



**NOVEMBER 19, 2012**

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## **The Final Days of the Media Campaign 2012**

*Obama enjoys surge in positive coverage the last week of the race;*

*Attention to Romney drops*

### **FOR FURTHER INFORMATION:**

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## Overview

In the final week of the 2012 presidential campaign, Barack Obama enjoyed his most positive run of news coverage in months, according to a new study by the Pew Research Center's Project for Excellence in Journalism. Only during the week of his nominating convention was the treatment in the press more favorable.

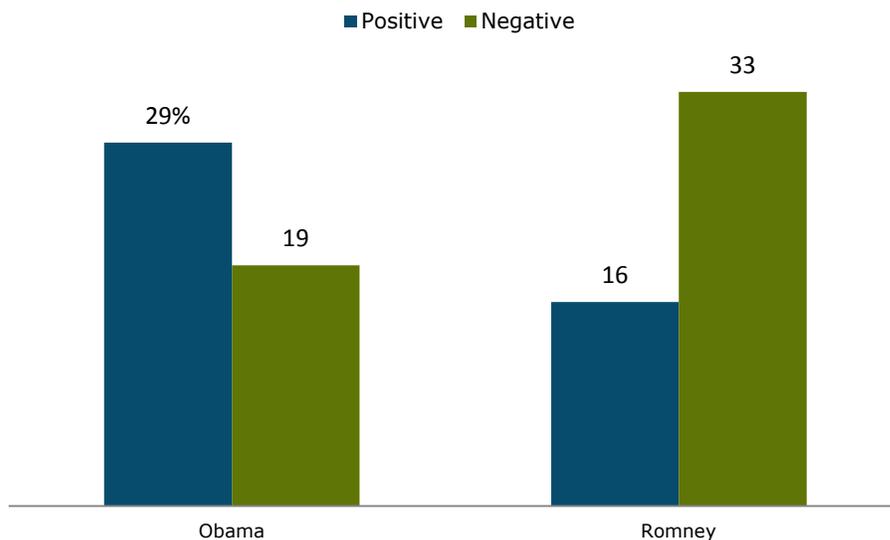
Much of that surge in positive coverage, the data suggest, was tied to Obama's strategic position, including improving opinion polls and electoral math, rather than directly to positive assessments of Obama's response to Superstorm Sandy. The storm, however, appeared to reduce the amount of attention focused on Mitt Romney and may well have influenced public attitudes about the president.

During this final week, from October 29 to November 5, positive stories about Obama (29%) outnumbered negative ones (19%) by 10 points.<sup>1</sup> A week earlier, negative coverage of Obama had exceeded positive by 13 points. The final week of the campaign marked only the second time in which positive stories about Obama outnumbered negative dating back to late August.

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### Tone of Candidate Coverage the Last Week of the Campaign

*Percent of stories with tone*



**Date Range:** October 29 – November 5, 2012

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For Mitt Romney in the final week, the tone of coverage remained largely unchanged from the previous two weeks. Negative stories in the press outnumbered positive ones 33% to 16%.

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<sup>1</sup> Unless otherwise noted, the "final week" in this report refers to the last eight days (October 29 to November 5) prior to Election Day. All other weeks mentioned are from Monday through Sunday.

But Romney may have suffered in final days from the press focusing less on him relative to his opponent. After receiving roughly identical levels of coverage for most of October, in the last week of campaigning Obama was a significant presence in eight out of 10 campaign stories compared with six in 10 for Romney—one of the biggest disparities in any week after Labor Day.

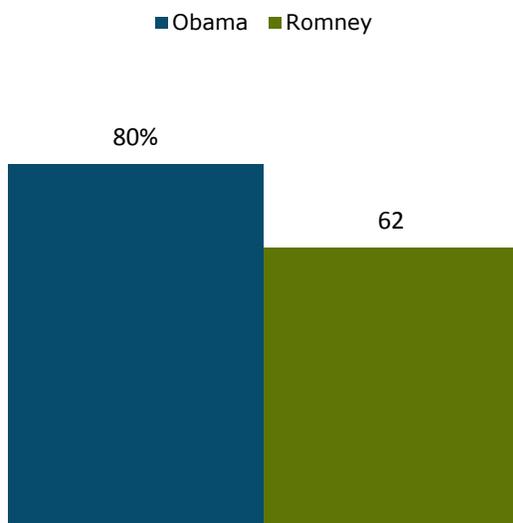
The changes seen in mainstream coverage did not carry through to social media, however, and each of the three major social media platforms offered a different sense of the candidates. On Twitter, for example, the conversation about Romney in the last week was the most positive of any during the general election while Obama’s was basically unchanged. On blogs, it was Obama who saw a surge in favorable conversation. On Facebook, the tenor changed relatively little in the final days.

The study tracked the coverage in mainstream news and the conversation in social media in the final two weeks of the campaign (October 22 to November 5) and is a [follow-up report to one released by PEJ](#) on November 2 that went to the eve of the third debate.<sup>2</sup>

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### Obama Received More Coverage Than Romney in the Final Week

*Percent of campaign stories where each candidate is a significant presence*



**Date Range:** October 29 – November 5, 2012

**Note:** A candidate is considered a significant presence if 25% or more of the story is about him. More than one candidate can appear in the same story.

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When it came to mainstream news coverage, a leading cause of Obama’s more upbeat narrative in the last week was that the horse-race coverage about his campaign—stories focused on strategy, polls and the question of who is winning—became more positive: 37% were clearly favorable in tone while 16%

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<sup>2</sup> In this study, campaign stories are defined as stories where 50% or more of the story was devoted to discussion of the ongoing presidential campaign, or else included President Obama, Governor Romney, Vice President Biden or Congressman Paul Ryan in at least 25%.

were unfavorable. That is considerably more upbeat than it had been for most of the final two months of the campaign.

The positive final week for Obama stands in contrast to the narrative for both candidates during most of the fall. But it also meant that when the campaign coverage for the two candidates is measured in full—from the conventions to election eve—Obama fared better. All totaled, in the period from August 27–November 5, the number of unfavorable stories exceeded favorable one for both men in the mainstream media, but the tone for Obama was considerably less harsh. In the end, 20% of stories during the fall period about Obama were favorable compared with 29% that were unfavorable (a gap of 9 points). For Romney, 15% of stories during this full period were favorable while 37% were unfavorable, a gap more than twice as large as Obama's.

