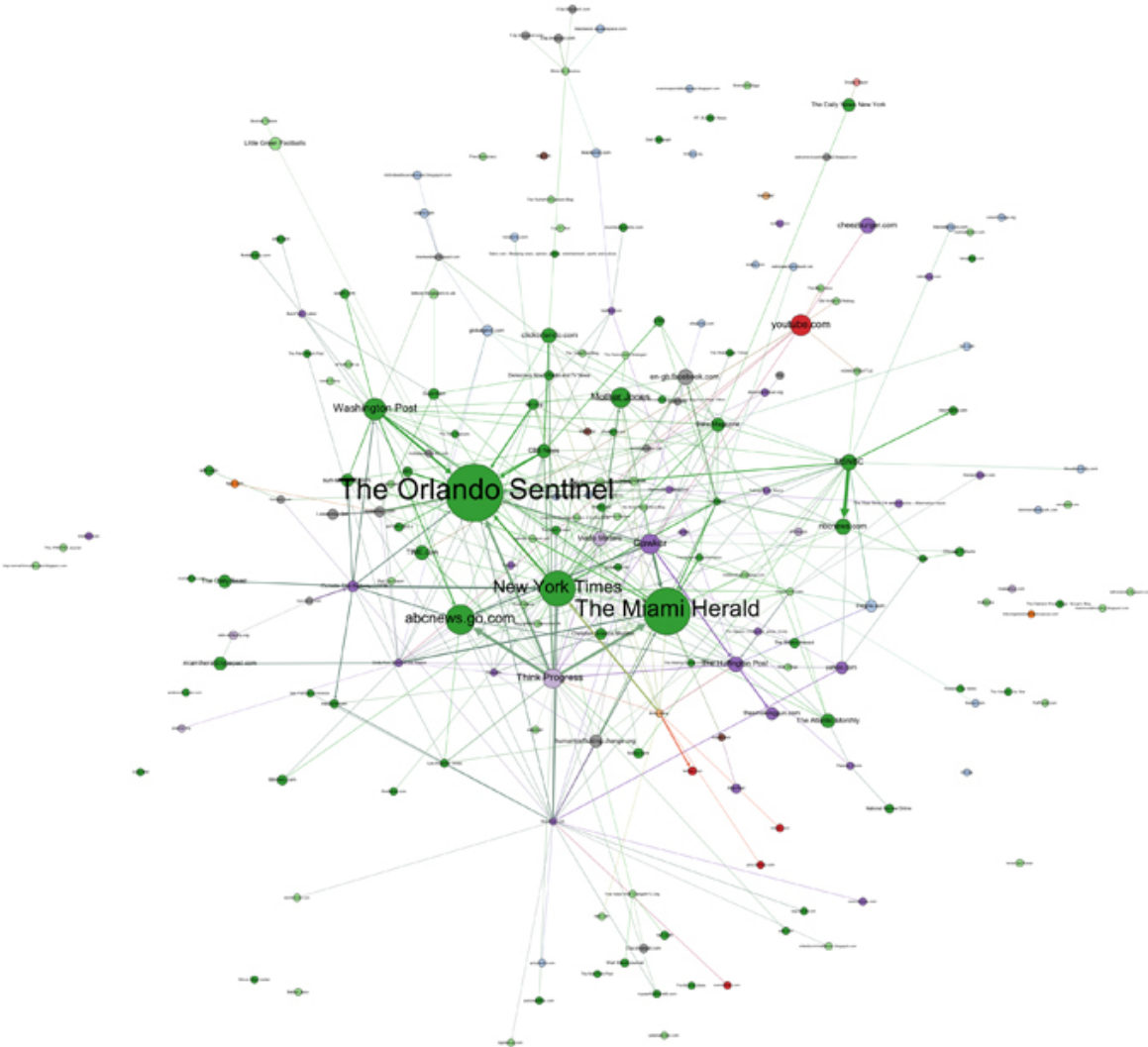


Figure 4: Network of interlinked media during Act III. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure4.png>.

The network graph from the Act II ([Figure 2](#)) showed the comparatively large role played by race-specific and activist media like ColorOfChange and the Black Youth Project. In Act III, mainstream media strengthened their positions as the predominant authorities. The energy building around the story accelerated sharply on 16 March, when Crump was successful in his quest to secure the public release of the audio of the 911 call Zimmerman placed while he pursued Martin with a gun. The audio of the call established that the 911 operator asked Zimmerman not to pursue Martin. Zimmerman ignored this advice and confronted Martin.

This explosive evidence, which was accessible to any interested online listener, helped grow the story’s reach across the Web. We can see upticks in Media Cloud stories and Google Searches for both Martin and Zimmerman. While television had helped spread the Trayvon story in Act II, Broadcast Television took up the story in earnest after the release of the tapes. The audio may have been especially important for broadcast media, as it gave radio and television an “actuality” to build a story around.

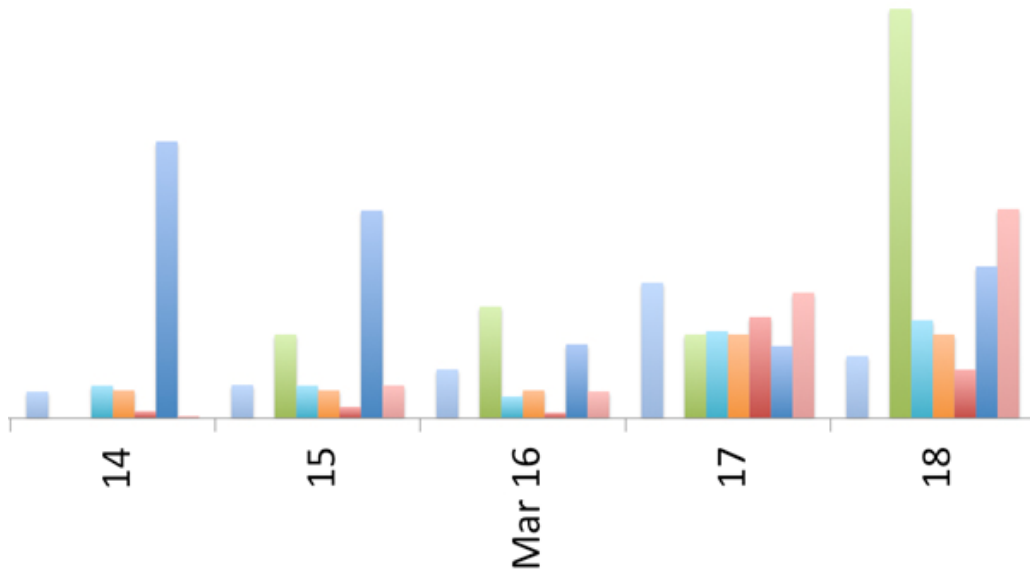


Figure 5: Effect of 911 tapes on media attention — general rise on all media channels on 17 March, with notable spikes in Media Cloud stories (light blue) and Television coverage (green) on 18 March. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure5.png>.

Strong televised coverage, including the personal involvement of Reverend Al Sharpton, preceded a second wave of sharp growth in Change.org petition signatures and mentions in online news article and blog posts tracked by Media Cloud. The Change.org petition was posted to Reddit’s /r/blackculture subreddit on 17 March [25], and the social empowerment organization ColorOfChange launched their “Justice for Trayvon Martin” campaign on 19 March [26].

The Change.org petition surpassed a million signatures, and civil rights leaders and activists began holding rallies and marches in Sanford, New York City, London, and elsewhere starting 21 March [27]. The most notable of these marches was the Million Hoodie March in New York City, initiated by digital strategist Daniel Marea (Mina, 2012) [28]. Despite the heavy attention in other media, no stories about Trayvon Martin made the front page of the *New York Times*, *New York Post*, *Los Angeles Times*, or *Washington Post* until 22 March, perhaps because mainstream and broadcast media prefer the easily covered actuality of a march — and in this case, they waited until after it was a fact.

Another development in the story was delivered directly by a mainstream media commentator on 23 March, when TV pundit Geraldo Rivera suggested that Martin’s decision to wear a hooded sweatshirt was “as much responsible for [his] death as George Zimmerman.” There was immediate backlash to Rivera’s comments, including from Rivera’s own son. This moment solidified the ‘hoodie’ as part of the national conversation and battle over the framing of the story.

Trayvon supporters were already using the ‘hoodie’ as a potent symbol for organizing, pointing out that it was raining the evening of the altercation and decrying the racial profiling inherent in assigning suspicion to garb commonly worn by African-Americans. Zimmerman supporters, finding legitimation in mainstream media coverage, fought back, arguing such clothing was representative of thugs who commit crimes. When we look at mentions of ‘hoodie’ in Media Cloud stories during our period of analysis in Figure 6, we see how there are zero to few mentions leading up to the Million Hoodie March in NYC on 21 March, coverage of the protest gains traction on 22 March and then it accelerates and peaks 23–24 March with Rivera’s comments. In this case, the mainstream media and even blogosphere discussions do not equal the discussions in activist circles, which are likely happening through alternate channels and/or “dark social” like we saw in the case of Howard University community.

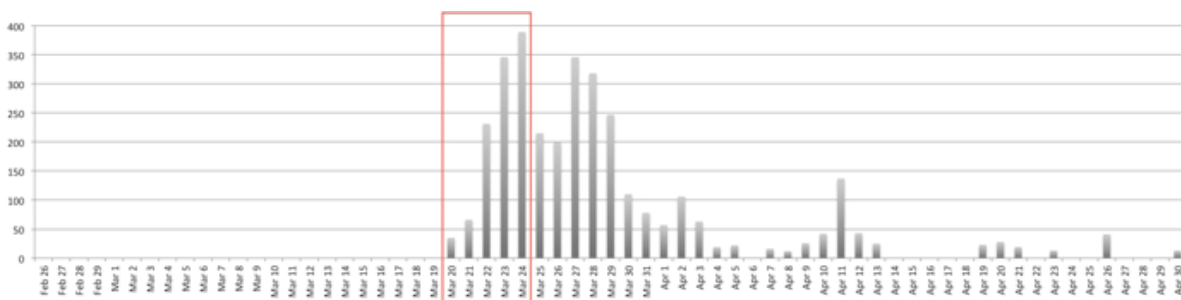


Figure 6: Number of Media Cloud stories mentioning “hoodie”. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure6.png>.

