Has the Tea Party Era Radicalized the Republican Party? Evidence from Text Analysis of the 2008 and 2012 Republican Primary Debates

Juraj Medzihorsky, Central European University Levente Littvay, Central European University Erin K. Jenne, Central European University

Party on the American political landscape. Pundits and journalists declared that the emergence of the Tea Party movement pushed the Republican Party to a more extreme ideological position, which is generally anti-Washington. To test this hypothesis, we analyzed the ideological positions taken by candidates in the 2008 and 2012 pre-Iowa caucus Republican presidential-primary debates. To establish the positions, we used the debate transcripts and a text-analytic technique that placed the candidates on a single dimension. Findings show that, overall, the 2012 candidates moved closer to an anti-Washington ideology—associated with the Tea Party movement—and away from the more traditional social conservative Republican ideology, which was more salient in the 2008 debates. Both Mitt Romney and Ron Paul, the two candidates who ran in both elections, shifted significantly in the ideological direction associated with the Tea Party.

he so-called Tea Party movement came into its own in the 2010 midterm elections, when popular discontent with the recession, Obama-initiated bailouts, and the Obama presidency in general led to historic Republican legislative victories in federal and state legislatures. This led to "Tea Party" demonstrations against the federal government as well as numerous Republican primary challenges from "Tea Party candidates" on the right. In addition to extensive coverage of the movement by journalists and pundits, social scientists began to publish research on the Tea Party (see, e.g., Gervais and Morris 2012; Karpowitz et al. 2011; Mead 2011; Williamson, Skocpol, and Coggin 2011). Until recently, this research tended to focus narrowly on (1) the identity and motivations of sympathizers with the Tea Party movement,

and (2) the electoral success of so-called Tea Party candidates (particularly in Republican primary elections).

In this article, we take a different approach to test directly the proposition that the positions associated with the Tea Party movement (i.e., antitaxation, antigovernment, and antiregulation comprising an "anti-Washington" ideology) found their way into the messaging of mainstream Republican candidates. In fact, the 2012 Republican candidate positions reflected the radicalized Tea Party discourse more so than the traditional social conservative Republican discourse, which dominated the 2008 elections. To assess this claim, we examined the ideological stances taken by the Republican candidates in televised presidential-primary debates in 2008 and 2012—specifically, the debates early in the primary competitions. Our findings indicate that the positions taken by Republican presidential candidates in 2012—measured by their words spoken and ideological positions they revealed in the presidential-primary debates—were less representative of traditional social conservative Republican positions than those of anti-Washington Tea Party themes. This suggests that either (1) the emergence of the Tea Party has indeed had an impact on the Republican messaging and ideological positions, or (2) the conditions that led to the emergence of the Tea Party simultaneously pushed the Republican Party in

 $\label{lem:Juraj Medzihorsky} \textit{ is a PhD candidate specializing in methodology and comparative politics in the department of political science at Central European University. He can be reached at medzihorsky_juraj@ceu-budapest.edu.$

Levente Littvay is an associate professor in the department of political science at Central European University. He can be reached at littvayl@ceu-budapest.edu.

Erin K. Jenne is an associate professor in the department of international relations and European studies at Central European University. She can be reached at Jennee@ceu.hu.

an anti-Washington direction. In either case, it appears that the Republican Party has been radicalized in a direction consistent with the libertarian, small-government ideology.

EXISTING LITERATURE

Much of the earliest work about the Tea Party was written by journalists who placed a premium on enhancing its general understanding of the Tea Party as a social movement, particularly with respect to its base (see, e.g., Zernike 2010).

Specifically, we test the claim that the messages of mainstream Republican presidential candidates in 2012 were significantly different than those of Republican candidates in the 2008 primaries. If, as we claim, the emergence of the Tea Party movement in 2009 had a radicalizing effect on the Republican presidential candidates in 2012, then we should expect that they had an overall more anti-Washington (versus traditional social conservative) message in the 2012 versus the 2008 primary elections. Our claim receives even stronger support if we can observe ideological radicalization of

...in the course of presidential primaries, candidates produce numerous shorter written and spoken statements that encompass their positions on all important campaign issues, particularly those that concern their general approach toward governance.