These are among the findings of a content analysis of 660 stories from 49 mainstream outlets from October 22 through November 5, 2012, the last 15 days of campaigning. For the traditional press, the study included a sample of mid-day, early-evening and prime-time programs on the three major cable news channels based on audience ratings data, the three broadcast networks, the 12 most popular news websites, 11 newspaper front pages and news programming from PBS and NPR along with radio headlines from ABC and CBS news services. From these outlets, PEJ researchers watched, listened or read every story in the sample and counted each assertion for whether it was positive in nature about a candidate, negative in nature or neutral. For a story to be deemed to have a distinct tone, positive or negative assertions had to outnumber the other by a factor of three to two. Any story in which that was not case was coded as mixed.

For social media, the researchers combined a mix of traditional human coding with technology from the firm Crimson Hexagon. Researchers trained the computer "monitors" to replicate their human coding according to PEJ rules. For Twitter, the sample includes the full "fire hose" of public tweets. For Facebook, the study includes a large sampling of public posts about the campaign. The study included a sample of several million blogs as well.

The study of the tone in news coverage is not an examination of media bias. Rather, it measures the overall impression the public is receiving in media about each candidate, whether the assertion is a quote from a source, a fact presented in the narrative that is determined to be favorable or unfavorable, including poll

Among other findings in the study:

- **Obama received no clear bounce in media coverage from the third debate.** In the four days after the October 22 debate, which focused on foreign policy, 15% of Obama's coverage was positive while 28% was negative. That is similar to the previous week, which followed the second debate. Romney's coverage during those same four days was also largely unchanged from the week before, 21% positive and 34% negative.
- **Hurricane Sandy dominated the news, but not campaign coverage.** In the election's final week, only 4% of the campaign-related coverage was about the storm. And of those few campaign stories that focused on the hurricane, the treatment of Obama was mostly neutral or mixed. However, coverage of the storm may have had a more indirect benefit for Obama by depicting

him in passing references responding to the disaster. While the president was not a major figure in these stories, they have may have influenced public attitudes about him.

- **In the final week of the campaign, both Fox News and MSNBC became even more extreme in how they differed from the rest of the press in coverage of the two candidates.** On Fox News, the amount of negative coverage of Obama increased—from 47% in the first four weeks of October to 56% the final week. Meanwhile, positive discussion of Romney grew, from 34% of segments to 42%. On MSNBC, the positive coverage of Obama increased from 33% during most of October to 51% during the last week, while Romney’s negative coverage increased from 57% to 68%.
- **The conversation on the three social media platforms studied moved in different directions during the final week of the campaign.** On Twitter, Romney had his best stretch of the general election in the final week; 32% of the conversation was positive compared to 45% negative. On blogs, however, it was Obama who had his best week of the entire period studied; positive posts were roughly equal to negative (28% positive to 27% negative). The tenor of the Facebook conversation changed relatively little—the conversation about Obama stayed steady and Romney’s declined a small amount.
- **On Election Day, the differences between the three social media platforms emerged again as each served a different purpose.** Twitter was the most instantaneous; 53% of the conversation involved users sharing breaking news or personal opinions. On Facebook, half (50%) the conversation involved personal political expressions. Blogs were more focused on the meaning of the election results, where 47% of the discussion involved post-mortem insights or the relaying of stories regarding broader themes.

## Final Weeks in the Mainstream Press

Throughout most of the general campaign period, President Obama received slightly better coverage in the mainstream press than Governor Romney did. An [earlier PEJ report](#) showed that from August 27 to October 21, 19% of stories about Obama were clearly favorable in tone while 30% were unfavorable and 51% were mixed. For Romney, 15% of the stories were favorable, while 38% were unfavorable and 47% were mixed—a differential toward negative stories of 23 points.

However, most of the difference during that period could be accounted for by the horse-race stories, which generally showed Obama with small leads in important state and national polls. If those horse-race stories were removed from the sample, the coverage of the two candidates became quite similar—15% of the remaining campaign stories about Obama were positive, 32% were negative and 53% were mixed. For Romney it was 14% positive, 32% negative and 55% mixed.

The next week included the third and final debate, which most polls indicated Obama had won. Obama, however, did not see an improvement in his media coverage. The week of the final debate, October 22 to 28, Obama’s coverage was 16% positive and 30% negative while Romney’s was 18% positive and 32% negative—about on par with the week prior.

Then, in the final week (October 29 to November 5), a noticeable change occurred: Obama’s coverage improved dramatically while Romney’s coverage stayed about the same but shrank in volume.

That week, fully 29% of the Obama stories were positive compared to 19% which were negative, a net plus of 10 points. That was the best week Obama had seen since the week of the Democratic National Convention in early September; the final week also marked only the second week of the general election when Obama was the subject of more positive stories than negative.

Romney's coverage in that final week slipped slightly, but not by a significant amount. That week, 16% of his stories were positive compared to 33% that were negative, a difference of 17 points.

Rather than Romney faltering in the last week, in other words, the difference was largely that Obama benefited from a new media narrative.

Not only did the tone change, but the amount of coverage changed as well. From October 1 to 28, Romney and Obama were both covered at roughly the same amount. Obama was a significant presence (meaning he was in 25% of the story or more) in 75% of the campaign-related coverage compared to 71% for Romney.

But in the final week, a bigger discrepancy was seen as Obama was a significant presence in 80% of the coverage, and Romney was a significant presence in 62%.

The data suggest two major factors in Obama's increased and improved coverage in the final week of the campaign. One was the increase in amount of attention paid to the horse-race components of the race, which showed Obama with key advantages late in the race. During the final week, 46% of all press coverage of the campaign focused on horse-race and strategy stories, larger than the 39% that was devoted to such issues throughout the entire race.

And in those horse-race stories of the final week, Obama did particularly well. Fully 37% of the horse-race stories including Obama were positive while only 16% were negative, a net plus of 21 points. For Romney that week, 20% of those stories were positive compared to 29% negative, a net minus of 9 points.

The other major element was Hurricane Sandy—but its impact on the tone of Obama's coverage appears to be more subtle than direct.

The disastrous storm, which inflicted its most severe damage on the U.S. on October 29, provided Obama with numerous opportunities to be seen in a presidential role rather than as a candidate. In general, Obama earned high marks on his handling of the storm's aftermath and received praise from many, including Republican New Jersey Governor Chris Christie, a key supporter of Romney.

The overall news coverage of the storm was extensive. For example, for the five days between October 29 and November 2, all three major networks (ABC, CBS and NBC) led both their morning and evening newscasts with stories about Sandy—an unusual occurrence. However, the media did not run many stories that directly connected the disastrous events with the presidential campaign, even when Obama was a key part of those stories.

