Representing the Underrepresented: Minority Group Representation through Speech in the U.S. House*

Nicole Kalaf-Hughes
Department of Political Science,
Bowling Green State University,
Bowling Green, OH 43403
419-372-7273
ngkalaf@bgsu.edu

Abstract

Much of the research on minority representation in the U.S. House has focused on how group preferences are reflected in bill sponsorship, cosponsorship, and recorded votes. However, left unexamined is how legislators can represent group interests through speech on the floor - specifically one-minute speeches. I turn to these speeches and examine the conditions under which members speak on behalf of minority groups. In an analysis of speeches from the 109th Congress, I look specifically at the Latino population, and find the effect of descriptive and substantive representatives to vary across issue area in terms of when a member delivers a speech and the content they choose to deliver. The research in this paper has implications for our understanding of legislative position-taking before a recorded vote, as well as offering a more nuanced discussion of how minorities are best represented in Congress.

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In July 2013, one-minute speeches gained national attention when they were used to condemn comments made by Representative Steve King (R-IA). King stated that for each immigrant success story that comes with the DREAM (Development, Relief, and Education for Alien Minors) Act, “there’s another 100 out there who, they weigh 130 pounds and they’ve got calves the size of cantaloupes because they’re hauling 75 pounds of marijuana across the desert. Those people would be legalized with the same act.” Following this comment, many Latino members of Congress used one-minute speeches not only to denounce Representative King’s remarks, but also to argue for their preferred position: a clear path to earned citizenship and full integration for the undocumented (Llamas 2013). This example highlights an important, but often overlooked, aspect of position-taking in Congress: legislative speech. More specifically, Representative King’s statement, and the responses it produced, illustrate the potential importance of this type of representation and prompts the question: Under what conditions do members of Congress speak on behalf of minority groups?

Legislative speech is an understudied aspect of the policymaking process. Despite the fact that most proposed legislation never makes it to a final vote, much of our understanding of Congressional behavior and position-taking stems from analyses of roll call data. This suggests legislators are taking positions which go unexplained in most research. One such example comes in the form of the aforementioned one-minute speech. Occurring at the start of the legislative business day, these speeches can be used to advocate for policy, highlight an achievement in their district, or speak on some business of the day. One-minute speeches provide an opportunity for all members of Congress to weigh in on an issue of their choosing, regardless of minority status, party membership, or institutional tenure, and therefore can offer a more complete picture of representation in Congress. These speeches do not typically garner a fraction of the attention of Congress’ more popular activities such as roll call votes or floor debates. Nevertheless, as this example illustrates, they can share a great deal of information about a legislator’s policy preferences. Previous research has
examined the relationship between members who may not be able to much influence on the policy making process and legislative speech (see Pearson and Dancey 2011a, 2011b, Rocca 2007). However, there has been very little research into the conditions under which members of Congress speak on behalf of minority groups. I argue one-minute speeches can provide the venue for members of Congress to represent minority interests in a way other types of legislative activities often do not.

Studies of descriptive representation suggest descriptive representatives provide increased representation to underrepresented groups (see Dovi 2002; Mansbridge 1999; Pitkin 1967; among others). Additionally, the composition of legislative districts should influence the substantive representation of minority groups, with previous literature finding representatives from districts with a large minority constituency will advocate for their policy preferences (Cameron et al. 1996; Hero and Tolbert 1995; Swain 1993). Thus, descriptive representatives and non-descriptive representatives are expected to provide substantive representation in the form of speech given the right conditions.

To test this theory, I analyze the relationship between Latino members of Congress and speech in the U.S. House of representatives. In the paper that follows, I first explore the use of speech in Congress and offer a greater discussion of the theory explaining the relationship between descriptive and substantive representation as it is reflected in speech. Second, I test the theory using the case of Latino representation. I look specifically at the use of one-minute speeches during the 109th Congress by Latino representatives and legislators who represent Latinos across all issue areas, as well as key minority interest issue areas: race and immigration. I then empirically analyze the effect of various covariates on speech content producing a novel way to explore representation.

Position-Taking and One-Minute Speeches in the U.S. House

Legislative speech, specifically one-minute speeches, offers a unique look at representation. Most studies of political representation focus on bill sponsorship, cosponsorship, or recorded votes. While the conclusions from this research support the idea that members of Congress
take positions on issues which their constituents care about and when their own preferences align with those of the voters (Hall, 1996; Highton and Rocca, 2005; Mayhew, 1974; among others), these studies do not account for the fact that most proposed legislation never makes it to a vote, and therefore denies most legislators the option to register a preference. Thus, studies of legislative speech offer a more holistic picture of representation than what we can garner from studies of recorded votes alone.

Long before an issue comes to a vote, legislators have opportunities to shape legislation by attending committee meetings, bargaining with colleagues, and blocking agenda items. Literature on Congressional floor debates suggests when members of Congress participate in the debate before a final vote, they are given the opportunity to frame or spin the debate in order to shape the content or passage of the bill (Schonhardt-Bailey 2008). It is in this way members may be motivated to verbally take a position on the floor with the hopes of influencing the nature of the debate and the outcome of the policy. Additionally, roll call voting presents another challenge in understanding representation as it may not give members of Congress the chance to take so-called “good” positions, or positions that line up with their preferences (Hall 1996; Rocca 2007). During a recorded vote, members may be forced to choose between the lesser of two evils, and not necessarily their preferred outcome. In addressing this problem, Rocca (2007) argues members of the minority party are particularly vulnerable as they cannot rely on roll call votes as a means to take positions on issues that align with their constituents’ preferences. Instead, they must turn to alternative position-taking forums such as legislative debate and speeches on the floor.