Academics, meanwhile, debated the individual-level determinants of Tea Party support—namely, whether they tend to have latent racist attitudes (Arceneaux and Nicholson 2012; Barreto et al. 2011; Williamson, Skocpol, and Coggin 2011).

Other researchers explored the electoral impact of the movement. Karpowitz et al. (2011) demonstrated that an endorsement by a Tea Party group had a negligible impact on the outcome of general elections; however, in some cases, it helped to secure the victory of Tea Party favorites over Republican moderates in primary elections. Jacobson (2011) found that the movement energized an older, whiter, more conservative electorate, which helped to deliver a historic victory to the Republicans in the 2010 midterms. Abramowitz (2011) analyzed survey data, which revealed that Tea Party members overwhelmingly identified with the Republican Party and were, by far, the most conservative and most activist bloc within the party. Libby (2013) argued that the Tea Party movement had already an important impact on the Republican Party and was likely to retain its influence for many years to come. Others tested the "Tea Party effect" by evaluating the messaging of Tea Party candidates versus establishment candidates (Livne et al. 2011).

For this article, we devised a direct test of whether the language and principles associated with the Tea Party movement have had a radicalizing effect on the positions taken by Republican candidates in the 2012 primaries as compared to those of 2008. If we are correct, then the candidates in 2012 voiced positions more characteristic of an anti-Washington Tea Party ideology than the traditional social conservative ideology. We tested this proposition using text analysis, extracting the candidates' respective positions from their announcements and primary debates in both 2008 and 2012 and announcements in 2012.

HYPOTHESES AND METHODS

Williamson, Skocpol, and Coggin (2011) discussed a range of scenarios likely to emerge as a result of the Tea Party movement and concluded that the most likely outcome was that "the presence of newly elected Tea Party representatives will only reinforce the 2009-10 Republican strategy of total opposition to the Obama agenda." This suggested that rather than serving as a political sideshow, the Tea Party would radicalize the mainstream Republican position in national (i.e., presidential) elections. Our study directly tested this hypothesis by analyzing shifts in the messaging of Republican politicians in two presidential elections that "bookended" the emergence of the Tea Party movement.

individual candidates who ran in both elections (i.e., Mitt Romney and Ron Paul).

Candidates in US presidential primaries are expected to take positions on a number of issues, yet they rarely generate manifestos that reliably address all important issues. However, in the course of presidential primaries, candidates produce numerous shorter written and spoken statements that encompass their positions on all important campaign issues, particularly those that concern their general approach toward governance. We used a subset of these statements to extract the positions of the main Republican candidates in 2008 and 2012.

Scholarly analysis of texts approaches the problem as either discourse or content. The most widely used text-analytic methods are highly labor-intensive, relying heavily on human judgment. Computerassisted content analysis is largely free of these problems. We applied a computer-assisted content-analytic method, known as Wordfish

Table 1
Candidates

2008 (11 DEBATES)		2012 (13 DEBATES)			
				Included	
Brownback	7	Bachmann	13		
Giuliani	9	Cain	11		
Huckabee	10	Gingrich	13		
Hunter	10	Huntsman	9		
McCain	9	Paul	13		
Paul	10	Perry	10		
Romney	9	Romney	13		
Tancredo	10	Santorum	12		
	Exclu	ded	,		
Gilmore	3	Johnson	1		
Keyes	2	Pawlenty	2		
F. Thompson	5				
T. Thompson	4				

Candidates who took part in the debates selected for the analysis and the number of the selected debates they have attended. Candidates excluded from the analysis are at the bottom of the list.

(Slapin and Proksch 2008) and as implemented by Lowe (2013), that relies on factor analysis of word frequencies. The method has been shown to produce valid estimates of positions, and it has been applied to a variety of political documents. Each count Wofword in document is modeled as a draw from a Poisson distribution with rate λ_{ij} (1). In the following equations, (2) the rate is modeled as a function of the sum of the document fixed effect α_i , the word fixed effect ψ_j , and the product of the word slope β_i with the document position θ_i .