During the final week of the campaign, 4% of the newshole was devoted to stories focused on Hurricane Sandy, more than was devoted to other major issues such as Libya (3%), unemployment (1%), taxes (1%) and political endorsements (1%).

But of the 16 stories in the sample that focused exclusively on the hurricane and included Obama in a significant way, only 3 were positive and 5 were negative. (Romney was only a significant presence in two hurricane-focused stories—both of them neutral.)

The data suggest that the media did not run a huge number of stories focused on Obama and the hurricane and even those that did run did not offer a glowing review of the president’s performance. Instead, the storm may have had a more indirect influence on voters who saw passing references to Obama in other Sandy stories. If Obama was not present in 25% of a story about the storm, it would not appear in the data as an Obama related story.

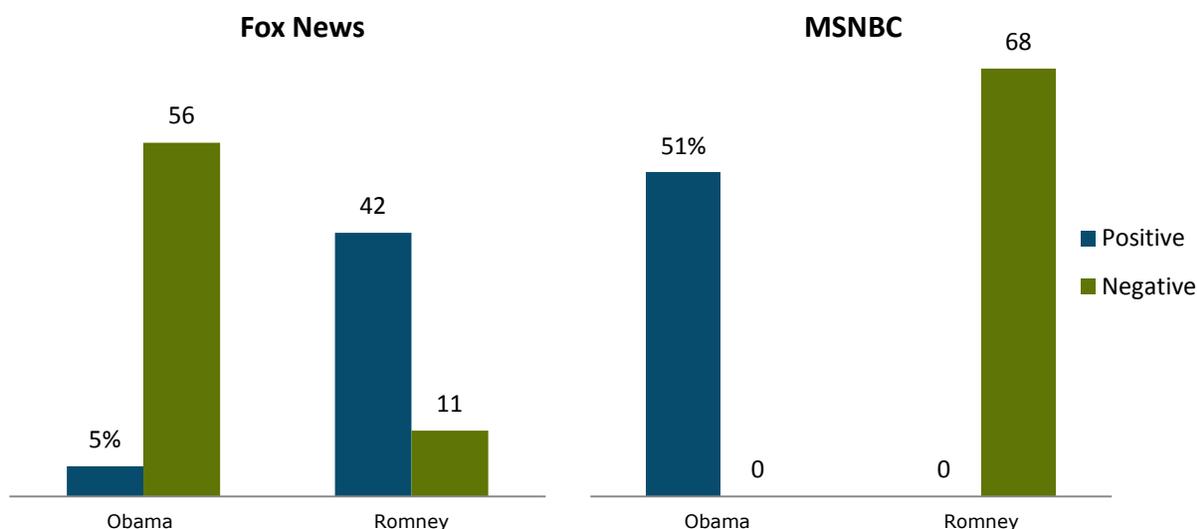
### The Role of Fox News and MSNBC

Throughout the campaign, the two most popular cable news channels, Fox News and MSNBC, stood out from the rest the media coverage. Fox News was much more positive about Romney than the press as a whole and substantially more negative about Obama. MSNBC was even more overwhelmingly negative about Romney and offered mostly positive coverage about Obama.

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### Alternate Narratives on MSNBC and Fox News During the Final Week

*Percent of stories with tone*



**Date Range:** August 27 – November 5, 2012

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During the final week of the campaign, those differences became even more pronounced.

That week, when the media overall were more positive about Obama than negative, Fox News went a different direction and became more negative about him. From October 1 to 28, 4% of Obama’s stories were positive and 47% were negative (a difference of 43 points). In the final week, however, that tenor changed so that 5% of Obama’s stories were positive while 56% were negative—a difference of 51 points.

At the same time, when Romney was receiving negative coverage in the final week from the rest of the press, Fox was different; 42% of its segments about him were positive while only 11% were negative.

This was more positive than the earlier part of October when 34% of Fox News' Romney coverage was positive and 9% negative.

MSNBC moved in the other direction. MSNBC's coverage of Romney during the final week (68% negative with no positive stories in the sample), was far more negative than the overall press, and even more negative than it had been during October 1 to 28 when 5% was positive and 57% was negative.

For Obama, meanwhile, the coverage improved in the last week. From October 1 to 28, 33% was positive and 13% negative. During the campaign's final week, fully 51% of MSNBC's stories were positive while there were no negative stories at all in the sample.

## **Social Media during the Closing Weeks of the Campaign**

The social media platforms studied—Twitter, Facebook and blogs—did not follow the pattern of the mainstream press during the final weeks of the campaign. They also did not follow each other. Romney's closing week on Twitter was the most positive he experienced during the entire general election, even while Obama was having his best week in the blogosphere. And on Facebook, the final week brought relatively little change.

### **Twitter**

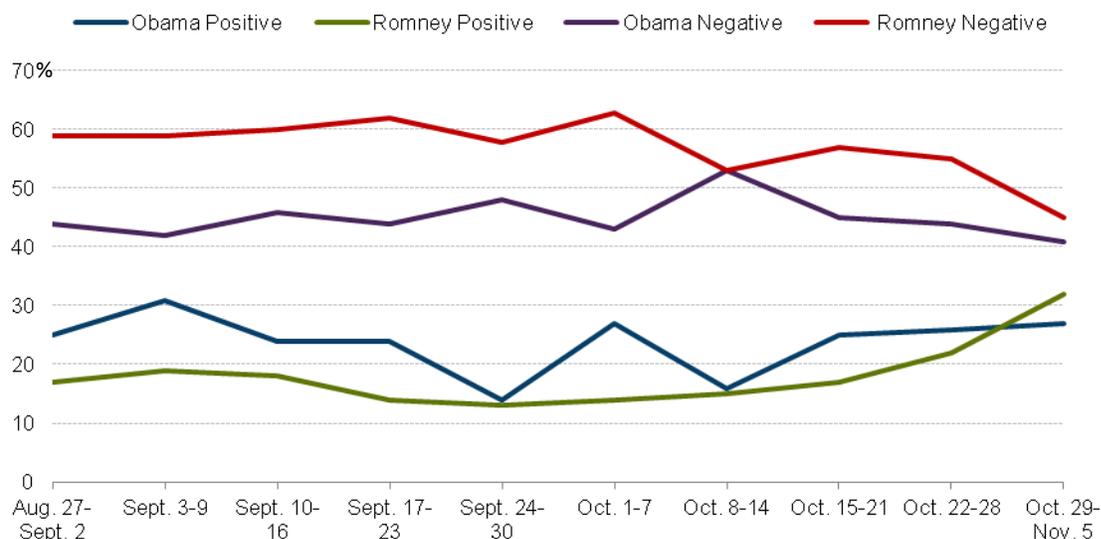
The closing weeks on Twitter for Romney and Obama differed significantly. During the penultimate week of the campaign, October 22 to 28, the conversation about Obama was much better than about Romney—as it had been throughout the general election. During that week, 26% of the assertions about Obama were positive compared to 44% negative, while for Romney, 22% were positive and 55% were negative.<sup>3</sup>

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<sup>3</sup> The Crimson Hexagon software used to analyze social media measures text in the aggregate. Therefore, the unit of measure is the 'statement' or assertion, not the post or Tweet. One post or Tweet can contain more than one statement if multiple ideas are expressed.