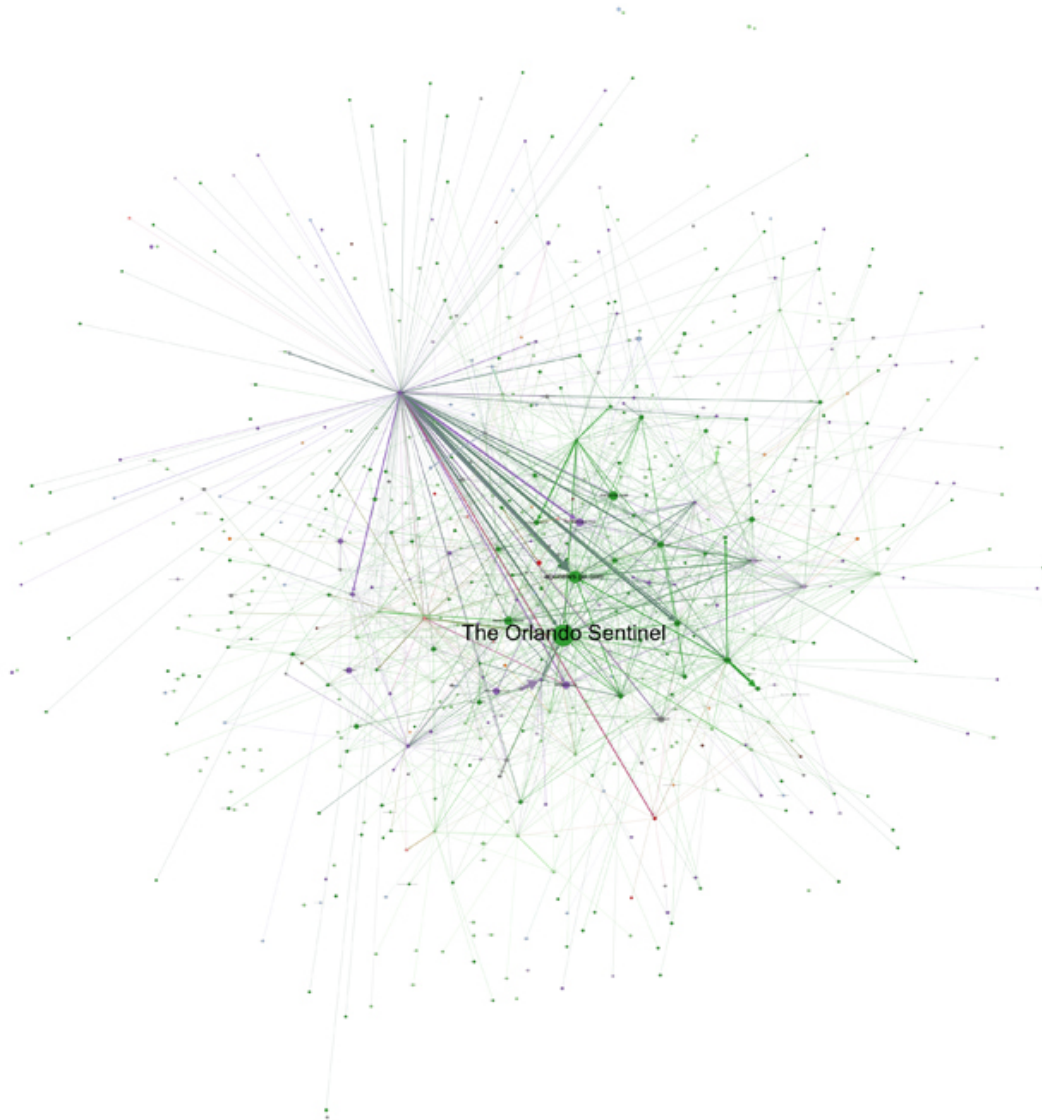


Figure 7: Network of interlinked media during Act IV. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure7.png>.

Nearly a month after Martin was shot, a reporter asked President Obama about the case during an unrelated press conference in the White House Rose Garden. The President alluded to the potential of racial profiling by saying that if he had a son, he would “look a lot like Trayvon.”

The President’s statement brought the already heavily covered story to a crescendo across every data source we tracked, consistent with Galtung and Ruge’s (1965) theories about attention paid to nation’s leaders versus ordinary citizens. The day following Obama’s statement brought hundreds of blog posts, tens of thousands of tweets, continued strong TV coverage, front page stories in national newspapers, and shortly afterwards, the Change.org petition passed the two million signatures mark. On 25 March, Howard University students released their video campaign [29] entitled “Am I Suspicious?” which garnered hundreds of thousands of online views and additional media attention [30]. On 26 March, the Change.org petition signatures were delivered to the Florida Attorney General, Sanford Police Chief, U.S. Attorney General, and Florida’s 4th District State’s Attorney.

The actions taken online and off-line, the incendiary comments by pundit Geraldo Rivera, and the President’s statement broadened the story beyond the focus on the events of 26 February. The Pew Research Center reported that the Trayvon Martin story “received the highest level of sustained coverage of any other story with a racial component” they had seen in the past five years of weekly media tracking (Anderson, 2013). Given the broad media attention paid to the case, what started as a battle for justice around an event became a political battle, with pre-established sides harnessing the attention trained on the story for political gain.

To study the different framings of the Trayvon case, we used subgraphs of the linked Media Cloud network for this time period, which included only those stories that mentioned specific terms associated with a media frame. This allowed us to identify which actors were important in introducing the frames. In this act, we see evidence that actors on the political right worked to establish a narrative that undercut our understanding of Martin as an innocent victim. The network graphs allowed us to pinpoint the origins of



Figure 9: Network of interlinked media mentioning 'drug dealer' during Act IV. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure9.png>.

The influence of Wagist is visible in both 'marijuana' and 'drug dealer' sub-graphs in Figures 8 and 9, although the former is noisy because of the *Miami Herald's* coverage was based on their coverage of Martin's school records, not the Wagist's framing. Still, key actors like Drudge Report aggregated and amplified some of these counternarratives, helping to set the media agenda themselves by leveraging their consistently large audiences of both bloggers and mainstream media journalists who repeated that framing, like those at the *Daily Mail* [35], seen more prominently in Figure 8 than Figure 9.

In Figure 9, we see Left-leaning blogs and organizations like Think Progress chime in to debunk the assertions while some alternative media like the Gothamist [36] join the conversation at the level of metanarrative, covering the coverage of the claim. Even CNN, via a commentator on race and policies, features a mention of the drug dealer frame in a piece on the battle over stereotypes [37]. This suggests a strategy for reframing a story — if an activist is able to gain mainstream coverage for a framing, opponents are likely to respond, perpetuating a debate that features the desired framing.

The *Wall Street Journal* is the other prominent node in the 'drug dealer' network, not because it was responding to the Wagist's claim, but because Juan Williams wrote an op-ed the day after the Wagist post came out, discussing the larger questions that the notoriety of the Trayvon Martin story should bring out: "Where is the march against the drug dealers who prey on young black people?" This excerpt was widely discussed and circulated in blogs. It's hard to say Williams' op-ed is at all related to the Wagist's post, though we might argue that Williams' choice of examples might be shaped by other media commentary. This problem is a good example of a challenge we face in quantitative media analysis of framing. It is difficult to detect framing by searching for short key phrases and difficult to detect patterns purely by hyperlinks.

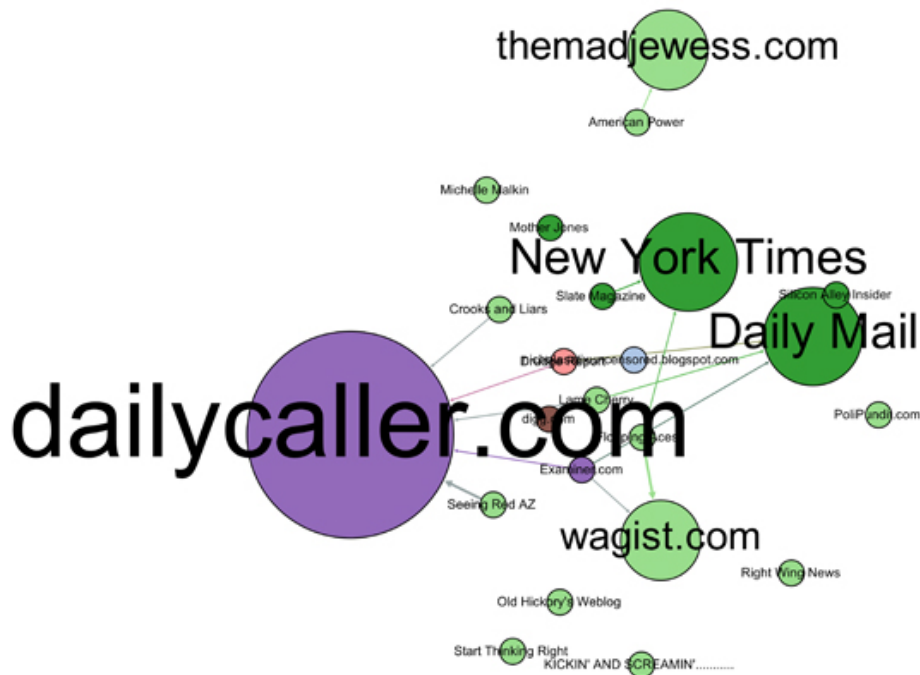


Figure 10: Network of interlinked media mentioning 'NO_LIMIT_N' during Act IV. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure10.png>.