Iowa caucus—that is, in at least seven of the 11 pre-Iowa debates of the 2008 cycle or nine of the 13 pre-Iowa debates of the 2012 cycle. Included and excluded candidates are listed in table 1. Tables 5 and 6 in the online appendix (available on the PS website at http://dx.doi. org/10.1017/S1049096514001085) report details about the debates and announcements, including the sources of their transcriptions.

We treated all utterances of each candidate in all selected debates as a single document. The resulting compiled texts can be expected

Much of the scholarship on the Tea Party focuses on what is driving the movement, what attracts people to it, and what influence it has on policy. Our study asked whether the movement directly influences the positions of Republicans running for national office.

The document positions and word slopes are the crucial inferential quantities. The fixed effects account for the fact that some documents are longer and some words are more common.

$$W_{ii} \sim Poisson(\lambda_{ii})$$
 (1)

$$log(\lambda_{ij}) = \alpha_i + \psi_i + \beta_i \ \theta_i \eqno(2)$$

DATA

Our analysis focused on the pre-Iowa caucus Republican presidential debates because, in this period, the candidates had yet to maneuver in response to competition in the primary battles. Therefore, their positions were more likely to reflect their own ideological positions. For the sensitivity analysis, we used the candidates' presidential candidacy announcements. The debates and candidacy announcements differ substantially—the debates are spoken words whereas the announcements are prewritten. The sensitivity analysis was restricted to the 2012 cycle because the 2008 cycle announcements were not in a consistent format.4

For the analysis, we selected those candidates who participated in at least two thirds of the televised presidential debates before the

to encompass the majority of relevant issues because individual debates tend to focus on a narrow subset.

In our analysis, we made no ex-ante assumptions about how informative each word (i.e., "stem") is relative to an ideological position other than assuming that the most common function words are not informative. Instead, we used the data and the model to assess how informative each included word is. Thus, we excluded only the most common function words (i.e., "stop-words") and numbers. Including primary-specific issues would have artificially inflated the differences between the 2008 and 2012 candidates because related words often are common in one cycle but rare in the other. Therefore, we selected the stems that were used in each cycle by at least two (i.e., 15%) of the selected candidates; we included a total of 1,513 stems in our analysis. 6

RESULTS

The positions of candidates on the extracted dimension are shown in figure 1 and reported in table 2. The most widely used word stems and the extent to which they discriminate on the dimension are shown in figure 2. When we discuss the extracted dimension, we use the labels "negative" and "positive" in a purely

numerical sense.

Several factors are immediately apparent in figure 1. First, in both campaigns, Ron Paul staked out the farthest position on one end of the dimension. This corresponds with the popular assessment of his position as the most extreme among the mainstream Republican candidates. Paul's 2012 position also was significantly more extreme than his 2008 position. Furthermore, his distance from the second mostextreme candidate decreased in 2012: in 2012, Herman Cain was considerably closer to Paul than was the second most-extreme candidate of 2008, Mike Huckabee. The Republican candidate field of 2012 moved so significantly toward the positive end that only two 2008 candidates other than

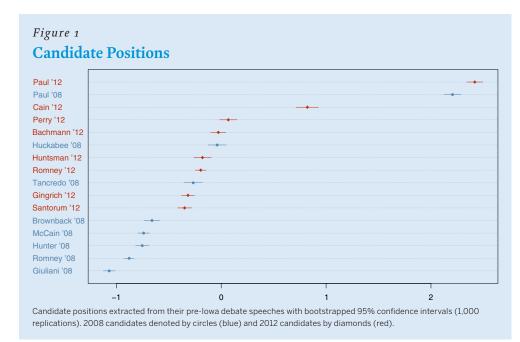


Table 2

Candidate Positions

	CANDIDATE	POSITION
Bachmann	'12	03
		(.04)
Brownback	.08	66
		(.04)
Cain	'12	.82
		(.05)
Gingrich	'12	32
		(0.3)
Giuliani	.08	-1.07
		(.03)
Huckabee	.08	04
		(.05)
Hunter	.08	75
		(.03)
Huntsman	'12	18
		(.04)
McCain	.08	74
		(.03)
Paul	.08	2.21
		(.04)
Paul	'12	2.42
		(.04)
Perry	'12	.07
		(.04)
Romney	.08	88
		(.03)
Romney	'12	20
		(.03)
Santorum	'12	35
		(.03)
Tancredo	.08	27
		(.05)

Note: Candidate positions extracted from pre-lowa debates. Bootstrapped standard errors (1000 replications) in parentheses.