## Tone of Conversation about Candidates on Twitter

Percent of assertions



**Date Range:** August 27 – November 5, 2012  
 PEJ analysis using Crimson Hexagon technology

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That changed markedly for Romney, however, in the final week. From October 29 to November 5, roughly a third (32%) of the conversation about the GOP candidate was positive compared to 45% negative, a difference of 13 points. While this was still negative overall, it was by far the best week Romney had on Twitter during the general election after Labor Day. It also marked the only occasion when Romney's tone of conversation on Twitter was close to that of Obama's (27% positive and 41% negative), in this instance actually besting the president by one point.

What accounted for this improved tone for Romney in that final week? A closer examination suggests that supporters of Romney went to Twitter to share their optimism that Romney could win the election and that excitement around his campaign was growing.

"#Boehner says #Romney will win #Ohio, despite auto bailout issue," tweeted Esmir Milavic while linking to a story on the CNN website.

"[Counselor to George W. Bush, Ed] Gillespie: Undecided Voters Will Win Race for Romney," shared @UnsureVoters.

Endorsements were also key in the final week.

"Four Major Iowa Newspapers Endorse Romney," tweeted @MrBlog1.

“Good for her ‘Former Hillary aide backs Romney’,” added Tammy Bruce reacting to the news that Clinton's former Senate state director, Gigi Georges, endorsed the Republican nominee.

Obama saw no such dramatic surge on Twitter in the final week. It did mark the fourth straight week of improved tone, but was only slightly better than the week before. And the optimism shared by Romney supporters was not as evident for Obama supporters.

The other difference in the last week is that the amount of conversation on Twitter about each candidate decreased significantly from the previous week (if you exclude the Monday before the election). From October 29 to November 4, Romney was the subject of 2.9 million assertions compared to 3.9 million for Obama, down from more than 5 million devoted to each the previous week. Most of this decrease is likely attributed to the immense attention that Hurricane Sandy and its aftermath received online. [According to Twitter](#), from October 27 to November 1, users sent more than 20 million tweets related to the natural disaster, meaning that the attention of many users appeared to be diverted away from the campaign.

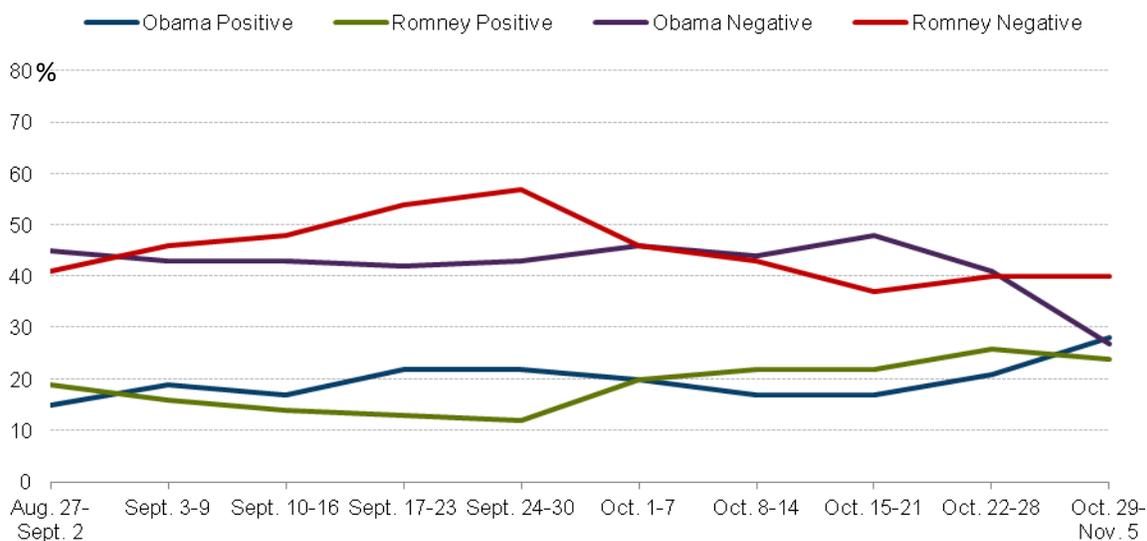
### **Blogs**

The trajectory of conversation on blogs during the final two weeks of the campaign differed significantly from Twitter. The second to last week saw a slight advantage on blogs for Romney (26% positive and 40% negative) over Obama (21% positive and 41% negative).

However, during the final week, the discussion shifted dramatically in a positive direction for Obama. Indeed, the conversation about Obama in the last week on blogs was slightly more positive than negative—something that did not happen any other week for either candidate on the three main social platforms. The level of negative discussion about Obama dropped from 41% to 27%, while the amount of positive discussion rose from 21% to 28%.

## Tone of Conversation about Candidates in Blogs

Percent of assertions



**Date Range:** August 27 – November 5, 2012  
 PEJ analysis using Crimson Hexagon technology

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In this regard, blogs, unlike Twitter and Facebook, more closely followed the mainstream press as Obama's coverage there also improved dramatically in the closing days.