Drudge Report did not show up as an authority in Figures 8 or 9 because of the site's unique lack of permalinks for the stories it posts, which discourages direct linking to Drudge Report itself [38]. We were able to document Drudge's influence by searching our corpus for mentions of 'drudge.' A term frequency-inverse document frequency analysis of words in our corpus showed 'drudge' to be among the 100 most statistically significant words within stories published on 27-28 March. Searching an online archive of links posted on Drudge Report [39] revealed several links to news stories about Trayvon Martin posted on the previous day. A notable example is a link [40] to a 26 March post on the Right-wing blog The Daily Caller, which exposed Trayvon Martin's tweets under the username NO_LIMIT_NIGGA [41], which was subsequently referenced by mainstream media in much the same way as in the Wagist post (see Figure 10). Ironically, a senior analyst at the Left-wing think tank Media Matters drove more attention to Drudge and the content and frame exposed by The Daily Caller, by wrongly castigating Drudge for featuring the photo from the Daily Caller, claiming the screen shot was faked [42]. This mini-controversy was covered by several media sources leading to Drudge's popularity on 27-28 March, and even a couple of links in Figure 10.

We also identified concerted efforts to use the attention the story had attracted to connect the public to broader national issues behind the events. The Center for Media and Democracy, a progressive group concerned about the influence of the American Legislative Exchange Council (ALEC) proved very effective in propagating their own original reporting, published on their Web site PRWatch.org (PRWatch.org) and through their campaign microsite ALEC Exposed [43]. The organization had begun an anti-ALEC campaign seven months before Trayvon Martin was shot, and successfully made the connection between the shoot-first Stand Your Ground law used to justify Zimmerman's actions and ALEC's behind-the-scenes influence in passing these laws in 24 states (Scola, 2012a).

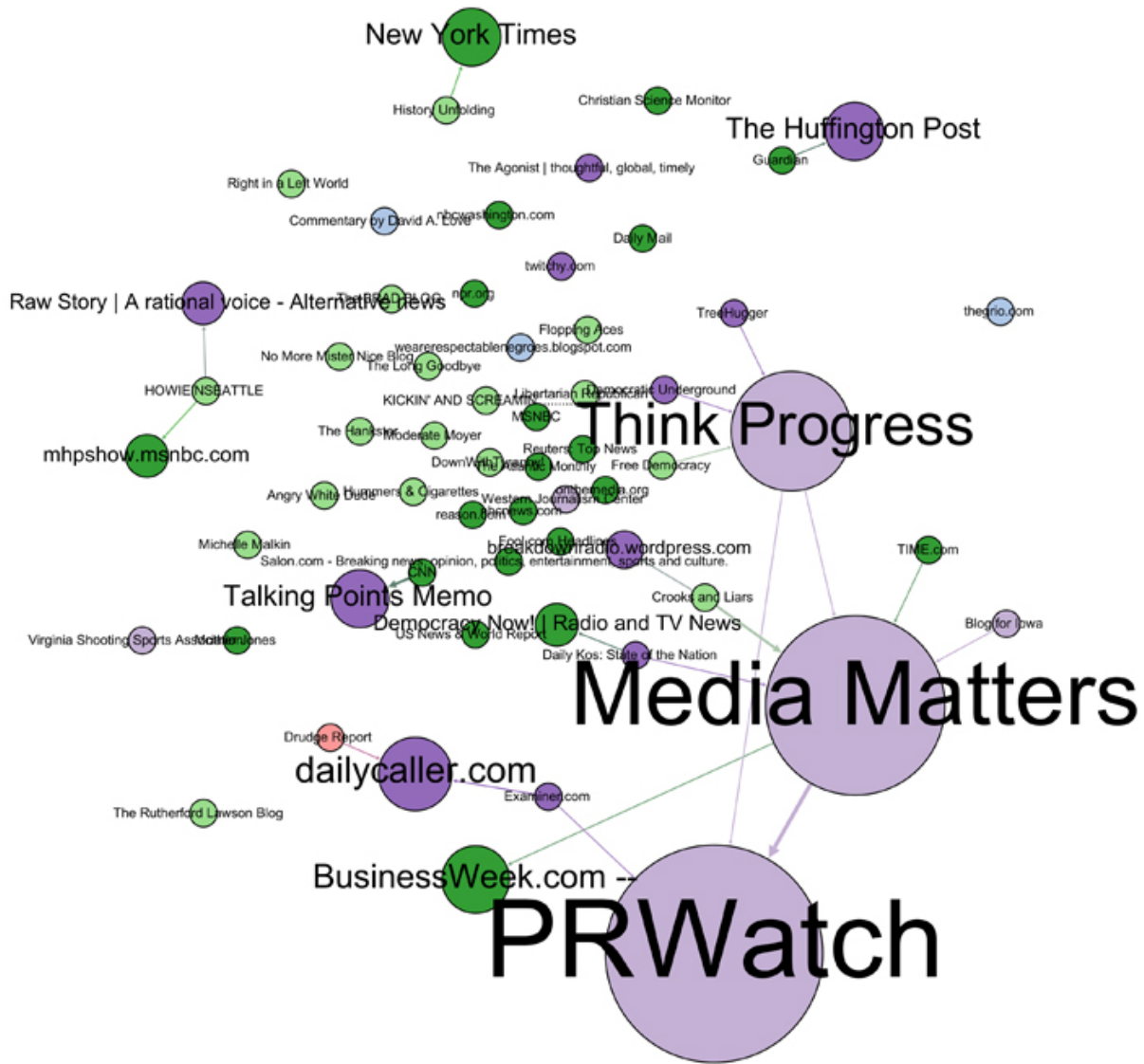


Figure 11: Network of interlinked media mentioning 'American Legislative Exchange Council' or 'ALEC' during Act IV. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure11.png>.

Progressives relied on CMD's research to organize campaigns pressuring consumer brands sponsoring ALEC, such as Coca Cola and McDonald's. Progressive organizations/blogs like Media Matters, and ThinkProgress cited PRWatch.org and amplified the research.

Huffington Post contributors wrote pieces connecting ALEC, Trayvon, and Stand Your Ground, which are all indexed in their "The Trayvon Martin Case" collection [44]. These pieces made arguments that were soon echoed elsewhere in the liberal blogosphere. From 21 March on, ALEC can be seen as a sustained frame in our Media Cloud data. The anti-ALEC campaign received a spike in attention when Paul Krugman wrote about ALEC and Trayvon in his *New York Times* op-ed citing CMD research on 26 March [45]. More activism followed, as over 50 Change.org petitions were started to challenge Stand Your Ground laws (New Organizing Institute, 2012).

The Left successfully pressured several of the target ALEC sponsor companies to end their relationship with the lobbying council (Scola, 2012a). The public attention to the Trayvon Martin story drove the pressure that eventually resulted in the campaign's victory. On 17 April, ALEC announced they would shut down the Task Force behind the controversial Stand Your Ground laws (Scola, 2012b).

Act V: Tabloid court case (11-30 April)

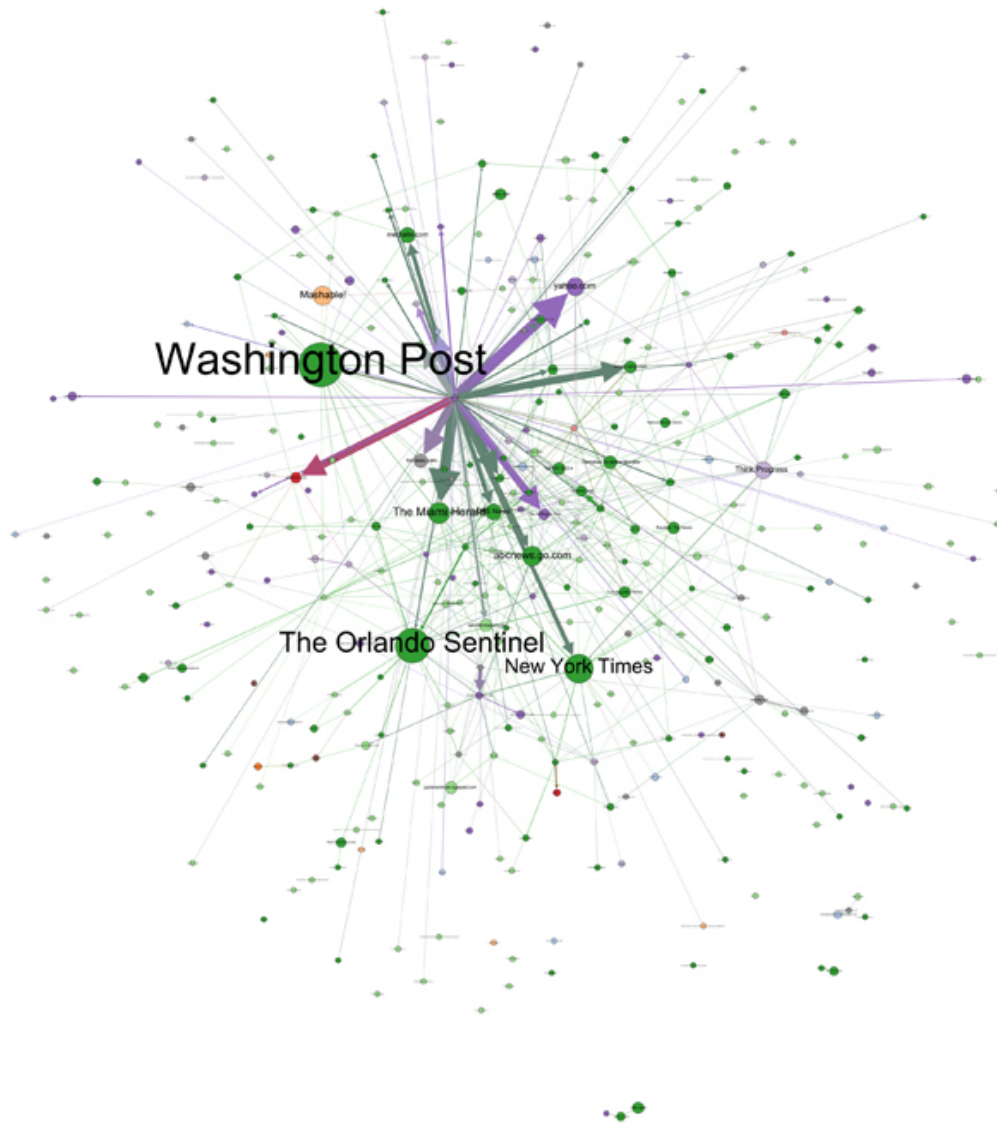
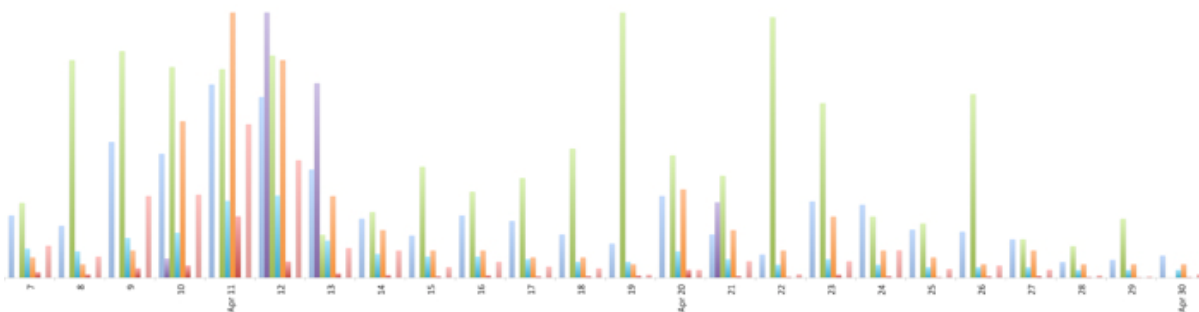