One-minute speeches are key when we consider the opportunities for members of the House to speak on the floor during formal debate are limited. During debate, members are typically confined to the topic of the legislative business at hand, with the opportunity to address the floor being governed by rules that set strict time limits on debate. Contrary to traditional legislative debate, one-minute speeches provide one of the few opportunities for non-legislative debate in the House, allowing a member to speak on a topic of interest to
them or their constituents, whether or not it is relevant to the day’s business. One-minute speeches are delivered at the prerogative of the Speaker at the beginning of the legislative day after the daily prayer, Pledge of Allegiance, and approval of the previous day’s Journal (Schneider 2007). During this time, a representative asks for unanimous consent to address the House for one minute on a topic of their choice. Members who run out of time or, for whatever reason, cannot give their one-minute speech on the floor, may instead insert the speech in the House section of the Congressional Record alongside the one minutes delivered on the floor that day. The difference between read and inserted speeches centers on audience. Speeches inserted into the Record are available to readers of the hard copy and online versions of the document, whereas speeches delivered on the floor are available in the copies of the document and viewers of C-SPAN’s televised proceedings (Schneider 2007).

This type of purposeful speech creates a particularly interesting type of political text. Previous literature suggests people are much more likely to consult such evaluative statements than the actual text of a bill or law under discussion, due to the dense nature of legislative language and the fact that most Congressional bills reach several hundred pages in length (Smith et al. 2005). Moreover, as legislative speech is a largely untapped area of political data it may provide additional insight into the legislative process beyond what we can gather from recorded votes alone (see for example, Kalaf-Hughes 2013; Monroe and Maeda 2004; Slapin and Proksch 2008; Proksch and Slapin 2012). Finally, speech may provide insight into policy positions beyond those of recorded votes or cosponsorship as it is not subject to punishment by voters or fellow partisans in the same way. It is a low cost way to take a position - a way to bring an issue to the table, record support or opposition for a policy, or attempt to shape legislation without the direct consequences of an enacted bill or heavy media coverage. Speaking on the floor also offers a member of Congress the opportunity to elaborate on a position, something not afforded by a recorded vote.

Participation in one-minute speeches is not random, and the motivations for members to participate in this type of Congressional speech has often been attributed to a combi-
nation of policy-based explanations (Maltzman and Sigelman 1996; Rocca 2007), electoral explanations (Morris 2001), and party-based explanations (Harris 2005; Rocca 2007). Studies of policy-based explanations originated with Maltzman and Sigelman (1996), and found members who are on the outside of traditional party influence – including members of the minority party, ideological extremists, and junior members – all make use of one-minute speeches to a greater degree than their more senior or more majority-oriented colleagues. Rocca (2007) finds similar results with institutional status determining member participation in one-minute speeches. Specifically he finds membership in the minority party, freshman members, and ideological extremity to be significantly related to delivering one-minute speeches. These results are echoed by Morris (2001), who also finds minority party members are more likely to give partisan one-minutes. These conclusions are supported by comments from members of Congress themselves. For example, Representative Steve Chabot (R-OH) highlighted this point in a one-minute speech on the importance of one-minute speeches: “As my colleagues know, a freshman or sophomore Member might sit at a committee meeting for two hours before being able to pose one question to a witness. He or she, if lucky, might get 30 seconds to debate a pending bill on the floor. One-minute speeches give these Members and the people they represent back home a chance to be heard” (Chabot 1997).

While it is clear there is some consensus in the literature that this type of Congressional speech is often used by members who are typically underrepresented or outside of traditional influence in Congress, none of these studies to date have considered the conditions under which members of Congress may use them to represent the underrepresented.

**Representation in Congress**

This paper examines this question in light of the Latino population, specifically, when members of Congress speak up on their behalf. The Latino population is the fastest growing and largest minority group in the U.S. (Census 2010), and while recent years have seen an increase in the number of Latinos elected to Congress, they are still underrepresented in terms of the congruence between the size of the population and the number of descriptive
representatives in Congress. The differences between Latinos in the population and Latinos serving in Congress suggest this group is an interesting starting point from which to examine representation.