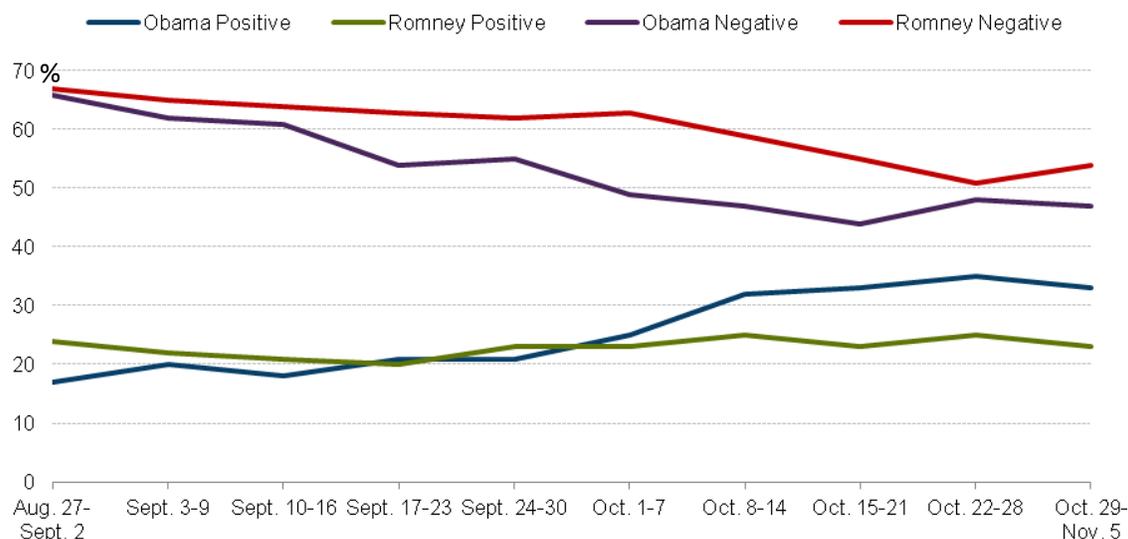
For Romney, the final week did not mark much of a change from earlier weeks. There, 24% of the conversation was positive compared to 40% negative.

### Facebook

On Facebook, contrary to Twitter and blogs, the final two weeks of conversation saw relatively little change for either candidate.

## Tone of Conversation about Candidates on Facebook

Percent of assertions



**Date Range:** August 27 – November 5, 2012  
PEJ analysis using Crimson Hexagon technology

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For Obama, the final weeks were virtually identical. From October 22 to 28, 35% of the Facebook conversation was positive compared to 48% negative. The next week, 33% was positive and 47% was negative.

Romney, on the other hand, saw some change in a negative direction during the final two weeks, but the change was not nearly as large as on Twitter or blogs. During the second-to-last week, 25% of Romney's discussion was positive while 51% was negative. For the last week, the conversation became a bit worse for Romney, as 23% was positive and 54% was negative.

## Social Media on Election Day

Election Day 2012 was one of the busiest ever in the world of social media. [Twitter reported](#) that the election was the most tweeted-about event in U.S. political history. There were more than 31 million tweets sent, with a peak of 327,452 tweets per minute shortly after the television networks called the race for Obama.

Facebook also reached new levels as Election Day chatter set a record for U.S. users in 2012. According to the site's own internal analytical tool called Talk Meter, the day scored a 9.27 on a 10-point scale. By comparison, the 2008 election scored an 8.95.

What was the nature of all this Election Day conversation?

The focus of the discussions differed by platform. For Twitter, users shared real-time vote results gleaned from other sources while they also expressed their personal opinions and voting experiences. Facebook messages were dominated by political expressions and calls for others to partake in their civic duty. And blogs were also used to convey information, but were less about real-time news as they were about larger stories. Blogs also included more focus on the meaning and results of the election for time going forward.

<b>Social Media Discussion on Election Day</b>			
<i>Percent of stories with tone</i>			
	Twitter	Facebook	Blogs
Get Out the Vote	13%	17%	*
Media Coverage	9	6	5
Voting Results/Conveying Straight Info	25	10	36
Accusations of Mischief	*	*	6
Personal Political Expressions	28	50	28
Post-Mortem Discussions	*	*	11
Voting Process	16	8	5
Other	8	10	8

**Date Range:** 6AM November 6 to 6AM November 7, 2012  
 \*The category was negligible in that platform

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## Twitter

Twitter, with its length restrictions and ease of real-time posting, encourages a fast-paced conversation that reacts quickly to events. Consequently, the two biggest types of usage of Twitter on Election Day were personal reactions to political events (28%) and the relaying of voting results as they came in (25%).

Users were eager to share their feelings about the election and candidates, often in a negative light.

“It’s bad when you can’t trust either candidate,” shared Rob Warwick.

“I hate this election stuff. If romney wins I feel like its going to change my life in a terrible way,” feared Irene Costello.<sup>4</sup>

Others used Twitter to share vote results as they came in—often relying on television news as their original source. Many of those tweets were accompanied by the author’s reaction.

“Fox news calls KY and IN for Romney. 2 down 55 to go!!!” shared @ConManBO early in the evening.

<sup>4</sup> For the sake of authenticity, PEJ has a policy of not correcting misspellings or grammatical errors that appear in direct quotes from online postings.

“Looking at these percentages on CNN. The youth vote definitely went to Obama this year. Great sign,” explained @ccthagod.

There was one element of conversation on Twitter that was not seen nearly as much on the other platforms: messages related to the process of voting (16%). Some users shared their personal experiences with voting, even while waiting in lines. Also, as the day wore on, a common refrain from a number of activists was for voters to “stay in line” even if the polling places had closed.

As the NAACP tweeted to its followers, “Remember to stay in line - you can NOT be turned away if you are in line before the polls close.”

### **Facebook**

Half of the assertions on Facebook were expressions of feelings about the election or candidates, geared primarily to their friends, far more than the other social media outlets.

“So amp up right now.. let's get it Obama 2012.. I'm ready for change!!!” posted Brittany Ojeda in the late afternoon.

“I feel great now that my vote is counted for Romney/Ryan,” expressed Roger Heffner.

The reactions became even stronger after the election was called for Obama.

“Very disappointed in america tonight. I guess ill just sit on the couch and watch him turn us into greece. Im done voting, theres no point anymore,” shared Michael Erga.

“Signed.....sealed.....delivered, he is Our President !!!!!!! President Obama,” cheered Kim Lincoln.

More than the other social media platforms, messages aimed at encouraging others to vote made up 17% of the Facebook conversation. In general, the posts were less about specific plans to help people reach the polls and more about calls to action as a civic duty.

“Vote today and we’ll get the president we deserve!!” wrote Jeremy Shearer early in the morning.

“Today is election day. Get out and vote. I don't care who you vote for, just vote. Too many men and women have died protecting your right to vote for you not to,” echoed Ryan McIntyre.

### **Blogs**

The blogosphere tended to be a space for more reflection on Election Day. More than a third (36%) of the conversation on blogs involved conveying information such as voting results or actions taken by the candidates. Some of those posts included up-to-the-minute results. However, unlike with Twitter, blogs were also used to give a wider perspective.

Many bloggers posted excerpts from wire reports about the election after it had concluded, while others shared portions of Obama’s acceptance speech. Some, such as Contacto Latino News, shared news

stories such as one highlighting the fact that Obama spent part of his election day playing basketball with former NBA players.