Figure 12: Network of interlinked media during Act V [46]. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure12.png>.

Finally, six weeks after Martin was shot, Zimmerman was taken into custody. The District Attorney stated that day that public pressure had nothing to do with the arrest, but if there's one thing that actors on the Left and Right can probably both agree on, public pressure had everything to do with the arrest. Google searches for 'George Zimmerman' peaked, alongside a final, smaller spike in searches for 'Trayvon Martin.' Front page newspaper coverage peaked the day after the arrest, again suggesting a need for actualities as "news hooks" for newspaper stories.



- Media Cloud stories
 - Newspaper front pages (% of NY Times, WaPo, LA Times, and NY Post)
 - TV national news mentions of Trayvon Martin (closed captioning)
 - Google searches for "Trayvon Martin"
 - Google searches for "George Zimmerman"
 - Tweets about Trayvon Martin
 - Change.org signatures
 - bitly global clicks
- (all volumes are normalized)

Figure 13: Tabloid court case patterns of media attention during Act V: Broadcast television news (green) stays focused on the story as other channels significantly decrease — 19 April sees peak of 117 mentions in TV news, well after other media have peaked; Shift in Google Trends volume toward "George Zimmerman" (orange) vs. "Trayvon Martin" (turquoise) mirrors the shift in the story to focus on Zimmerman's legal battle. A larger version of this figure can be found at <http://web.media.mit.edu/~erhardt/fm/Figure13.png>.

In this final act of the narrative, news outlets played up a human drama angle, giving a tabloid tone to the stories. While interest in the Trayvon Martin story largely disappeared from online media, television media covered the story day after day, as Figure 13 demonstrates. Cable news channels FOX News and MSNBC aired a series of character attacks, while HLN's Nancy Grace weighed in on whether or not Zimmerman cried in his jail cell [47]. A poll found that national public opinion was split along predictable racial fault lines [48] following the intense media coverage.

Jelani Cobb wrote of the story's transformation from injustice to limelight to stale news:

If the wheels of justice grind slowly, the court of public opinion expedites its verdicts. It takes far less than 46 days for a teachable moment to devolve into an airing of fetid undercurrents from the American id. In an instant the case pitched from tragedy to travesty to absurdist spectacle, the judgments coming far faster than the facts [49].

Television news channels reported heavily on the story throughout this phase, even as attention in other media decreased. Represented by the green bars in Figure 13, TV coverage was consistently middle-to-high and spiking regularly up to and around its peak, while the attention spikes in Google searches, newspaper front pages, and Media Cloud mentions dissipated shortly after Zimmerman's arrest. The issue-based battle between political agendas took a backseat to developments in the criminal trial, and coverage shifted to trial outcomes for Zimmerman. As April 2012 drew to a close, Google Search interest in Zimmerman spiked occasionally in tandem with the television coverage until all media attention ebbed away.

Statistical comparison of media attention measures

To find relationships between media sources not obvious from the chronological and network analyses, we looked for statistical correlations in the volume data from each media source across the time period we studied. Because we have data by day, we also looked for correlations where the fit was offset by a day or two, suggesting attention or coverage paid by certain media sources led or lagged behind others. To do this, we applied the cross-correlation function in the R statistical computing language [50] to our attention volume data from each media source. We tabulated the correlation coefficients (Pearson's r) between media sources with no offset — lag '0' — (Table 2), as well as the best fit correlation coefficients regardless of lag (Table 3), and noted the time shift (Table 4) — shadings reflect the strength of the correlations based on an extended version of Cohen's effect size index for social science correlations [51].

	MC	FPN	BTV	GSTM	GSGZ	T	CP	BC
MC		0.464	0.678	0.892	0.820	0.664	0.778	0.884
FPN	0.464		0.243	0.526	0.545	0.508	0.570	0.392
BTV	0.678	0.243		0.545	0.622	0.349	0.794	0.596
GSTM	0.892	0.526	0.545		0.656	0.871	0.755	0.840
GSGZ	0.820	0.545	0.622	0.545		0.532	0.848	0.739
T	0.664	0.508	0.349	0.871	0.532		0.677	0.640
CP	0.778	0.570	0.794	0.755	0.848	0.677		0.738
BC	0.884	0.392	0.596	0.840	0.739	0.640	0.738	

Table 2: Pearson's r values for correlations between media sources at Lag 0; darker shade is greater effect size.

	MC	FPN	BTV	GSTM	GSGZ	T	CP	BC
MC		0.581	0.797	0.892	0.820	0.692	0.899	0.884
FPN	0.581		0.438	0.526	0.720	0.508	0.864	0.531
BTV	0.797	0.438		0.567	0.723	0.430	0.794	0.660
GSTM	0.892	0.526	0.576		0.656	0.871	0.894	0.840
GSGZ	0.820	0.720	0.723	0.656		0.523	0.871	0.739
T	0.692	0.508	.430	0.871	0.523		0.947	0.692
CP	0.899	0.864	0.794	0.894	0.871	0.947		0.846
BC	0.884	0.531	0.660	0.840	0.739	0.692	0.846	

Table 3: Pearson's r values for correlations between media sources at Best Fit Lag; darker shade is greater effect size.

	MC	FPN	BTV	GSTM	GSGZ	T	CP	BC
MC		+1	-1	0	0	-2	-1	0
FPN	-1		-2	0	-1	0	-2	-1
BTV	+1	+2		+1	+1	-3	0	+1
GSTM	0	0	-1		0	0	-2	0
GSGZ	0	+1	-1	0		0	+1	0
T	+2	0	+3	0	0		-2	-1
CP	+1	+2	0	+2	-1	+2		+1
BC	0	+1	-1	0	0	+1	-1	

Table 4: Time shift in days for best fit correlations relative to rows; darker shade is greater effect size.

The correlation matrices show that the media sources are all correlated to some extent. In particular, the Media Cloud articles, Broadcast Television mentions, both Google Search queries, Change.org Petition signatures, and bitly clicks are strongly correlated, while Front Page Newspaper coverage and Tweets were weakly correlated with the rest. Front Page Newspaper coverage may have been weakly correlated because of the small sample size and nature of the data: no front page stories means a zero for that day, even if there were several “Page Two” stories. The comparatively low correlation between Twitter and other sources appears to be a matter of not being out of a phase but out amplitude with the other media sources (for example, see the spark lines in [Appendix 2](#)).

Interest on Twitter failed to rematerialize after its peak on 24 March 2012, while the other media sources either peaked or approached the magnitude of an earlier peak later in the time period. Because this is a relative index, this might reflect the impacts of campaigns to bring attention to the Trayvon Martin story early in the time examined, or suggest fickleness of attention from social media like Twitter during a sustained story as compared to mainstream media’s sustained coverage. The production of Media Cloud stories were sustained to a greater degree than bitly clicks on that content throughout the second half of the period of study, which suggests that while blogs and media outlets were reporting on the Trayvon Martin story, there may have been less expressed interest from readers. While we cannot measure engagement with television coverage, Broadcast Television attention to the Trayvon story late in our study period was also sustained at a much greater degree than engagement online, as shown by our set of online engagement metrics.