Paul (i.e., Tancredo and Huckabee) took positions that resembled those of the 2012 field. The median 2008 candidates (i.e., Brownback and McCain) were significantly more moderate than the median 2012 contenders. The only candidate from both 2008 and 2012 other than Paul (i.e., Mitt Romney) also moved significantly to the positive end of the dimension. In 2008, Romney was the second farthest on the negative end of the dimension, whereas in 2012, his estimated position was above both the 2008 median position and Tancredo's position. The results of the linear regression reported in table 3 summarize the fact that a 2012 candidate who is not Ron Paul was, on average, more than 0.5 point to the right of a 2008 candidate. The distance between Ron Paul and the other candidates as well as the shift of the overall field to the right in 2012 are so prominent that they jointly account for most-almost 90%-of the variance in the extracted positions.

Table 3
Linear Regression with Normally Distributed
Error

	COEFF.
Constant	6
	(.1)
2012	.6
	(.2)
Ron Paul	2.6
	(.3)

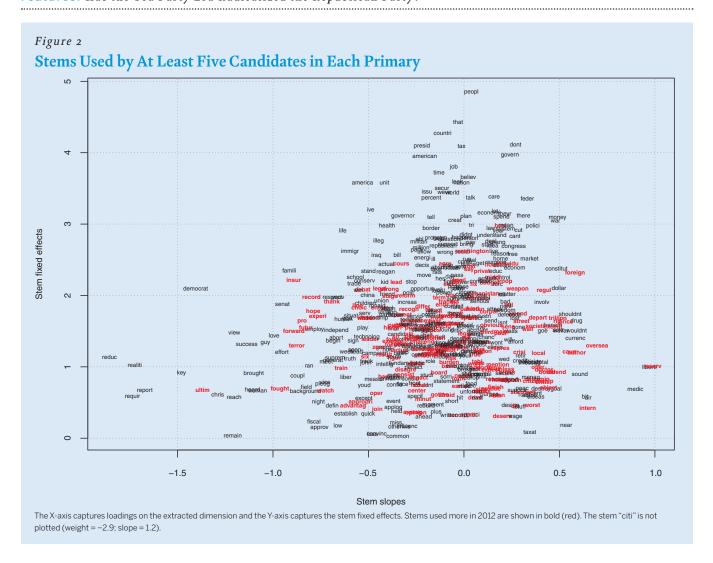
Conditioned (i.e., left-hand side) variable: candidate placement on the extracted dimension. Conditioning (i.e., right-hand side) variables: binary variables indicating whether the campaign was in 2012, and whether the candidate was Ron Paul. Standard errors in parentheses. N = 16, residual S.D. = 0.4, and multiple R^2 = 0.9.

In short, it appears that the entire 2012 field—and the Republican Party as a whole—clearly moved to the positive end of the dimension. The question is how to substantively characterize this position. Given the popular perception of Ron Paul, our first intuition is to look for libertarianism.

To understand what is captured by the extracted dimension, it is helpful to look at the stem parameters. Figure 2 shows the parameters of stems used by at least five candidates in each primary. Word stems that correspond to Paul's side of the dimension strongly suggest opposition to government—especially the federal government in Washington—and, in particular, federal taxation and regulations.

To better understand the extracted dimension, we divided the candidate speeches into all possible segments of five consecutive sentences by a single candidate. We then reviewed several hundred of those segments positioned close to -1, 0, +1, and +2. Table 4 shows six representative five-sentence sequences from the debates, positioned within ± 0.1 of -1 or +2 on the extracted dimension. The speech segments in table 4 reveal a marked contrast between the two parts of the dimension. The displayed speech segments close to -1 are concerned with issues such as cooperation with Democrats and unions, as well as using the federal government to achieve policy goals. Similarly positioned speech segments not shown in table 4 refer to national policies on security, foreign policy, energy, schooling, and family. By contrast, displayed speech segments close to +2 strongly favor restricting the scope of federal government. In short, they agree that the best federal policy is no federal policy. Based on this evidence, we labeled the negative and positive ends of the dimension as "pro-Washington" and "anti-Washington," respectively.