The first condition under which members of Congress are expected to speak on behalf of a group is if they are members of that group. There is a large body of work examining the role of descriptive representation in increasing the political influence and representation of historically underrepresented groups (see Dovi 2002; Mansbridge 1999; Pitkin 1967; among others). The effect of having a representative with shared characteristics to their constituency has been shown to have a range of positive political outcomes for traditionally underrepresented groups, with the most obvious positive outcome being the evidence that minority representatives are better advocates for minority group preferences (Barreto 2010; Bratton and Haynie 1999; Griffin and Newman 2007; Grose 2005; Haynie 2001; Whitby 1997). Previous research shows minority members of Congress sponsor bills (Bratton 2006; Bratton and Haynie 1999; Tate 2003) and vote (Grose 2005) more in line with minority group interests than their white colleagues. Additional research also attributes descriptive representation to higher turnout (Bobo and Gilliam 1990; Barreto et al. 2004; Barreto 2010), greater trust in government (Gordon and Segura 1990), and lower levels of political alienation (Pantoja and Segura 2003) among minorities. Even with respect to descriptive representation in speech, earlier work into the role of women shows Congresswomen speak at greater length about women’s issues in Congress than non-female legislators (Pearson and Dancey 2011a; 2011b). As stated by Preuhs (2005), ”minority representatives provide benefits to minority citizens that are not provided by non-minority representatives” (205).

Given the expectation that members of Congress speak on behalf minority groups if they are members of that group, it is therefore reasonable to expect members to deliver speeches relating to minority interests. In terms of the case at hand, Latino legislators should give more speeches relating to Latino interests. For the purposes of this paper, two areas that are extremely salient with the Latino community are explored: race and immigration. Generally,
the areas producing the most divergent preferences from the general population are those with a cultural or ethnic basis (Sanchez 2006). First, legislative speech on race has the potential to constitute substantive representation when members act on behalf of a group, focusing on interests that are specifically relevant (Pitkin 1967). In this case, I argue mentions of the Latina/o or Hispanic population are distinctly relevant to that group. Second, the issue of immigration, while having been historically linked to a wide variety of groups, has in recent years become linked to the Latino population (Jimenez 2007). Additionally, while there is some level of variation in the policy preferences of Latinos on the issue of immigration, they are overwhelmingly supportive of more liberal policies resulting in pathways to citizenship or guest worker programs (Lopez et al. 2013). This leads to my first hypothesis:

**H1:** Latino members are more likely than non-minorities to deliver one-minute speeches relating to Latino interests.

Beyond descriptive representation, another branch of research argues *any* representative elected from a district with a large minority constituency will advocate for their policy preferences in a similar manner to what we would observe given a level of descriptive representation (Cameron, Epstein, and O’Halloran 1996; Hero and Tolbert 1995; Swain 1993). Here, there is evidence that non-minority legislators can represent the substantive interests of their constituents and vice versa (Bratton and Haynie 1999; Cannon 1999; Hero and Tolbert 1995; Lublin 1997). In this view, representatives are held accountable to their constituents through the electoral process, regardless of their race or ethnicity.

Therefore, in addition to descriptive representatives playing a role in representing minority interests on the floor, it is also reasonable for members with a larger minority group population in their district to support their causes in Congress and speak on behalf of the group. The presence of a substantial number of minority group constituents positively affects the substantive representation provided by its representative (Grose 2011; Lublin 1997). Members should be motivated to provide substantive representation to the minority group as its population within the district increases. Mayhew’s (1974) electoral connection argument
suggests members will take positions that will maximize voter support, and in the case of representing minority groups, this can be challenging if the preferences of the majority are at odds with those of the minority. One-minute speeches offer a low-cost way to represent the minority. The low level of public awareness of one-minute speeches combined with the lack of a direct effect of these speeches on policy outcomes should allow a representative to raise issues of concern to their minority constituents, without the potential fall-out that comes from a recorded vote. Additionally, this type of representation can also garner favor from the minority, helping to boost their reelection constituency, as taking positions counter to minority groups may prove politically costly, with previous research indicating representatives are often punished by Latinos for taking positions that are seemingly counter to their interests (Pantoja et al. 2001). Previous literature supports this idea, and finds a representative elected from a district with a large minority constituency will advocate for their policy preferences (Cameron et al. 1996; Hero and Tolbert 1995; Swain 1993). Here, there is evidence non-minority legislators can represent the substantive interests of their constituents and vice versa (Bratton and Haynie 1999; Cannon 1999; Hero and Tolbert 1995; Lublin 1997). In this view, representatives are held accountable to their constituents through the electoral process. This expectation leads to the second hypothesis:

**H2:** Members of Congress representing districts with a large Latino constituency are more likely to deliver one-minute speeches relating to Latino interests.

These hypotheses lay out the expectations for the discussion of minority interests in Congress. However, it is not just the decision to speak on issues of importance to underrepresented groups that leads to representation, but also the content of the speech itself. As not all speech relating to minority interests is necessarily positive (see the aforementioned speech at the beginning of this paper from Representative Steve King), it just as important to understand not only when a member of Congress speaks, but also what they say. Here, I approach the delivery of speech on the floor as a two-stage process. First, the member must decide whether or not to deliver a speech, and second what position to take in the
speech. As suggested by the previous literature, members of Congress choose to take positions based on a desire to make good policy, achieve reelection, and improve institutional standing. However, the nature of the positions they choose to take can be more complicated to tease out.

Given the previous literature, I expect members of Congress to choose to take a position, not only when they have a position to take, but also to take a position that will increase their chances of legislative success. As this paper uses the case of Latino representatives and the Latino population to test a theory of representation for underrepresented groups, I examine the content of legislative speech on an issue routinely ranked among the Top-5 most important issues facing the United States by Latinos: immigration (Lopez and Gonzalez-Berrera 2012). I expect the same factors motivating members to speak on behalf of underrepresented groups to also push them to speak favorably.