Another interesting finding from the time shift matrix ([Table 4](#)), was how Change.org Petition signatures and Broadcast Television Mentions preceded other media sources in reaching their attention peaks. The strong correlations of Change.org to other feedback channels at time shifts of up to two days for Google searches for Trayvon Martin and Twitter suggest that the signatories represent a percentage of the mavens and early connectors who share related news on topics they care about with their personal social network, and thus contribute to greater attention paid by the rest of the media ecosystem in the following days. Perhaps in other cases, volume of petition signatures could serve as an indicator of general media attention to come, not necessarily because of the media event created by the petition itself — as Change.org might hope — but because of its ability to capture accurately a regular (and extrapolatable) percentage of a community willing to engage in an issue.

In the case of Broadcast Television, the reason it beats other media source in our volume-based model is likely due to its nature as a bundled product, which is produced on the same day and shown to a large audience. The large audience and news bundling means people who didn’t consciously choose to follow the story hear it first there. This would have a ripple effect on the rest of the media ecosystem by stimulating feedback loops in the forms of Google searches and social media discussion that create demand for content production from faster media sources like Media Cloud, which all show up a day later in our matrix. Front Page Newspaper stories would follow a day after that, as we see, because of their next-day production schedule.

Bitly data and the role of race-specific media

When we look closely at the bitly clicks, we find that non-race-specific mainstream media still dominates the lists of most clicked on stories, just like they do in our network maps. As in most contexts, mainstream media is able to carry over its credibility and large audiences into an age of networked gatekeeping and framing, which, as Meraz and Papacharissi (2013) found in their analysis of Twitter data, is subject to the formation of exclusive and/or homogeneous communities as well as elite users preferring to link to other elite users. These serve to distort the link economy in ways that misrepresent actual influence in terms of readership numbers when focusing too much on the network-based controversy mapping approach.

Despite these shortcomings, including the evidence from Ryan Julison’s public relations work targeting Reuters and CBS *Morning News* that mainstream media attention is still critical to awareness of and attention paid to a story, we also see across our data and different methods that blogs and niche media, including race-specific media, can divert attention to their own accounts of the story with profound effects on the overall media ecosystem.

We were offered the click count analytics from bitly after our initial analysis of Media Cloud data had been completed. As in bitly's dashboard, the click counts were broken down by where the link was shared: Twitter, Facebook, or *Other* [52]. We grouped the URLs and their clicks by originating media source, like in our network graphs, and looked at the click counts across the entire period of analysis (Table 5), as well as in each Act for which we had stories (Tables 6-9), coloring the media sources by type using the same scheme as in our network graphs. Like our Twitter, Google search, and Change.org data, the bitly analytics represent a direct, quantifiable example of engagement with the Trayvon Martin story. Furthermore, because the clicked links go to the stories in our Media Cloud corpus, we can compare our Controversy Mapper network analysis as influence metric to the authority of media sources in terms of readership and distribution [53]. While clicks on bitly links are not a perfect proxy for readership, they offer a broader picture of a story's influence than the hyperlink method discussed in the previous section.

Table 5: Top 25 most clicked media sources across all Acts, according to bitly.

Media source	Stories	Total clicks	Twitter clicks	Facebook clicks	Other clicks
Think Progress	80	156,716	91,264	24,244	41,208
yahoo.com	166	144,100	7,154	55,027	81,919
MSNBC	141	61,856	20,138	28,948	12,770
<i>Washington Post</i>	66	56,532	25,190	13,836	17,506
<i>Huffington Post</i>	154	53,517	9,152	31,926	12,439
globalgrind.com	4	46,705	5,511	34,855	6,339
<i>Orlando Sentinel</i>	68	45,189	26,419	6,770	12,000
CBS News	153	34,778	14,964	8,722	11,092
<i>Miami Herald</i>	38	30,869	12,053	10,451	8,365
Change.org	6	28,648	3,490	20,846	4,312
Time.com	20	26,354	13,399	3,163	9,792
Fox News	55	24,708	11,124	4,248	9,336
abcnews.go.com	20	21,339	10,879	4,868	5,592
BBC	83	20,383	14,449	747	5,187
<i>New Yorker</i>	6	19,580	6,559	9,673	3,348
dailycaller.com	15	19,459	12,349	972	6,138
<i>Daily News</i> (New York)	98	15,776	7,529	4,185	4,062
Reuters: Top News	58	15,690	10,916	281	4,493
BuzzFeed — Latest	41	14,629	3,550	7,899	3,180
thesmokinggun.com	2	14,448	4,542	670	9,236
hollywoodreporter.com	10	13,714	9,777	784	3,153
bet.com	1	13,680	698	11,396	1,586
<i>USA Today</i>	61	12,976	1,429	7,602	3,945
<i>The Onion</i>	10	12,949	8,273	1,638	3,038
<i>Slate</i>	16	12,680	120	11,375	1,185

Table 6: Top 10 most clicked media sources during Act II, according to bitly.

Media source	Stories	Total clicks	Twitter clicks	Facebook clicks	Other clicks
bet.com	1	13,232	532	11,228	1,472
<i>Huffington Post</i>	8	5,421	598	3,642	1,181
CBS News	5	2,081	88	1,362	631
blackyouthproject.com	1	52	21	19	12
Change.org	1	38	17	0	21
globalgrind.com	1	24	18	0	6
<i>Atlantic Monthly</i>	1	18	13	2	3
CNN	1	12	10	0	2
<i>Miami Herald</i>	1	6	4	0	2
themoralminority.blogspot.com	1	6	6	0	0

Table 7: Top 10 most clicked media sources during Act III, according to bitly.

Media source	Stories	Total clicks	Twitter clicks	Facebook clicks	Other clicks
Think Progress	14	63,486	30,753	16,277	16,456

yahoo.com	14	28,981	884	23,171	4,926
Huffington Post	19	27,514	4,747	17,269	5,498
Change.org	3	21,421	2,055	16,731	2,635
MSNBC	19	14,634	8,813	2,691	3,130
Miami Herald	13	14,253	8,666	832	4,755
Time.com	3	11,536	6,837	2,014	2,685
globalgrind.com	1	11,494	95	10,465	934
CBS News	25	9,911	1,923	3,768	4,220
New Yorker	2	8,620	2,150	5,258	1,212

Table 8: Top 10 most clicked media sources during Act IV, according to bitly.

Media source	Stories	Total clicks	Twitter clicks	Facebook clicks	Other clicks
yahoo.com	74	88,591	4,338	25,328	58,925
Think Progress	50	83,840	55,245	6,141	22,454
MSNBC	50	83,840	55,245	6,141	22,454
globalgrind.com	2	34,849	5,397	24,163	5,289
Orlando Sentinel	37	23,486	11,844	5,972	5,670
abcnews.go.com	14	19,769	10,026	4,580	5,163
dailycaller.com	14	19,241	12,280	964	5,997
Huffington Post	95	17,444	2,979	10,712	3,753
CBS News	81	16,818	9,178	3,371	4,269
Miami Herald	14	16,033	3,033	9,583	3,417

Table 9: Top 10 most clicked media sources during Act V, according to bitly.

Media source	Stories	Total clicks	Twitter clicks	Facebook clicks	Other clicks
Washington Post	12	34,631	15,792	8,624	10,215
yahoo.com	77	26,525	1,932	6,528	18,065
Orlando Sentinel	10	14,909	10,064	510	4,335
Fox News	18	13,843	7,260	985	5,598
Think Progress	16	9,390	5,266	1,826	2,298
BBC	11	7,683	5,621	66	1,996
wkrg.com	1	6,310	2,275	2,685	1,350
CBS News	42	5,968	3,775	221	1,972
Reuters: Top News	16	5,392	3,774	74	1,544
New Yorker	1	4,194	1,278	2,076	840

The bitly data suggests that the link economy and ensuing network of media sources is only a partial proxy for actual authority and influence in the attention economy of news media. Clicks are a better proxy for readership than simply the existence of links to stories. And we see important parts of the media ecosystem, specifically in this case Race-specific Media, are underrepresented in the link economy. The click numbers for media sources like BET.com and The Global Grind suggest that Race-specific Media were players throughout the Trayvon Martin story. As noted in Act II and III of the [Chronological analysis](#), alongside Change.org, Race-specific Media were key to the early mobilization that built up the pressure and helped make the story a national one. However, their lack of incoming links — Black Youth Project received one link from Gawker in Act II and ColorOfChange received one from PRWatch in Act III — may mean that they were *gated* by mainstream media sources when it comes to the link economy, yet outside of that networked context, enjoyed huge success on platforms like Facebook, where related events like the Million Hoodie March in NYC were organized.

Conclusions

Our primary research objective was to understand the relative prominence and importance of online and off-line media at different points in the Trayvon Martin story. We also find a couple of general principles, which may apply in stories beyond this specific case. Namely, that broadcast media is still important as an amplifier and gatekeeper, but that it is susceptible to media activists working through participatory media to co-create the news and influence the framing of major controversies.

Like Benkler, *et al.* (2013), we see evidence for the importance of networked discourse in our data, but our analysis finds that gatekeeping power is still deeply rooted in broadcast media. In this case, Benjamin Crump's strategy to focus PR efforts on broadcast media with national reach was astute. Rather than reflecting an outdated approach to influencing public opinion, we believe the national attention brought to the story through broadcast media allowed groups like the Black Youth Project to amplify stories to their online communities, and informed actors like Cunningham who launched campaigns like the Change.org petition. Without the initial coverage on newswires and television, it is unclear that online communities would have known about the Trayvon Martin case and been able to mobilize around it.

While broadcast media is powerful in promoting issues to the level of national conversation, it is vulnerable to influence from activists, who are growing more talented in manipulating the dynamics of the participatory news cycle, activating the blogosphere's observed capacity to sustain news stories after news media peaks (Leskovec, *et al.*, 2009). "Media activists" like Change.org and the Center for Media and Democracy structure their activism strategies around maximizing the salience of their stories and exploiting known norms governing political journalism such as the creation of news icons like Trayvon Martin [54], which afford journalists greater freedom to write about controversial issues like race relations in America, and the pursuit of the trails of power, as exemplified by the case of ALEC, which can lead journalists to cover stories in ways that challenge official narratives (Bennett, 1996).