There is good reason to associate this position with the Tea Party movement, broadly construed. Indeed, the tenets of the Tea Party movement include a massive rollback of the federal government and a corresponding devolution of competencies to the states. Among the candidates we analyzed, Ron Paul most embodies these ideals, and a compelling interpretation of the scale is that it represents a traditional Republican versus Tea Party (arguably, Libertarian) dimension. It is interesting that Michele Bachmann, the founder of the Congressional Tea Party Caucus, falls much closer to a traditional social conservative Republican position. This may be due to her preoccupation with traditional social issues as well as issues that the Tea Party movement claims as its own.



SENSITIVITY ANALYSIS

To test the sensitivity of the analysis, we compared the ideological dimensions derived from the 2012 candidate announcements with the 2012 debates. Whereas the debates can be expected to encompass a larger set of specific issues, the announcements—much shorter texts produced at the beginning of a campaign—focus on two very general topics: namely, the general values emphasized by the candidate and the qualities of the candidate. Furthermore, although candidates prepare carefully, the messages they convey in the debates are considerably more improvised than those embedded in their announcements. We selected stems that were used by at least two candidates. Although this analysis did not consider the 2008 announcements, the dimensions extracted from both the announcements and the debates are remarkably close to one another (as shown in figure 3) and strongly correlated: Pearson's $\rho = 0.94$ (95% confidence interval: 0.69, 0.99).

CONCLUSION

Much of the scholarship on the Tea Party focuses on what is driving the movement, what attracts people to it, and what influence it has had on policy. Our study asked whether the movement directly influences the positions of Republicans running for national office. We focused on pre-Iowa debates assuming that these early debates provide a more accurate reflection of

candidate preferences and positions going into the election unaffected by election maneuvering.

To better understand the candidate positions, we used quantitative text analysis and extracted a single factor from frequencies of words spoken in presidential-primary debates. The result was a scale that clearly extends from a moderate, traditional Republican point of view to a more radical view in line with the values of the anti-Washington Tea Party. To ensure that our scale was not simply an artifact of the selected texts, we cross-validated it with the 2012 candidacy announcements, which yielded highly comparable results.

When comparing the 2008 and 2012 candidates, there is both a drastic and a statistically significant shift toward the overall positions of the anti-Washington Tea Party. There also is a clear and significant shift for both candidates who ran in both the 2008 and 2012 presidential campaigns. In 2012, Mitt Romney moved from the moderate to the extreme side of the 2008 field. By the standards of the 2012 election, this move placed him near the median of the 2012 candidates. Although the causal mechanism underlying this shift is still uncertain, it is clear that Tea Party positions moved Republican politics to an ideologically anti-Washington, anti-government position. It remains to be seen whether these effects herald a lasting shift in Republican ideology.

Table 4

Selected Five-Sentence Sequences Spoken by a Single Candidate in a Single Debate

NEGATIVE, -1±0.1

"I have joined together across the aisle on a number of pieces of legislation, many of them very important. I'm proud of my legislative record of conserving my ideals and my conservative principles and getting things done in Washington. And I am proud of that, and I will continue to hold to those ideals. But I will reach across the aisle to the Democrats who I have worked with, who know me, and we know we can work together for the good of this

country. Let's raise the level of dialogue and discussion and debate

in this campaign." (McCain on December 12, 2007; score: -1.1)

"It's the one place I found to agree with President Obama. If every parent in America had a choice of the school their child went to, if that school had to report its scores, if there was a real opportunity, you'd have a dramatic improvement. I visited schools where, three years earlier, there were fights, there were dropouts, there was no hope. They were taken over by a charter school in downtown Philadelphia, and all of a sudden the kids didn't fight anymore, because they were disciplined. They were all asked every day, what college are you going to? Not are you going to go to college, what

college are you going." (Gingrich on September 7, 2011; score: -1)