Another important component of blogs, at 11%, consisted of post-mortem reactions and summaries of what the meaning of the election would be. In the hours after Obama was declared the winner, a number of bloggers began discussing why Romney lost and what it would mean for the Republican Party.

“What a slap in the face for the Tea Party. I am sure that there are already people claiming that Barack Obama won because Mitt Romney wasn't conservative enough. He may not be conservative enough, but that is not why he lost,” surmised The Turner Report. “When the candidate who survives the primaries is the only one who could not launch a successful attack on Obamacare (because it was his idea), then you know how poor the field of candidates was.”

Other bloggers gave suggestions on why Obama was victorious.

“I am soo glad this is over,” wrote Nic Rellek at Streamz of Consciousness & MadConceptz. “Things were looking touch and go for a minute there but President Obama's incredible ground game held true and the polling held up and here we are. They mocked his community organizer background. Seems like that's the perfect skill set to have to win two terms.”

### **Topics Social Media Did Not Discuss**

Two areas of discussion were not as prevalent on social media as some might have anticipated. First, while many users relied on more traditional media for getting their results, discussion about the media was a relatively small component of the conversation in general. On Twitter, 9% was devoted to critiques of the media compared to 6% on Facebook and 5% on blogs.

Second, there were very few conversations focused on accusations of mischief or improper voting practices. Despite receiving prominent attention on a number of the most well-read political blogs, these issues did not have much of a presence in the social media realm. In both Twitter and Facebook, less than 1% of the conversation focused on such improprieties, while the number was 6% for blogs.

For example, a number of conservative blogs reported on the presence of Black Panthers at polling places in Pennsylvania, suggesting their intent was to intimidate voters. By 9 a.m. ET, this was the lead story on Breitbart.com, and was featured prominently on both Redstate.com and the Drudge Report within hours. Some liberal sites, such as the Huffington Post, posted a YouTube video said to be of a touch screen voting machine in Pennsylvania that changed an intended vote for Obama to one for Romney.

Despite the significance that these popular blogs placed on these and other allegations throughout Election Day, discussion of them did not permeate the world of social media.

## About This Study

A number of people at the Pew Research Center's Project for Excellence in Journalism worked on PEJ's "The Final Days of the Media Campaign 2012." Director Tom Rosenstiel, Deputy Director Amy Mitchell, Associate Director Mark Jurkowitz and senior researcher Paul Hitlin wrote the report. Paul Hitlin supervised the content analysis components. Additional coding and data analysis were done by Researchers Steve Adams, Monica Anderson, Heather Brown, Laura Santhanam and Sovini Tan. Nancy Vogt worked on the computer coding. Katerina Matsa created the charts. Jesse Holcomb copy edited the report. Dana Page handles communications for the project.

## Methodology

This special report by the Pew Research Center's Project for Excellence in Journalism on media coverage of the 2012 presidential campaign uses data derived from two different methodologies. Data regarding the tone of coverage in the mainstream press were derived from the Project for Excellence in Journalism's in-house coding operation. ([Click here](#) for details on how that project, also known as PEJ's [News Coverage Index](#), is conducted.)

Data regarding the tone of conversation on social media (Twitter, Facebook and blogs) and how the platforms were used on Election Day were derived from a combination of PEJ's traditional media research methods, based on long-standing rules regarding content analysis, along with computer coding software developed by [Crimson Hexagon](#). That software is able to analyze the textual content from millions of posts on social media platforms. Crimson Hexagon (CH) classifies online content by identifying statistical patterns in words.

This study is a follow-up report to [one released on November 2](#), which was based on data collected from August 27 through October 21, 2012. This report adds new data from the final 15 days of the campaign, October 22 through November 5, 2012, along with a special look at social media on Election Day itself, November 6.

## Human Coding of Mainstream Media

### Sample Design

The mainstream media content was based on coverage originally captured as part of [PEJ's weekly News Coverage Index](#) (NCI).

Each week, the NCI examines the coverage from 52 outlets in five media sectors, including newspapers, online news, network TV, cable TV, and radio. Following a system of rotation, between 25 and 28 outlets each weekday are studied as well as 3 newspapers each Sunday.

For this particular study of campaign coverage, three commercial talk radio programs were not included. In addition, broadcast stories that were 30 seconds or less were also excluded.

In total, the 49 media outlets examined for this campaign study were as follows:

**Newspapers (Eleven in all)**

Coded two out of these four every weekday; one on Sunday

*The New York Times*

*Los Angeles Times*

*USA Today*

*The Wall Street Journal*

Coded two out of these four every weekday; one on Sunday

*The Washington Post*

*The Denver Post*

*Houston Chronicle*

*Orlando Sentinel*

Coded one out of these three every weekday and Sunday

*Traverse City Record-Eagle (MI)*

*The Daily Herald (WA)*

*The Eagle-Tribune (MA)*

**Web sites (Coded six of twelve each weekday)**

Yahoo News

MSNBC.com

CNN.com

NYTimes.com

Google News

FoxNews.com

ABCNews.com

USAToday.com

WashingtonPost.com

LATimes.com

HuffingtonPost.com

Wall Street Journal Online

**Network TV (Seven in all, Monday-Friday)**

Morning shows – coded one or two every weekday

ABC – Good Morning America

CBS – Early Show

NBC – Today

Evening news – coded two of three every weekday

ABC – World News Tonight

CBS – CBS Evening News

NBC – NBC Nightly News

Coded two consecutive days, then skip one

PBS – NewsHour

**Cable TV (Fifteen in all, Monday-Friday)**

Daytime (2:00 to 2:30 pm) coded two out of three every weekday

CNN

Fox News

MSNBC

Nighttime CNN – coded one or two out of the four every day

Situation Room (5 pm)

Situation Room (6 pm)

Erin Burnett OutFront

Anderson Cooper 360

Nighttime Fox News – coded two out of the four every day

Special Report w/ Bret Baier

Fox Report w/ Shepard Smith

O'Reilly Factor

Hannity

Nighttime MSNBC – coded one or two out of the four every day

PoliticsNation

Hardball (7 pm)

The Rachel Maddow Show

The Ed Show

**Radio (Seven in all, Monday-Friday)**

NPR – Coded one of the two every weekday

Morning Edition

All Things Considered

Radio News

ABC Headlines

CBS Headlines

From that sample, the study included all relevant stories:

- On the front page of newspapers
- In the entirety of commercial network evening newscasts and radio headline segments
- In the first 30 minutes of network morning news and all cable programs
- In a 30 minute segment of NPR's broadcasts or PBS' NewsHour (rotated between the first and second half of the programs)
- The top 5 stories on each website at the time of capture

Click here for the full [methodology](#) regarding the News Coverage Index and the justification for the choices of outlets studied.