In the work of conservative and liberal commentators during "Act IV" in our analysis, we see an understanding that television and newspapers are sensitive to new developments in stories they have made a long-term commitment to cover. This openness to new developments may make some news outlets unwitting amplifiers of outside political agendas, while other news outlets may intentionally amplify partisan messages when convenient, both products of networked framing. Given the longevity of the attention paid to the Zimmerman prosecution on television news, far beyond peak attention in our other data sources, it is possible that television is especially likely to continue to cover a story it has already introduced to its viewers. Like Hollywood's penchant for sequels to popular film franchises, it's possible that once a story and its characters have been introduced, it's relatively frictionless for TV news programs to return with greater frequency to the story, which would be consistent with the previously mentioned concept of the news icon as well as Franklin's (2005) "McJournalism" thesis that contemporary news media constantly seek efficiency and predictability in their coverage.

Some debates about the relationship between professional and nonprofessional media suggest a parasitic relationship between professional and social media, where professionals report stories and social media argues about them, creating little additional value (Project for Excellence in Journalism, 2010). Our research suggests the narrative is far more complicated. In unearthing content from social networks about Trayvon's past, conservative bloggers attempted to contribute original reporting to the dialog, while Think Progress and others took on a verification role [55], challenging the facts unearthed and their interpretation. While neither the conservative fact-finders or liberal verifiers rise to the level of independence that journalism scholars Bill Kovach and Tom Rosenstiel (2001) prescribe, they complicate a picture that suggests we understand social media purely as commentary by playing on the information production and lack of available alternatives that improve their salience.

In some cases, members of the public using social media present interpretations of events which themselves become newsworthy, as in the case of newspapers amplifying the framing of Martin as blameworthy. In other cases, social media becomes a tool to organize responses to events reported in professional media. Responses like the Million Hoodie March and the "Am I Suspicious?" video became news stories in and of themselves, leading to additional coverage and extending the lifespan of the story. Facebook and YouTube, the platforms of choice in these cases, have the effect of reducing the power of traditional gates and gatekeepers, allowing users to reach audiences of friends and friends of friends rather than pre-existing broadcast audiences. By creating original and newsworthy or salient content they enter the controversy's media ecosystem themselves, and also enjoy the attention of the meta-coverage.

In conducting our analysis, we were interested in how different groups sought control of the professional media's spotlight, demanding attention to a story that originally attracted very little attention. In Benkler, *et al.*'s analysis of SOPA-PIPA, an action organized online — the self-imposed blackout of Wikipedia — calls attention to a piece of legislation which otherwise might have gone ignored. In our study, social media's role in agenda-setting is more complicated. Attention to the Martin killing comes initially from professional news outlets. However, online communities demonstrate agenda-setting power both by organizing protests like the Million Hoodie Marches and by influencing online dialog, suggesting alternative interpretations of events.

The power of social media in the context of stories like Trayvon Martin's, where a local tragedy sparked a national debate, may be less about bringing these stories to light than about shaping their arc. The competition to shape the framing of a high-attention story and thereby the media agenda recalls not only networked gatekeeping and networked framing but also Jay Rosen's (2009) analysis of social media's impact in terms of Daniel Hallin's (1986) spheres of discourse. Hallin considers the media agenda in terms of spheres of consensus, legitimate debate and deviance; ideas that either have widespread acceptance or are agreed upon as being not worthy of debate receive little media attention.

Rosen suggests that social media challenges the gatekeeping function professional journalists have long enjoyed. Ideas that would have been ascribed to the sphere of deviance enter the broader media dialog if there's strong enough pressure from advocates using social media: *e.g.*, the debate over President Obama's citizenship, which likely would have been considered a deviant discourse in an earlier time. Our work suggests a mechanism through which social media users introduce potentially deviant frames into the mainstream: they harness ideas to a high attention story already underway and attempt to direct the attention generated by the story towards their interpretations and views. Meraz and Papacharissi (2013) argue that these networked gatekeeping and framing phenomena may work in tandem to sustain information flows — in their case of #egypt, Twitter users aggregated and negotiated framing statements in a public process that produced authoritative sources whose frames were endorsed by other users connected to the movement.

To analyze the complex interplay between professional and participatory media, we believe researchers need to cast wider nets. Much of the best research conducted on social media focuses on the spread of stories and ideas in a single medium, like Twitter. To consider the phenomena of agenda-setting and influence, we need tools, techniques, and data sources that allow us to empirically study the spread of ideas between media, examining influences of participatory media on professional media and vice versa. Work like Memetracker's ability to analyze quote propagation and manipulation across news media (Leskovec, *et al.*, 2009), the use of automated coding and sentiment analysis to study newsroom bias and gatekeeping (Soroka, 2012), and emerging uses of Media Cloud for controversy mapping (Benkler, *et al.*, 2013) should be continued and augmented with "real world" data, like in Soroka's study of economic reporting, and broader sources of media online and off-line. While we have made efforts to expand our perspectives beyond isolated data sets, we are also acutely aware of the limitations we've faced along the way and explore some of those limits in the following section.

Future work

Analog measurements of media attention relied on small sample sizes and rough estimates for exposure. The advertising metrics that long supported the newspaper and television businesses are based on purposefully broad definitions of circulation and

readership and a sample of household viewing habits tied to a real-time definition of viewership, respectively (Filloux, 2011; Prior, 2007; Anders, 2010).

We have newfound ability to measure media consumption more accurately in terms of both exposure and engagement. Controversy mapping of large datasets like the one assembled for this paper can enable us to connect linked media and broadcast media, and perform rigorously inductive analyses of how media activism propagates. However, the current technical and cultural environments limit these efforts. The availability of valuable media data, tools, and established methods to analyze multimedia corpora are increasing, but still immature, and some key data sets are entirely inaccessible. We identify ourselves as part of a movement working to build and improve the publicly available tools of digital observation, but these tools are early in their development. In many cases, the proliferation of participatory publishing platforms complicates our task, as these fragmented platforms are often difficult to study. Tumblr, Inc. first began to provide analytics tools to its publishing partners in 2012, over five years after it was founded. Twitter offers access via its "Firehose," but access is both expensive and complex — the flood of data provided by Twitter can easily overwhelm analytics platforms.

Other data is simply inaccessible. While Archive.org's TVNews archive opens a new frontier for data analysis, other key sources are not yet available for automated analysis. Change.org and Facebook data belong to private companies and are available only to select researchers. We gained access to bitly data thanks to their team reaching out to us when they came across a link online to an earlier presentation of these findings.

We know, anecdotally, that e-mail listservs — part of "dark social" — played a role in the story's early phase, but even with bitly's click data for links shared through means "other" than Twitter and Facebook, we have no way to measure accurately the impact of these private communications beyond interviews with participants. Any analysis of agenda-setting in American media also demands a way to consider AM talk radio, and we have no source for AM radio transcripts. Future work includes finding data for television and radio and integrating it more thoroughly into the Media Cloud toolkit.

Even when we are able to access the data we need for analysis, interpretation is complicated by the specificity of individualized media experiences, where we've each curated our own individualized lists of sources on platforms like Twitter and Facebook. This can leave us with very different understandings of the day's news. Is it possible to speak meaningfully about a media agenda when agendas are set by individuals following a combination of friends and professional sources they've chosen to meet personal preferences and needs? The "Black Twitter" community may be influential within certain parts of the media ecosystem, and certainly was a key part of the whole picture on the Trayvon Martin story (Hilton, 2013), but it's also gated in a way that bounds their distribution across the full media ecosystem.

We must also question our seeded list of mainstream media sources. Media Cloud uses the top 25 U.S. media sources by monthly unique users according to Google's AdPlanner service [56]. It's unclear how that might affect our further spidering. We know we are missing many stories about Trayvon Martin which neither linked to nor were linked by the stories we consider here.

Even with the limited sets of media we were able to collect, we have encountered interpretive challenges unresolved within this paper. For instance, by using normalized volumes in our media attention histogram, we lose the ability to visually compare audience sizes across media. This may result in a distortion of perceived media attention paid over time when the peak of a media type — like the percentage of front page news stories — is particularly low, making differences within a small margin appear dramatic.

In our network graphs, we used hyperlinks as proxies for citation and influence. In practice, many news organizations do not cite research directly through links; instead they will reference a source by name. This may be a feature, not a bug, of gatekeeping institutions, which want to protect their limited monopolies on credibility and search engine optimization.

It is also common for writers online and off-line to borrow concepts and framings from other writers and fail to credit the source, remarkable as this may seem to academics. A hyperlink method of influence will fail to find these borrowings, while searching within a corpus for keywords will sometimes identify them. The disconnected graphs featured in "Act IV" show this phenomenon: two sources write about the same framing at roughly the same time, but do not link to one another. A better solution to this problem may involve more sophisticated natural language processing to track the emergence of framing, using methodologies similar to Leskovec, *et al.*'s (2009) "MemeTracker".

Links are further complicated in cases of unusual linking practices, such as the front page of a source or to an RSS feed rather than directly to the individual article or post. Drudge Report is particularly unusual as a source because it links to stories only from its main front page, which is frequently updated. This presents two problems:


1. It's hard to keep track of the links it posts. We use a third-party RSS feed of Drudge Report links to collect those stories, which means we have to reverse-engineer those citations from the Drudge Report to represent them in the network emanating from a reconstituted Drudge Report node.
2. The Drudge Report receives no true inbound links to its story posts because they are just links on a homepage with a static URL, which means we don't have an accurate depiction of the intermediating role the source plays between sources.