"I can tell you a good union, the Steel Workers Union. When last year, Chris, we had a strike in a Kansas plant that made the tires for our humvees, I called up the president of the Steelworkers and the president of Goodyear, and within a very short period of time, they were working together, they got that thing done for the good of the country. A union is a receptacle of power, just like management. But those folks love this country, they love their family, and they helped to build a middle class, which has been important for America and for our party. We need to work with unions to win this presidency." (Hunter on October 9, 2007; score: -0.9)

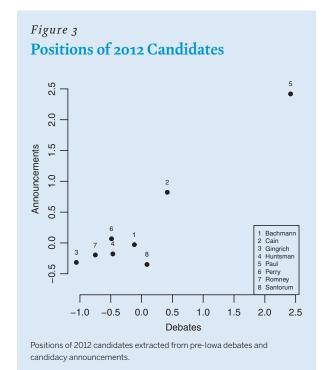
POSITIVE, +1±0.1

"Repeal Dodd-Frank, repeal Obamacare. It really isn't that tough if you try. It is easy to turn around this economy, just have the backbone to do it. Well, as president of the United States, I would not be reappointing Ben Bernanke, but I want to say this. During the bailout, the \$700 billion bailout, I worked behind the scenes against the bailout, because one of the things that I saw from the Federal Reserve, the enabling act legislation is written so broadly that, quite literally, Congress has given the Federal Reserve almost unlimited power over the economy." (Bachmann on September 12, 2011; score: 1.9)

"If we look for it, you'll realize that our national sovereignty is under threat. Yes, and I would like to state that, to the statement earlier made that we all went to Washington to change Washington and Washington changed us, I don't think that applies to me; Washington did not change me. I would like to change Washington, and we could by cutting three programs, such as the Department of Education–Ronald Reagan used to talk about that–Department of Energy, Department of Homeland Security is the biggest bureaucracy we ever had. And besides, what we can do is we can have a stronger national defense by changing our foreign policy. Our foreign policy is costing us a trillion dollars, and we can spend most of that or a lot of that money home if we would bring our troops home." (Paul on November 28, 2007; score: 2)

"There's a responsible way for the federal government to do the things that it should do. Running organizations like the TSA, I would agree with Representative Paul, no. Having the federal government responsible for trying to micromanage Medicare, no, trying to micromanage education, no. The federal government is not good at micromanaging anything. This is why I believe in empowering the states to do more and limit what the federal government does with regard to those kinds of program." (Cain on August 11, 2011; score: 2.1)

Sequences were selected from all such sequences longer than 500 characters and within ± 0.1 to two points on the dimension: -1 and ± 2 . Sequences in the first column characterize the negative end of the extracted dimension and sequences in the second column the positive end.



NOTES

- 1. See Grimmer and Stewart (2013) for a comprehensive overview of the current state of computer-assisted content analysis in political science.
- Slapin and Proksch (2008) demonstrate that the method produces estimates that
 are both internally and externally valid. Grimmer and Stewart (2013) discuss the
 validity and reliability of the position estimates in the context of the underlying
 assumptions about the document-generating process.
- 3. Applications of the method include documents such as party manifestos (Proksch and Slapin 2009; Proksch, Slapin, and Thies 2011; Slapin and Proksch 2008); party congress motions (Ceron 2012, 2014); submissions to European Commission consultations (Klüver 2009, 2011, 2012); and political talk (i.e., legislative speeches) (Louwerse 2012; Proksch and Slapin 2010).
- 4. Whereas the 2012-cycle announcements were speeches of similar length delivered in similar contexts, some of the 2008-cycle announcements did not follow this format, differed in length, and were delivered in different contexts (i.e., some were published only in writing and one occurred during a legislative session).
- The frequencies were obtained and the stop-words excluded using R (R Core Team 2013) package "tm" (Feinerer 2013; Meyer, Hornik, and Feinerer 2008).
- 6. We also excluded one stem ("york") from the analysis because it was a clear outlier. It was used disproportionately by a single candidate (Giuliani). Its exclusion also facilitates the graphical presentation of the results without affecting them.
- We also tested the sensitivity of our analysis to different stem-inclusion criteria, which are reported in the online appendix.

REFERENCES

Abramowitz, Alan I. 2011. "Partisan Polarization and the Rise of the Tea Party Movement." 2011 APSA Annual Meeting Paper.