Legislative discussion surrounding immigration is often focused predominantly on Latinos, as the issue has been inextricably linked with the Latino population and is discussed primarily in anti-Latino terms (Jimenez 2007; Schildkraut 2005). In this context, the policies advocated are often restrictionist in nature.¹ Recent survey data suggests rather than restrictionist policies, Latinos are overwhelmingly supportive of policies such as pathways to citizenship (89% of Latinos surveyed), temporary visas for agricultural workers (85% of Latinos surveyed), and 46% of Latinos said they worry about deportation (Lopez et al. 2013). In terms of the effect of Congressional policy (or lack thereof), 64% of Latinos in another survey report the immigration debate and the failure of Congress to enact a reform bill has made life more difficult for the Latino population (Pew Hispanic 2007). Given the aforementioned policy preferences, along with the record of Latino activism on this issue (see Pantoja et al. 2001), and the previous literature on descriptive representation, I expect Latino members of Congress and those with large Latino constituencies to echo the positions of Latinos more generally and support a less restrictive position. Thus, the third hypothesis states:

¹Restrictive positions are understood to mean any policy aiming to limit, reduce, or prevent immigration.
**H3:** Latino members of Congress or members of Congress representing districts with a large Hispanic constituency are more likely to use less restrictive rhetoric on immigration than their counterparts with fewer Hispanic constituents.

It is worth noting, however, that it is possible for the effect of Latinos in a Congressional district to have the opposite effect. The literature on group conflict theory predicts as the number of immigrants in a community increases with respect to native-born members of the community, restrictionist policy proposals will increase out of a feeling of threat (Valenty and Sylvia 2004). Group conflict theory has been used to explain the popularity of English language laws and other policies aimed specifically at minority groups in states with large minority populations (Citrin et al. 1990, Valenty and Sylvia 2004). The perception of immigrants as a threat suggests representatives of districts with larger Hispanic populations will use more restrictive rhetoric than their counterparts with fewer Hispanic constituents. In this situation, these members may also be more likely to speak seemingly “on behalf” of their minority constituents, by delivering a number of speeches relating to minority interests, yet if we look at the content of the speeches, it may be restrictive in nature. In this way we cannot fully understand the relationship between legislators, constituents, and speech without looking at the content. Mentions of the issues in one-minute speeches may, in fact, be positive or negative, and Hypothesis 3a accounts for this possibility:

**H3a:** Members of Congress representing districts with a large Hispanic constituency are more likely to use more restrictive rhetoric on immigration than their counterparts with fewer Hispanic constituents.

To summarize, descriptive and non-descriptive representatives can offer substantive representation to their minority constituents via speech, given the right conditions. Holding all else equal, minority members of Congress should deliver more floor speeches, especially related to minority group interests. The same is true for non-descriptive representatives with a large group of minority constituents. However, the number of speeches delivered on
a certain topic does not speak to the content of the speeches, and therefore does not present
a full picture of representation. Here, the theory predicts descriptive representatives or non-
descriptive representatives with a sufficiently large minority population should speak more
favorably on issues relevant to the minority population.

**Modeling One-Minute Speeches**

I analyze one-minute speeches from the 109th Congress. This data was collected from the
*Congressional Record* available on the library of Congress’ Thomas database. The resulting
data included 3,466 one-minute speeches, from 316 members of Congress. This data was
then linked to data on the members of Congress including their district demographics, per-
sonal traits, partisanship, and electoral stability. The one-minute speeches are used to craft
dependent variables of counts of speeches per member, in the aggregate and by two issue
areas: race and immigration. The result is an average of 7.7 speeches per member (standard
deviation of 19.4, ranging from 0 speeches to 156 speeches).

After collecting all one-minute speeches from the 109th Congress, each speech was iden-
tified as being relevant to race or immigration using an automated content analysis program
designed by James Pennebaker and his colleagues, called Linguistic Inquiry and Word Count
(LIWC) (Pennebaker, Booth, and Francis 2007). LIWC searched each speech for the key
words listed in a dictionary I created and that was associated with each issue area. For
example, the immigration dictionary asked LIWC to search all speeches for use of any of
the following words: immigration, immigrant, alien, undocumented, or border. LIWC then
assigns each speech a score based on the percentage of each speech using the words in the
appropriate dictionary. This approach provides a way to identify relevant speeches without
potential coder bias that comes in reading each individual speech.\(^2\) The speeches were then
counted, with each member of Congress assigned a number based on the number of total
speeches delivered, as well as the total number of speeches in each category. The relevant

\(^2\)To verify the accuracy of the LIWC program, a graduate student assistant and the author checked the
speeches and content against hand-coding that had been done ahead of time.
speeches were then analyzed for content - a process that will be discussed later in this paper.