Another unusual source is Examiner.com, which is a news platform for freelance journalists that operates like an aggregate news source meaning there is a high volume of content on a range of topics, linking out to cited stories. This produces a kind of super-hub in our networks, seen most notably in [Figure 12](#), which may distort the network structures and authority measures. Despite these problems, we choose to reflect hyperlinks between sources as accurately as possible, and reason that omitting a set of links or a source like Drudge Report or Examiner.com may introduce more distortions than simply representing the data that we collected.

Wire stories present another distortion in our story counts and network graphs because they appear as identical or slightly edited versions of stories under different headlines. We make the assumption that the decision by a mainstream media outlet to pick up the wire story is a reasonable indication of that story's stature in the media agenda. Our story counts and links counts may be inflated due to issues like these.

Our use of the PageRank algorithm as a proxy for influence was based on published evidence of its superiority to HITS (Java, *et al.*, 2006; Ng, *et al.*, 2001), the other common metric packaged with Gephi, which we attempted to use initially. However, future studies should explore variations on both PageRank and HITS, as well as other network analysis algorithms (Sharma and Sharma, 2010), experiment with statistical thresholds to better control for known limitations (Grover and Wason, 2012), and look to develop new approaches tailored to specific types of media or network data completeness.

Finally, our case study exposes some potentially deep flaws in the controversy mapping network approach. Breaking the network graphs into periods of time allows for easier analysis of a particular story's or media source's influence at a given moment. But in some cases, stories in later acts linked back to stories published in previous acts, which could not be counted toward the ongoing influence of that media source. Also, when investigating the sub-graphs, the ability to comprehend frames is impaired by the noise inherited from a simple system of searching for phrases: for example, the mention of "drug dealers" by Juan Williams complicated our search for the "drug dealer frame" introduced by Wagist.com. An approach using machine learning and sophisticated topic modeling may be necessary to get more accurate accounts of relevant articles and their interrelationships.

We see both scholars as well as media activists as part of our audience and this conversation. And by looking at both the particular and the universal through a combination of narrative documentation and structural analysis, our methodology and output aspires to be like “phronetic social science” (Flyvbjerg, 2001), revealing practical wisdom that could help activists, newspapers, and citizens alike. To help everyone answer these questions, we need to expand and improve the publicly available tools of observation we apply to our own media, as it grows ever more complex. 

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Notes

1. This section is an attempt to synthesize the key events upon which all sources agree.
2. Benkler, 2006, p. 10.
3. Meraz and Papacharissi, 2013, p. 155.
4. <http://www.mediacloud.org>, accessed 6 November 2013.
5. Stability is an important feature of a network analysis algorithm for our methodology because of the subgraph analysis we performed (detailed in the [Methods and Data](#) section) — the global network influence rankings should ideally be strongly related to the local network rankings in any subgraph.
6. For a detailed account of how Media Cloud is used for Controversy Mapping, see the Appendix in Benkler, *et al.*, 2013.
7. The lists of blogs and mainstream media sources can be accessed online: http://www.mediacloud.org/dashboard/media_sets/1, accessed 5 August 2013.
8. <http://www.generalsentiment.com>, accessed 6 November 2013.
9. “Gephi is an interactive visualization and exploration platform for all kinds of networks and complex systems, dynamic and hierarchical graphs,” available at <http://gephi.org>, accessed 6 November 2013. Gephi natively supports the PageRank algorithm, which we ran against each discrete network in order to compute eigenvector centrality scores within the context of the acts and certain keyword subsets. For the graphs, we scaled the node diameters and their labels according to their PageRank scores. The directed edges were depicted with thicknesses according to the number of hyperlinks from one source to another, and with colors that are mixture between the source and target nodes. We used a force-directed graph-drawing algorithm — “Force Atlas 2” — to layout our networks. This allowed us to layout our networks with a hub at the center of a graph.
10. Media source types were coded by the lead author based on categories established in the Benkler, *et al.* 2013 paper, with the addition of Race-specific media, which included any blogs, organizations, or news sources directed at a single race. These were predominantly African-American media sources, but also included several White Nationalist sources.
11. “February ratings: WKMG, WOFL win in late news; WFTV tops in other slots,” archived at <http://archive.is/I0Ew>, accessed 1 September 2013.
12. “Boy, 17, shot to death in Sanford during ‘altercation,’ police say,” at http://articles.orlandosentinel.com/2012-02-29/news/os-fatal-shooting-sanford-townhomes-20120226_1_gated-community-death-sunday-night-shot, accessed 10 April 2013.
13. <http://www.orlandosentinel.com/advertiser/reach/>, accessed 10 April 2013.
14. “Miami teen shot dead while visiting family in Central Florida,” originally at <http://www.miamiherald.com/2012/03/02/2672446/miami-teen-shot-dead-while-visiting.html>, inaccessible.
15. http://www.miamiherald.com/about_us/, accessed 10 April 2013.
16. Yang and Leskovec, 2011, p. 178.
17. <http://www.statmyweb.com/site/reuters.com>, accessed 10 April 2013.
18. http://www.mediabistro.com/tvnewser/morning-show-ratings-week-of-march-5_b116402, accessed 10 April 2013.
19. This represents a strong example of the continued importance of what Alexis Madrigal (2012) calls “dark social,” which include e-mail, listservs, and other “social” media that are hard to track using contemporary analytics.
20. “Family Files Lawsuit Against Police In Teen’s Death,” *WESH* (9 March 2012), at <http://www.wesh.com/trayvon-martin-extended-coverage/Family-Files-Lawsuit-Against-Police-In-Teen-s-Death/-/14266478/13119074/-/13kdbbiz/-/index.html>,

accessed 23 January 2014, and "Trayvon Martin Case Moves To State Attorney's Office," *WESH* (13 March 2012), at <http://www.wesh.com/trayvon-martin-extended-coverage/Trayvon-Martin-Case-Moves-To-State-Attorney-s-Office/-/14266478/13118970/-/1505qea/-/index.html>, accessed 23 January 2014.

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22. "Honor Trayvon Martin: Build the movement," *ColorOfChange*, at <http://act.colorofchange.org/sign/Trayvon/>, accessed 23 January 2014.

23. "17 year-old Trayvon Martin Shot in His Gated Community by Neighborhood Watch," at <http://www.blackyouthproject.com/2012/03/trayvon-martin-shot-neighborhood-watch/>, accessed 10 April 2013.

24. "Trayvon Martin's Family Calls For Arrest Of Man Who Police Say Confessed To Shooting," at http://www.huffingtonpost.com/2012/03/08/family-of-trayvon-martin- n_1332756.html#s766198, accessed 10 April 2013.

25. http://www.reddit.com/r/blackculture/comments/r0smo/criminal_justice_petition_prosecute_the_killer_of/, accessed 10 April 2013.

26. <http://www.colorofchange.org/campaign/justicefortrayvon/>, accessed 10 April 2013.

27. "Trayvon Martin Rally In Union Square Leads to Massive March," at http://blogs.villagevoice.com/runninscared/2012/03/trayvon_martin_rally.php, accessed 11 June 2013.

28. "A Million Hoodies March for Trayvon Martin," at <https://www.youtube.com/watch?v=JPDNc9mbC0>, accessed 13 June 2013.

29. "Howard University Trayvon Martin 'Am I Suspicious?' Campaign Video," at <https://www.youtube.com/watch?v=rH5bB8HUWfs>, accessed 1 September 2013.

30. "'Do I Look Suspicious?': Howard Students' Video Goes Viral," at <http://www.ebony.com/news-views/do-i-look-suspicious-howard-students-video-goes-viral>, accessed 1 September 2013.

31. Gawker called this a "racial smear campaign," at <http://gawker.com/5897485/white-supremacist-hacks-trayvon-martins-email-account-leaks-messages-online>, accessed 1 September 2013.

32. "Was Trayvon Martin a Drug Dealer," at <http://www.waqt.com/2012/dan-linehan/was-trayvon-martin-a-drug-dealer>, accessed 11 April 2013.

33. "Multiple suspensions paint complicated portrait of Trayvon Martin," at <http://www.miamiherald.com/2012/03/26/2714778/thousands-expected-at-trayvon.html>, accessed 1 September 2013.

34. "Judge Rules: No trial delay in Trayvon Martin shooting case, pictures, texts, past marijuana use inadmissible," at <http://freakoutnation.com/2013/05/28/judge-rules-no-trial-delay-in-trayvon-martin-shooting-case-pictures-texts-past-marijuana-use-inadmissible/>, accessed 11 June 2013.

35. "Trayvon suspended THREE times for 'drugs, truancy, graffiti and carrying burglary tool' and did he attack bus driver too? New picture emerges of victim as parents claim it's all a smear," at <http://www.dailymail.co.uk/news/article-2120504/Trayvon-Martin-case-He-suspended-times-caught-burglary-tool.html>, accessed 11 April 2013.

36. "Right Wing Media Takes Aim At Trayvon Martin And His Supporters," at http://gothamist.com/2012/03/27/right_wing_media_keeps_attacking_tr.php, accessed 1 September 2013.

37. "A fight for Trayvon Martin is a war against stereotypes," at <http://www.cnn.com/2012/03/24/opinion/roland-martin-stereotypes/index.html>, accessed 1 September 2013.

38. Drudge Report is a collection of links with sensationalist headlines posted on a regularly updated front page. Because the content of stories does not reside on the Drudge Report site, our tools see Drudge's influence indirectly: stories that Drudge points to increase in influence on our graphs, while Drudge itself does not emerge as an authoritative node.

39. <http://www.drudgereportarchives.com/>, accessed 13 June 2013.

40. http://www.drudgereportarchives.com/data/2012/03/27/20120327_152300.htm, accessed 13 June 2013.

41. "The Daily Caller obtains Trayvon Martin's tweets," at <http://dailycaller.com/2012/03/26/the-daily-caller-obtains-trayvon-martins-tweets/>, accessed 13 June 2013.