### **Sample Selection**

To arrive at the sample for this particular study of campaign coverage, we gathered all relevant stories from August 27-November 5, 2012, that were either coded as campaign stories, meaning that 50% or more of the story was devoted to discussion of the ongoing presidential campaign, or included President Obama, Governor Romney, Vice President Biden or Congressman Paul Ryan in at least 25% of the story.

This process resulted in a sample of 3,117 stories (660 of those stories came from the final 15 days of the campaign). Of those, 2,823 stories focused on the presidential election while 294 focused on another topic, such as the events in Libya or Hurricane Sandy, but included one of the figures as a significant presence.

**Note:** The sample of 3,117 stories was used for all data regarding the tone of coverage for each candidate. For one section where the overall framing of campaign coverage is discussed in terms of newshole, the sample was made up of 3,689 stories and included talk radio stories and those 30 seconds or less.

### **Coding of Mainstream Press Campaign Stories for Tone**

The data in this study derived from PEJ's regular Index coding was created by a team of seven experienced coders. We have tested all of the variables derived from the regular weekly Index coding and all the variables reached a level of agreement of 80% or higher. For specific information about those tests, see the [methodology section](#) for the NCI.

The method of measuring tone was the same that had been used in previous PEJ studies, including the 2008 studies, in order to provide accurate longitudinal comparisons.

### **Unit of Analysis**

The unit of analysis for this study was the story. Each story was coded for tone for each of the four candidates. If a candidate did not appear in at least 25% of the story, they were not considered a significant figure in the story and were therefore coded as "n/a" for not having a significant presence.

### **Tone Variable**

The tone variable measures whether a story's tone is constructed in a way, via use of quotes, assertions, or innuendo, which results in positive, neutral, or negative coverage for the primary figure as it relates to the topic of the story. While reading or listening to a story, coders tallied up all the assertions in a story that have either a negative or positive tone to the reporting. Direct and indirect quotes were counted along with assertions made by journalists themselves.

In order for a story to be coded as either "positive" or "negative," it must have either 1.5 times the amount of positive comments to negative comments, or 1.5 times the amount of negative comments to

positive comments. If the headline or lead has a positive or negative tone, it was counted twice into the total value. Also counted twice for tone were the first three paragraphs or first four sentences, whichever came first.

Any story in which the ratio of positive to negative comments was less than 1.5 to 1 was considered a "neutral" or "mixed" story.

In some previous studies, PEJ used a ratio of 2 to 1 instead of 1.5 to 1 in determining the overall tone of news stories.

The 2:1 ratio makes sets the bar even higher for a story to be coded as either positive or negative overall. Prior to the 2008 election campaign, PEJ reviewed and retested both the 2:1 ratio and the 1.5 to 1 ratio. We also consulted with several leading scholars in content analysis methods. First, we found only minor shifts in the overall outcome of stories. Indeed, past content studies in which we coded using both ratios, the overall relationship of positive to negative stories changed very little. The bigger difference was in an increase in mixed or neutral stories. In our pre-tests in 2007, the Project felt that the 1.5 to 1 ratio more precisely represented the overall tone of the stories. The academics consulted concurred.

### **Coding Process**

Testing of all variables used to determine campaign stories has shown levels of agreement of 80% or higher. For specific information about those tests, see the [methodology on intercoder testing](#).

During coder training for this particular study, intercoder reliability tests were conducted for all the campaign-specific variables. There were two different intercoder tests conducted to assure reliability.

For this study, each of the seven coders were trained on the tone coding methodology and then were given the same set of 30 stories to code for tone for each of the four candidates. The rate of intercoder reliability agreement was 82%.

### **Coding of the Tone on Social Media Using a Computer Algorithm**

The sections of this report that dealt with the social media reaction to the campaign employed media research methods that combine PEJ's content analysis rules developed over more than a decade with computer coding software developed by [Crimson Hexagon](#). The portions of this report that focused on the final 15 days were based on separate examinations of more than 10 million tweets, 130,000 blog posts and 210,000 Facebook posts.

Crimson Hexagon is a software platform that identifies statistical patterns in words used in online texts. Researchers enter key terms using Boolean search logic so the software can identify relevant material to analyze. PEJ draws its analysis samples from several million blogs, all public Twitter posts and a random sample of publicly available Facebook posts. Then a researcher trains the software to classify documents

using examples from those collected posts. Finally, the software classifies the rest of the online content according to the patterns derived during the training.

According to Crimson Hexagon: "Our technology analyzes the entire social internet (blog posts, forum messages, Tweets, etc.) by identifying statistical patterns in the words used to express opinions on different topics." Information on the tool itself can be found at <http://www.crimsonhexagon.com/> and the in-depth methodologies can be found here <http://www.crimsonhexagon.com/products/whitepapers/>.

Crimson Hexagon measures text in the aggregate and the unit of measure is the 'statement' or assertion, not the post or Tweet. One post or Tweet can contain more than one statement if multiple ideas are expressed. The results are determined as a percentage of the overall conversation.

### **Monitor Creation and Training**

Each individual study or query related to a set of variables is referred to as a "monitor."

The process of creating a new monitor consists of four steps. There were six monitors created for this study – three for Obama (Twitter, blogs and Facebook) and three for Romney (Twitter, blogs and Facebook).

First, PEJ researchers decide what timeframe and universe of content to examine. The timeframe for this study was August 27-November 5, 2012. PEJ only includes English-language content.

Second, the researchers enter key terms using Boolean search logic so the software can identify the universe of posts to analyze. For each of these monitors, the Boolean search terms simply consisted of the candidate's last name ("Obama" or "Romney").

Next, researchers define categories appropriate to the parameters of the study. For tone monitors, there are four categories: positive, neutral, negative, and irrelevant for posts that are off-topic.

Fourth, researchers "train" the CH platform to analyze content according to specific parameters they want to study. The PEJ researchers in this role have gone through in-depth training at two different levels. They are professional content analysts fully versed in PEJ's existing content analysis operation and methodology. They then undergo specific training on the CH platform including multiple rounds of reliability testing.

The monitor training itself is done with a random selection of posts collected by the technology. One at a time, the software displays posts and a human coder determines which category each example best fits into. In categorizing the content, PEJ staff follows coding rules created over the many years that PEJ has been content analyzing the news media. If an example does not fit easily into a category, that specific post is skipped. The goal of this training is to feed the software with clear examples for every category.