- Arceneaux, Kevin, and Stephen P. Nicholson. 2012. "Who Wants to Have a Tea Party? The Who, What, and Why of the Tea Party Movement." PS: Political Science and Politics 45 (4): 700–10.
- Barreto, M., B. Cooper, B. Gonzalez, C. Parker, and C. Towler. 2011. "The Tea Party in the Age of Obama: Mainstream Conservatism or Out-Group Anxiety?" *Political Power and Social Theory* 22: 105–37.
- Ceron, Andrea. 2012. "Bounded Oligarchy: How and When Factions Constrain Leaders in Party Position-Taking." *Electoral Studies* 31 (4): 689–701.
- 2014. "Gamson Rule Not for All: Patterns of Portfolio Allocation among Italian Party Factions." European Journal of Political Research 53 (1): 180–99.
- Feinerer, Ingo. 2013. "tm: Text Mining Package." R Package Version 0.5-8.3.
- Gervais, Bryan T., and Irwin L. Morris. 2012. "Reading the Tea Leaves: Understanding Tea Party Caucus Membership in the US House of Representatives." *PS: Political Science and Politics* 45 (2): 245–50.
- Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21 (3): 267–97.
- Jacobson, Gary C. 2011. "The President, the Tea Party, and Voting Behavior in 2010: Insights from the Cooperative Congressional Election Study." Available at Social Science Research Network 1907251.
- Karpowitz, C., J. Monson, K. Patterson, and J. Pope. 2011. "Tea Time in America? The Impact of the Tea Party Movement on the 2010 Midterm Elections." *PS: Political Science & Politics* 44 (2): 303–9.
- Klüver, Heike. 2009. "Measuring Interest Group Influence Using Quantitative Text Analysis." *European Union Politics* 10 (4): 535–49.
- —. 2011. "The Contextual Nature of Lobbying: Explaining Lobbying Success in the European Union." European Union Politics 12 (4): 483–506.
- ——. 2012. "Biasing Politics? Interest Group Participation in EU Policy-Making." West European Politics 35 (5): 1114–33.

- Libby, Ronald T. 2013. Purging the Republican Party: Tea Party Campaigns and Elections. Lanham, MD: Lexington Books.
- Livne, A., M. P. Simmons, E. Adar, and L. A. Adamic. 2011. "The Party Is over Here: Structure and Content in the 2010 Election." Fifth International AAAI Conference on Weblogs and Social Media, ICWSM 2011.
- Louwerse, Tom. 2012. "Mechanisms of Issue Congruence: The Democratic Party Mandate." West European Politics 35 (6): 1249–71.
- Lowe, Will. 2013. "Austin: Do Things with Words." R Package Version o.2.
- Mead, Walter Russell. 2011. "Tea Party and American Foreign Policy." Foreign Affairs 90 (2): 28–44.
- Meyer, David, Kurt Hornik, and Ingo Feinerer. 2008. "Text Mining Infrastructure in R." Journal of Statistical Software 25 (5): 1–54.
- Proksch, Sven-Oliver, and Jonathan B. Slapin. 2009. "How to Avoid Pitfalls in Statistical Analysis of Political Texts: The Case of Germany." *German Politics* 18 (3): 323–44.
- 2010. "Position Taking in European Parliament Speeches." British Journal of Political Science 40 (3): 587–611.
- Proksch, Sven-Oliver, Jonathan B. Slapin, and Michael Thies. 2011. "Party System Dynamics in Post-War Japan: A Quantitative Content Analysis of Electoral Pledges." *Electoral Studies* 30 (1): 114–24.
- R Core Team. 2013. R: A Language and Environment for Statistical Computing. Vienna, Austria: R Foundation for Statistical Computing.
- Slapin, Jonathan B., and Sven-Oliver Proksch. 2008. "A Scaling Model for Estimating Time-Series Party Positions from Texts." American Journal of Political Science 52 (3): 705–22.
- Williamson, Vanessa, Theda Skocpol, and John Coggin. 2011. "The Tea Party and the Remaking of Republican Conservatism." Perspectives on Politics 9 (1): 25–43.
- Zernike, Kate. 2010. Boiling Mad: Inside Tea Party America. New York: Times Books/ Henry Holt & Co.