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43. <http://www.alecexposed.org/>, accessed 10 April 2013.

44. <http://www.huffingtonpost.com/news/trayvon-martin/>, accessed 10 April 2013.

45. "Lobbyists, Guns and Money," at <http://www.nytimes.com/2012/03/26/opinion/krugman-lobbyists-guns-and-money.html>, accessed 10 April 2013.

46. The node in the network to which nearly all other nodes appear to be connected is [Examiner.com](http://www.examiner.com) — a news platform for freelance journalists that operates like an aggregate news source, meaning there is a high volume of content on a range of topics, linking out to cited stories. This anomaly is discussed in the [Future work](#) section.

47. "George Zimmerman weeping in jail?" at <http://www.hlnv.com/video/2012/04/13/george-zimmerman-weeping-jail>, accessed 10 April 2013.

48. "Poll shows racial divide on views of Trayvon Martin case," at <http://usatoday30.usatoday.com/news/nation/story/2012-04-05/trayvon-martin-poll/54047512/1>, accessed 10 April 2013.

49. "What Got George Zimmerman Charged With Second-Degree Murder," at <http://www.thedailybeast.com/articles/2012/04/12/what-got-george-zimmerman-charged-with-second-degree-murder.html>, accessed 10 April 2013.

50. Using the "ccf" function in R (R Core Team, 2013). Comparisons between Change.org and the other media sources were confined to the extent of Change.org's time series, which did increase the confidence interval for those correlation coefficients

relative to the others, but not significantly.

51. Cohen (1992) suggests correlation effect sizes in the social sciences follow a pattern of small (0.1+), medium (0.3+), and large (0.5+); we added very large (0.7+) to create a more detailed account.

52. The *Other* category includes all direct links shared via e-mail, instant messenger, or through an app, as well as those that are embedded directly on a Web page.

53. Because our bitly counts are sum totals covering a period that stretches well past the initial event period (the bitly data was downloaded in August 2013), we cannot offer direct comparison to our act graphs, which focus on links from stories published during the same discrete period.

54. Trayvon Martin continued to be a potent news icon for media activism work through George Zimmerman's trial. The 911 call audio was used in an August 2013 gun control PSA: "Stand up to 'Stand Your Grand' PSA" at <https://www.youtube.com/watch?v=kUKzDANF6QU>, accessed 1 September 2013.

55. "What Everyone Needs To Know About The Smear Campaign Against Trayvon Martin (1995–2012)," at <http://thinkprogress.org/justice/2012/03/26/452310/what-everyone-needs-to-know-about-the-smear-campaign-against-trayvon-martin-1995-2012/a>, accessed 1 September 2013.

56. http://www.mediacloud.org/dashboard/media_sets/1, accessed 5 August 2013.

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Appendix 1: Twitter queries

General Sentiment lets you begin with simple queries and then expand your search to relevant clusters of queries through an iterative process. We started with: Trayvon Martin, Treyvon Martin, Treyvon, Trayvon, TrayvonMartin. Based on General Sentiment's results, we eventually pulled in all tweets with the topics clustered below (some of which had very few tweets).

Fight Club:

Trayvon Martin Fight Club
 YouTube Pulled Trayvon Fight Club Video
 YouTube Pulls Trayvon Fight Club Video

Obama:

Obama Administration Exploits Trayvon Shooting
 Barack Looks Like Treyvon

RIP Trayvon:

R.I.P. Treyvon
 R.I.P Treyvon
 RIP Trayvon
 R.I.P Trayvon Martin.
 R.I.P Trayvon
 R.I.P. TrayvonMartin
 RIPTrayvon
 #RIPTrayvon
 #RIPTRAYVON
 #riptrayvon
 #RipTrayvon
 #RIPtrayvon
 #ripTrayvon
 #RIPTrayvonMartin
 #RIPTRAYVONMARTIN
 #RipTrayvonMartin
 #riptrayvonmartin
 #ripTrayvonMartin
 #RIPtrayvonmartin
 #RIPTrayvonMartin


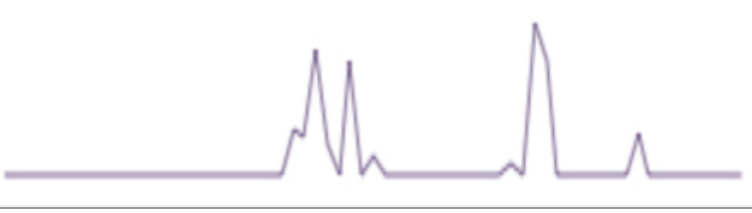
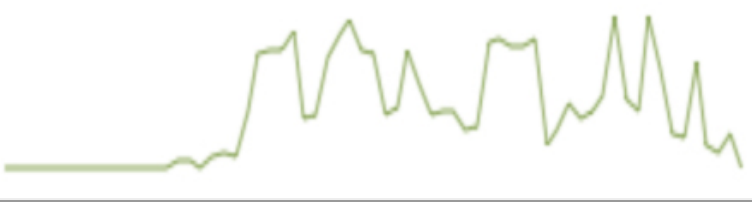
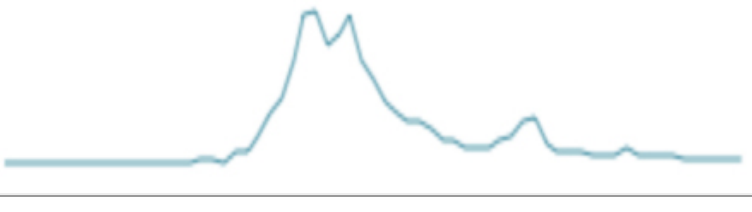
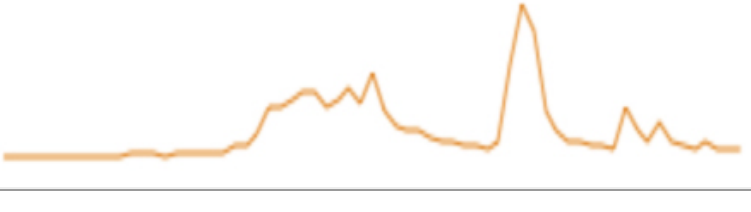
Trayvon Foundation/Memorial:
 Trayvon Martin Foundation
 Justice For Trayvon Martin Foundation
 Trayvon Martin Memorial
 GBU Trayvon Martin Memorial
 Permanent Trayvon Memorial

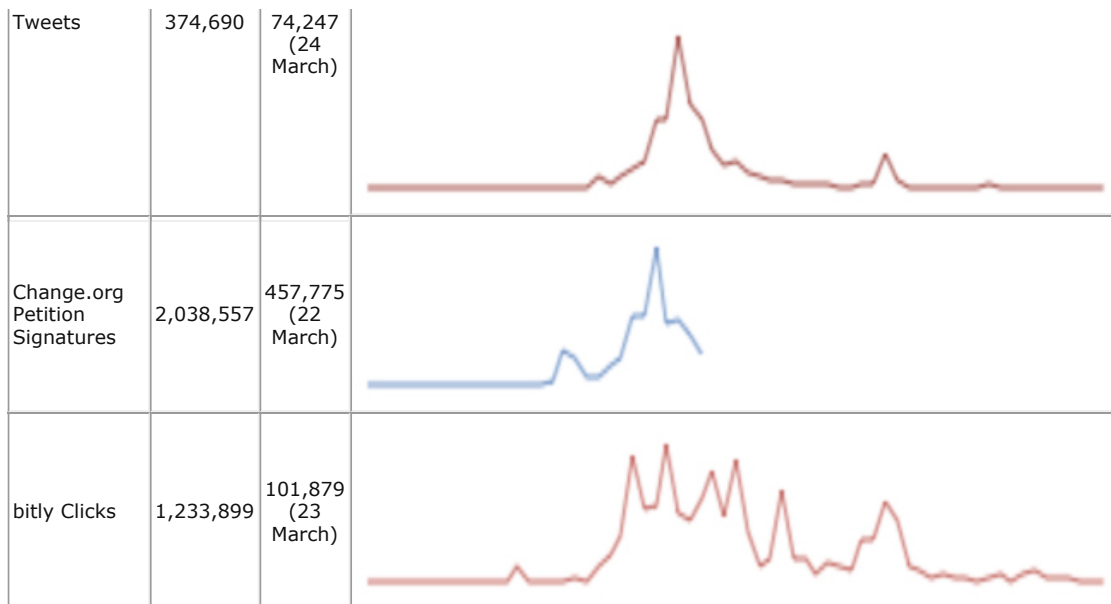
Trayvon Martin:
 #TrayvonMartin
 #trayvonmartin
 #TRAYVONMARTIN
 #Trayvonmartin
 #trayvonMartin
 #TrayVonMartin
 TrayvonMartin
 Trayvonmartin
 TRAYVONMARTIN
 R.I.P. TrayvonMartin
 #TreyvonMartin
 #treyvonmartin
 #TREYVONMARTIN
 #Treyvonmartin
 TreyvonMartin

Trayvon other:
 Organization Cuts Ad Blaming Conservative Group For Trayvon Martin
 Views On The Death Of Trayvon Martin

Treyvon other:
 Barack Looks Like Treyvon
 Obama Administration Exploits Trayvon Shooting

Appendix 2: Summary of data collected for period of 26 February–30 April 2012.

Medium	Data for total period	Peak	Spark line (normalized intensity over time)
Media Cloud Articles/Posts	8,643	490 (23 March)	
Front Page Newspaper Coverage (%)	1.91 (average)	27.25 (12 April)	
Broadcast Television Mentions	2,764	117 (10 April)	
Google Searches for 'Trayvon Martin' (%)	18.2 (average relative to peak)	100 (24 March)	
Google Searches for 'George Zimmerman' (%)	6.4 (average relative to 'Trayvon Martin' peak)	39 (11 April)	



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