For each new monitor, human coders categorize at least 250 distinct posts. Typically, each individual category includes 20 or more posts before the training is complete. To validate the training, PEJ has conducted numerous intercoder reliability tests (see below) and the training of every monitor is examined by a second coder in order to discover errors.

The training process consists of researchers showing the algorithm stories in their entirety that are unambiguous in tone. Once the training is complete, the algorithm analyzes content at the assertion level, to ensure that the meaning is similarly unambiguous. This makes it possible to analyze and proportion content that contains assertions of differing tone. This classification is done by applying statistical word patterns derived from posts categorized by human coders during the training process.

The monitors are then reviewed by a second coder to ensure there is agreement. Any questionable posts are removed from the sample.

### **Ongoing Monitors**

In the analysis of campaign coverage, PEJ uses CH to study a given period of time, and then expands the monitor for additional time going forward. In order to accomplish this, researchers first create a monitor for the original timeframe according to the method described above.

Because the tenor and content of online conversation can change over time, additional training is necessary when the timeframe gets extended. Since the specific conversation about candidates evolves all the time, the CH monitor must be trained to understand how newer posts fit into the larger categories.

Each week, researchers remove any documents which are more than three weeks old. For example, for the monitor the week of October 22-28, 2012, there will be no documents from before October 8. This ensures that older storylines no longer playing in the news cycle will be removed and the algorithm will be working with only the newest material.

Second, each week trainers add more stories to the training sample to ensure that the changes in the storyline are accurately reflected in the algorithm. PEJ researchers add, at a minimum, 10 new training documents to each category. This results in many categories receiving much more than the 10 new documents. On average, researchers will add roughly 60 new training documents each week.

### **How the Algorithm Works**

To understand how the software recognizes and uses patterns of words to interpret texts, consider a simplified example regarding an examination of the tone of coverage regarding Mitt Romney. As a result of the example stories categorized by a human coder during the training, the CH monitor might recognize that portions of a story with the words "Romney," "poll" and "increase" near each other are likely positive for Romney. However, a section that includes the words "Romney," "losing" and "women" is likely to be negative for Romney.

Unlike most human coding, CH monitors do not measure each story as a unit, but examine the entire discussion in the aggregate. To do that, the algorithm breaks up all relevant texts into subsections. Rather than dividing each story, paragraph, sentence or word, CH treats the "assertion" as the unit of measurement. Thus, posts are divided up by the computer algorithm. If 40% of a post fits into one category, and 60% fits into another, the software will divide the text accordingly. Consequently, the results are not expressed in percent of newshole or percent of posts. Instead, the results are the percent of assertions out of the entire body of stories identified by the original Boolean search terms. We refer to the entire collection of assertions as the "conversation."

### **Testing and Validity**

Extensive testing by Crimson Hexagon has demonstrated that the tool is 97% reliable, that is, in 97% of cases analyzed, the technology's coding has been shown to match human coding. PEJ spent more than 12 months testing CH, and our own tests comparing coding by humans and the software came up with similar results.

In addition to validity tests of the platform itself, PEJ conducted separate examinations of human intercoder reliability to show that the training process for complex concepts is replicable. The first test had five researchers each code the same 30 stories which resulted in an agreement of 85%.

A second test had each of the five researchers build their own separate monitors to see how the results compared. This test involved not only testing coder agreement, but also how the algorithm handles various examinations of the same content when different human trainers are working on the same subject. The five separate monitors came up with results that were within 85% of each other.

Unlike polling data, the results from the CH tool do not have a sampling margin of error since there is no sampling involved. For the algorithmic tool, reliability tested at 97% meets the highest standards of academic rigor.

### **Coding of Social Media Usage on Election Day Using Computer Algorithms**

For the section on how social media were used on Election Day, three separate Crimson Hexagon monitors were created (one for each Twitter, blogs and Facebook). The results were based on separate examinations of more than 32 million tweets, 27,000 blog posts and 210,000 Facebook posts.

The time frame for the analysis is November 6 6:00 a.m. EST through November 7 6:00 a.m. EST, 2012.

PEJ used Boolean searches to narrow the universe to relevant posts. Common terminology posted by users varies for each platform. Therefore, PEJ used slightly different search filters for each.

Since much of the Election Day social media conversation did not include contextual words that gave an indication that the post was about the election, PEJ came up with an extensive list of keywords to use on Twitter and Facebook to collect as many relevant posts as possible.

For blogs, PEJ used the following search filter:

(Barack OR Obama OR Mitt OR Romney)

For Twitter and Facebook, the more extensive search filter was:

(4more OR ABC OR America OR Anderson OR Cooper OR Sullivan OR Baier OR ballet OR Barack OR battleground OR bailout OR Beck OR Biden OR BigBird OR Binder OR black OR Blitzer OR bloc OR blue OR Scheiffer OR Breitbart OR Williams OR Hume OR CA OR cable OR call OR campaign OR candidate OR Crowley OR Carville OR CBS OR Hayes OR Matthews OR Todd OR close OR CNN OR Colbert OR CO OR Colorado OR concede OR congress OR conservative OR constituency OR Coulter OR country OR coverage OR Milbank OR Brooks OR Gregory OR Dem OR demo OR Brazile OR Drudge OR economy OR Henry OR elect OR election OR electoral OR Burnett OR Klein OR female OR FL OR Florida OR Fox OR Gingrich OR Borger OR GOP OR GOTV OR Ifill OR Hannity OR Perry OR Hispanic OR Kurtz OR Ingraham OR Iowa OR Tapper OR Yellin OR Stein OR King OR Stewart OR Williams OR Woodruff OR Karl OR Krauthammer OR Krugman OR Latino OR liberal OR Libya OR Limbaugh OR line OR lose OR lost OR Maddow OR Malkin OR map OR Raddatz OR Matalin OR Press OR Kelly OR Allen OR Mitt OR Mormon OR Morris OR MSNBC OR Muslin OR NBC OR Network OR NPR OR Obama OR Osama OR Ohio OR O'Reilly OR PA OR Begala OR PBS OR Penn OR Pennsylvania OR Morgan OR poll OR POTUS OR president OR pres OR prez OR Pundit OR Red OR Rep OR Republican OR Wolffe OR Martin OR Romney OR Rove OR Ryan OR Sawyer OR Scarborough OR Schultz OR Pelley OR Sharpton OR Silver OR speech OR state OR Stelter OR swing OR tcot OR term OR Brokaw OR Trump OR USA OR victory OR VA OR Virginia OR vote OR white OR win OR Wisconsin OR women OR woman OR won OR Zakaria)