In addition to data on one-minute speeches, I include data on relevant legislator and district characteristics including measures of a member’s party affiliation, ethnicity, and ideology. With respect to party affiliation, members identifying as Republican are coded as “1” and members identifying as Democrat are coded as “0.” For ethnicity, members identifying as Hispanic are coded as “1,” all other members are coded as “0.” A separate variable accounts for African American legislators in the same manner, with members identifying as African American are coded as “1,” all other members are coded as “0.” I also include a measure of gender, with female representatives “1,” and male representatives coded as “0.” Ideology is measured using Poole and Rosenthal’s (1997) W-NOMINATE scores. W-NOMINATE scores are a static version (meaning only applied to one Congress) of the original two-dimensional dynamic coordinates based on the spatial model of voting. Fitting the W-NOMINATE model allows me to recover estimates of the legislator ideal points and yea/nay locations of a roll call matrix, and use these results further analysis. I also include a measure of ideological extremity, measured as the absolute value of the W-NOMINATE score. Tenure in office is also accounted for, with freshman legislators coded as “1,” and more tenured members coded as “0.”

Beyond individual legislator characteristics, I include a variable representing the percent change in the Hispanic population in each district during the previous decade as well as a measure of the percent of the district identifying as Hispanic from the U.S. Census Bureau. I also include a binary measure indicating whether the legislator represents a district that shares a border with the U.S.-Mexico border. Table 1 presents the summary statistics for the relevant independent and dependent variables.

[Table 1 about here.]

To assess the impact of the independent variables on the delivery of one-minute speeches, I estimate a series of models examining first the delivery of any speech one-minute speech, second the frequency of one-minute speeches, and third the frequency of one-minute speeches
by issue area.

[Table 2 about here.]

Model 1 in Table 2 presents the results of a logit model with the dependent variable coded as “0” or “1” indicating whether a member of Congress delivered any one-minute speech. This model suggests ideologically extreme members, as well as those thought of as institutionally disadvantaged (in this case, African American and Freshman members) to be more likely to deliver a one-minute speech. In fact, if we calculate the predicted probabilities for delivering a speech, the most ideologically extreme members have a predicted probability of .91 of delivering a one-minute speech in Congress, a .44 increase in the probability over that of the more moderate members. Similarly, African American members of Congress and freshman members of Congress both have a probability greater than .9 of delivering a one-minute speech. On the other hand, the electorally secure are less likely to deliver a one-minute speech, with members receiving 50% of the electoral vote having a predicted probability of .83 of delivering a speech, compared to the .58 predicted probability of those running unopposed. While this model can speak to the likelihood a member of Congress delivers at least one one-minute speech, it does not speak to the frequency of delivery. Models 2, 3, and 4 examine the frequency of one-minute speech delivery using a negative binomial specification.

Model 2 in Table 2 estimates the effect of the various covariates on the number of one-minute speeches delivered. The results illustrate the key explanatory variables to again be ideological extremity and freshman legislator status. In this model, being female is a significant predictor of the number of speeches delivered, while being African American is not. Again, electorally secure members of Congress deliver fewer one-minute speeches. The estimated counts tell a similar story. Table 4 presents the predicted number of one-minute speeches along with the 95 percent confidence interval around the predict count (in

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3A zero inflated model was estimated for the models presented in Table 2, however, the Vuong test was not significant in either instance, suggesting a negative binomial model to be the more appropriate specification.
brackets) for each of the covariates of interest. The counts were estimated by setting the covariates to their maximum and minimum values. In the case of the ideologically extreme, extreme legislators deliver a predicted 1.06 speeches during the session, compared to the 37.8 delivered by their more extreme colleagues (on both ends of the ideological spectrum). Freshman legislators are predicted to deliver 5.8 more speeches than their more tenured colleagues, and female legislators deliver 5.9 more speeches than their male colleagues. Again, the more electorally secure legislators deliver fewer speeches than their more vulnerable colleagues, with incumbents who received a wide margin of the vote delivering 3.7 speeches fewer than those who received support from only half their constituents. These results confirm the findings in previous literature that suggests freshman legislators, the ideologically extreme, and women deliver more one-minute speeches (Matlzman and Sigelman 1996, Morris 2001; Rocca 2007). More generally, previous literature suggests it is the institutionally disadvantaged position that motivates these members to use one-minute speeches more often than their more advantaged colleagues (Rocca 2007). It is therefore interesting to note this finding does not seem to carry over into racial and ethnic minorities or members of the minority party serving in Congress, who also tend to be among the more institutionally disadvantaged – receiving less time during legislative debate and fewer opportunities to help craft legislation.

While these results illustrate the the factors responsible for one-minute speech participation across all areas, they do not shed direct light on the question at hand - speaking on behalf of the underrepresented. As previous research suggests minority members are better advocates for minority group preferences, it is natural to expect descriptive representatives to speak on issues of race, or in the case of Latino members of Congress, immigration.

Model 3 in Table 2 presents the results for speeches relating to Latino race and ethnicity. Controlling for the total number of speeches delivered on the floor, it is clear ideological extremity and prior vote share impact the decision to deliver speeches on race. Again, more specifically, the ideologically extreme deliver more speeches, while the electorally secure
deliver fewer. This is consistent with the results for all speeches, regardless of issue area. With regards to race, however, we also see Latino members delivering fewer speeches, and members with a larger Latino population in their district delivering more speeches relating to race. This negative effect of being Latino on delivering a speech may be related to a members reluctance to focus on issues that are seen as only relating to one demographic. As a minority they may feel it to be politically risky, and choose to instead focus on broader issues. This will be further explored when the content of speeches is considered in the next section.

Turning to Table 3 and Model 3, the estimated range in counts from minimum to maximum values, holding all other variables to their means, of the significant variables is slight. For ideologically moderate members, the predicted count is less than one speech at .29. For the most extreme, the predicted count is .52, giving a range of .45. Regarding a member’s electoral security, the range in counts is -0.18 from receiving just under 50% of the recorded vote to those running unopposed at .1. The change in predicted counts here is very slight, but the results are significant across the range of the variables. In the cases of Latino members and those with large Hispanic populations we see the predictions are not significant across the entire range of the variables - this is due primarily to the few observations at this end of the data (few Latino members and few districts with a Latino population greater than 60%), resulting in larger confidence intervals. Nevertheless, we see Latino members deliver .13 fewer speeches on race than their non-Latino colleagues. For non-Latino members representing large Latino populations, the minimum-maximum range over the predicted counts is about 8, though if we consider only the significant range of the effect the count falls to 2. Nevertheless, having larger Latino populations in a district does result in a representative delivering a larger number of speeches relating to race, indicating non-descriptive representatives may provide some level of substantive representation.

With respect to the issue of immigration (Table 2, Model 4), results are somewhat similar. Controlling for the total number of speeches delivered on all issues, the ideologically extreme
and members with a larger Hispanic population in their district are likely to deliver more speeches on immigration. Latino members of Congress are again likely to deliver fewer speeches on immigration. Returning to the predicted counts for Model 4 in Table 3, the minimum-maximum range over the predicted counts, holding all other variables to their means, is small for both ideologically extreme and Latino members of Congress, at .34 and -.14, respectively, implying that while these factors impact speech delivery, the effect is mild. In the case of members representing Latinos, the minimum-maximum range is 3.43, or about 2 for the significant range of this variable, implying members with about half of their district comprised of Latinos deliver about 2 more speeches on immigration than those with smaller Latino populations.

[Table 3 about here.]

The model estimates presented in Table 2, as well as the quantities of interest presented in Table 3 suggest contrary to the first hypothesis, minority members of Congress – in this case Latinos – do not speak more on issues of concern to minorities. In fact, they actually deliver significantly fewer speeches relating to these issues. One explanation, for this finding may stem from the idea that these legislators do not want to be seen as only representing minority interests. Unlike other “institutionally disadvantaged” legislators racial and ethnic minorities (Latinos and African Americans) are not more likely to deliver greater levels of one-minute speeches than their more advantaged colleagues. These members may choose to represent their descriptive constituents in other ways. It does seem, however, that members representing large groups of minorities, do provide increased substantive representation in the form of one-minute speeches relating to their interests. This is consistent with the second hypothesis and the argument presented in this paper. While descriptive representation may not lead to enhanced substantive representation in terms of the number of speeches delivered on issues relating to racial and ethnic minorities, substantive representation is seen when representatives are elected from a district with a large minority constituency.
But what about the content of the speeches? Representing minority interests is not just limited to bringing up issues of importance to the community, but should reflect the preferences of the group in what is actually said. Here it is possible that while descriptive representation may not lead to substantive representation in terms of bringing up the issue, instead it may lead to greater representation of the actual preferences of the group. To this end, I examine this content and explore the effect of descriptive and substantive representation on the content of one-minute speeches.

Modeling the Content of One-Minute Speeches on Immigration

To explore the relationship between representation and speech content, I treat each members’ speech as a type of word data, and use these data to estimate legislator policy positions. Computer-based content analysis has been used to extract political positions from party manifestos (Laver et al. 2003; Proksch and Slapin 2009), legislative speeches (Laver and Benoit 2002; Giannetti and Laver 2005; Kluver 2009; Kalaf-Hughes 2013; Monroe et al. 2008; Schondhardt-Bailey 2008; Proksch and Slapin 2009), campaign speeches (Schondhardt-Bailey 2005), and constitutional negotiations (Benoit et al. 2005). The Wordfish approach uses word frequencies as observations and models the data generating process (Slapin and Proksch 2008). It does not require any a priori definition of the dimension being estimated, either through a coding dictionary or reference texts, and instead employs a parametric model of word counts, scaling the word counts to reduce the data to a single dimension.

In this section, I look specifically at one-minute speeches on immigration. The issue of race, while useful for understanding when legislators speak on issues of importance to their minority constituents, encompasses a wide variety of policy dimensions – including immigration – that make computer-aided text analysis problematic. Wordfish is appropriate for studies on one policy area, as it has the benefit of not relying on pre-defined areas that may be biased in one direction. The downside is that it makes text analysis of broad policy areas less robust. The upside, however, is we can be confident the estimates generated for the policy area of interest, in this case immigration, are accurate representations of
legislator position. Additionally, we can cross check the estimates by examining the word-discrimination parameters from the Wordfish estimator to allow for the analysis of the degree to which the estimates capture the dimension under investigation. This provides assurance the texts being used actually capture the legislator’s position.

Wordfish assumes the word frequencies from a text are generated by a poisson distribution (Slapin and Proksch 2008). This distribution only requires one parameter to be estimated, λ, which is both the mean and the variance (Proksch and Slapin 2009). Slapin and Proksch (2008) present the functional form of the model is as follows:

$$\text{Wordcount}_{ij} \sim \text{Poisson}(\lambda_{ij})$$

$$\lambda_{ij} = \exp(\alpha_i + \psi_j + \beta_j\omega_i)$$

where α is a set of document fixed effects, ψ is a set of word fixed effects, β is an estimate of word specific weight capturing the importance of word j in discriminating between legislator positions, and ω is the estimate of legislator i’s position. The word fixed effects captures the fact that some words are used much more often than other words by all legislators. Document fixed effects control for the possibility that some members of Congress speak more than others. Wordfish uses an EM algorithm to estimate the parameters (Slapin and Proksch 2008).

I gathered data on the one-minute speeches using the LIWC program discussed earlier. Each relevant speech was then sorted by speaker, so that all of a member’s relevant speech files were merged into one text file per member for analysis. As previously mentioned, the Wordfish algorithm “assumes the principle dimension extracted from texts captures

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4Some studies argue the issue of immigration should not be measured along a single dimensional space because of the variety of different policy dimensions that accompany this issue. Jeong et al. (2011) argue in the U.S., the debate over immigration has been related to two major dimensions: “admission,” pertaining to border control and the number and type of immigrants in the U.S., and “rights,” which pertain to access to public benefits. As this paper is concerned with debate on the issue of immigration relating to two bills aiming to restrict immigration (or the “admission” dimension), I avoid the potential pitfalls of measuring multi-dimensional speech in one dimension.

5These parameters are further discussed in Appendices 1 and 2.
the political content of those texts” (Slapin and Proksch 2008), and therefore suggests if I am interested in legislative positions regarding immigration, I should run the program on documents containing information on immigration only.

It is worth noting that previous literature has detailed the possible pitfalls of relying on legislative speech to extract policy estimates. In fact, Laver et al. (2003) argue “...great[er] care must be taken in establishing the political context of speeches if we are to justify the comparison of different speeches in the same analysis” (327). I account for this concern by relying on legislative speech surrounding one issue: immigration. The texts were examined to ensure they related to this issue in question and should therefore use similar language. To provide further illustration, I present two samples of text from legislators on opposing sides of the issue.

One example comes from Virginia Foxx (R-NC), who, during the 109th Congress, argued:

Mr. Speaker, House Republicans understand that in this post-9/11 world we cannot separate national security from border security. On that fateful day back in 2001, we learned that the “business as usual” mentality simply does not work anymore. What our Nation needs is a clear immigration enforcement strategy that reduces the threat posed by those who are breaking our laws. It is estimated that roughly 12 million illegal aliens now reside in the United States. Each year the number grows by another 700,000. Yet we are arresting the same number of illegal aliens as we did back in 1977, despite the fact we have many more illegals coming in than we used to. Obviously, something has to be done. That is why House Republicans voted to pass a major border security bill this past December. This bill strengthens our borders, implements employment eligibility verification systems, cracks down on those who knowingly hire illegals, empowers local law enforcement to enforce our immigration laws and expedites the swift deportation of illegal aliens. This is something that has to be done and we cannot compromise on this. Our Nation’s security is at risk, and nothing else is more important.

A contrasting one-minute speech comes from Sheila Jackson-Lee (D-TX):

Today, Mr. Speaker, I announce the introduction of the Save America Comprehensive Immigration Act of 2005 and I will be presenting this legislation to my colleagues. This actually deals with reforming immigration, increasing the

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6See Laver et al. 2003 for a discussion of the problems in extracting policy positions from political speech rather than texts such as party manifestos.
allocation of family-based visas, legalization for long-term residents, real border
security, employment-based immigration where an employer would have to attest
to the fact that no American had the opportunity to take this job before a job
could be given to an undocumented individual. This is real reform. I hope my
colleagues will accept the challenge. Save America Comprehensive Immigration
Reform Act of 2005.

These transcripts not only illustrate the type of speech used in this analysis, but also
provide an example of the arguments used by members of the House during these debates.
Specifically, these examples highlight two key differences between speakers on opposite ends
of the political spectrum. On the one side, Representative Foxx links immigration with
terrorism and refers to law-breaking, illegal aliens, and border security. On the other side of
the spectrum, Representative Jackson-Lee refers to visas and undocumented immigrants.

Using these transcripts of one-minute speeches, I then construct a word-count dataset
with unique words in rows and legislators in columns, and use a word-count program to stem
the words.\footnote{I use Will Lowe's Jfreq program, available at http://www.williamlowe.net/software/ .}
With this word-count dataset, I use the Wordfish algorithm to extract the policy
positions for each individual legislator.\footnote{See Slapin and Proksch (2008) for a detailed discussion of implementing Wordfish.}
By focusing on the positions of individual legislators
I am able to account for members who take positions that are different than we might expect
based on ideology alone. The result is policy estimates for the 72 legislators who delivered
a one-minute speech on immigration during the 109th Congress. To assess the impact of
constituent and legislative characteristics on rhetoric during these sessions of the House, I
use a multivariate linear specification with a Heckman selection process. The dependent
variable measuring rhetoric is the aforementioned Wordfish estimates, and the independent
variables reflect the legislator's individual and district-level characteristics. The selection
process is based on the fact that whether or not a member delivers a one-minute speech
is non-random.

[Table 4 about here.]
algorithm. Table 4 presents the summary statistics for legislator estimates by party.\textsuperscript{9} These estimates are calculated using the Wordfish method discussed earlier. Recall the words used frequently by all members should not discriminate between speakers, while words mentioned more infrequently are more likely to be politically relevant. Politically relevant words will have large weights (represented by $\beta$ in the functional form of the model discussed earlier). The results presented in Table 4 indicate Democrats tend to fall on the left, while Republicans fall on the right of the ideological spectrum.\textsuperscript{10} A paired t-test indicates the differences between the two parties are significantly different than zero. The parties fall where we would expect based on the previous literature suggesting Republicans take more conservative positions on immigration.

These estimates represent the legislators’ political positions on immigration based on their one-minute speeches. I use these estimates as dependent variables to investigate what independent variables impact speech position. Table 5 presents the results of the selection model, justified by the significant parameter $\rho$. The results presented here illustrate that different factors are responsible for speech than are responsible for the actual rhetoric positions in the speech. Specifically, and most importantly, while Latino representatives do not deliver more speeches on immigration, the speeches they do deliver are more in line with Latino interests than their non-Latino counterparts.

[Table 5 about here.]

In examining the coefficients from Table 5, it is first important to call attention to the fact that interpretation of Heckman coefficients is notoriously challenging as the specification dictates the estimates cannot be interpreted as traditional OLS estimates if they appear in both the selection equation and the equation of interest. In the case of the rhetoric equation presented here, the only overlapping variable that is significant in both models is the measure of legislator ethnicity, “Hispanic MC.” To address the effect of variables significant in both

\textsuperscript{9}See Appendix 1 for a plot of the positions estimates for each speaker and the associated 95\% confidence intervals.

\textsuperscript{10}See Appendix 2 for a discussion of the politically relevant words used to generate these estimates.
the selection and outcome equations, I employ Sigelman and Zeng’s (1999) approach to calculate the adjusted Betas and assess the sensitivity of the estimates. The significant variables that do not overlap can be interpreted directly as an OLS model for the outcome equation and a probit model for the selection equation.

Turning first to the estimates in the selection equation, the results confirm the expectations laid out earlier. Ideologically extreme members and those representing districts with a large Hispanic constituency are more likely to deliver a one-minute speech on immigration. Latino members of Congress are less likely to deliver a one-minute speech on immigration. These are similar to the results displayed earlier in Table 2, suggesting members decide to speak on immigration when they are ideologically extreme (on either side of the spectrum) or when they represent a district with a large number of Latino constituents.

Beyond the decision of whether or not to speak, members are also faced with the decision of what to say. The outcome equation in the Heckman model indicates that in the case of immigration speeches, the factors driving position are ideology, legislator ethnicity, and district population growth – not population composition as we saw earlier. Members who are more conservative take a more conservative position in their speeches on immigration, so that a one-unit shift in ideology is associated with a .694 shift to the right in the speech position. In fact, the only factor driving members to be more conservative in their speech is their conservative ideology, measured by W-NOMINATE. While this may seem straightforward at first, it is worth mentioning these two variables are only correlated at .3, indicating there are some members of Congress whose speech does not line up perfectly with their ideology. As immigration is an issue that may not fall along the left-right continuum (see Jeong et al. 2010), it is natural that other factors may contribute to speech position. In the case of the model presented in Table 5, those other factors are legislator ethnicity and to a lesser extent, district population growth (significant at the .10 level). Using Sigelman and Zeng’s (1999) approach to calculate the adjusted $\beta$ for the relevant coefficient results in an average $\beta$ of -1.12. This new value is close to the values listed in the table, and indicates Latino members...
of Congress use more liberal speech than their non-Latino counterparts. Put differently, being Latino results in a shift to the left in speech position. Similarly, members observing a greater increase in the percent change in the Hispanic population (not the percent of Latinos in the district, but the percent increase in the Latino population, which should pick up on demographics shifts and immigration impact) also results in a more liberal position being taken in speech.

What is particularly interesting about these results, is the fact that neither of these covariates were significant predictors of delivering more one-minute speeches on immigration. While members of Congress from districts with rapidly growing Latino populations and Latino members themselves are not more likely to deliver speeches on immigration, when they do speak, their speech is more liberal, and theoretically more in-line with Latino preferences, than members who do not represent the growing population or who are not Latino. These results confirm the third hypothesis (though not Hypothesis 3a), and suggest while descriptive representation does not enhance substantive representation via bringing up up minority issues, representation is enhanced when descriptive representatives actually speak. Additionally, non-minority legislatives do represent the substantive interests of their constituents via speech – and are more liberal when the population is growing.11

Discussion and Conclusions

Returning to the key question presented in this research: how are underrepresented groups represented in speech on the floor – we see the empirical evidence does not support Hypothesis 1, as Latino members were not more likely to deliver one-minute speeches relating to Latino interests. Instead, Hypothesis 2 found more support as non-minority representatives were able to provide substantive representation to their constituents by addressing topics related to minority interests on the floor. These results held even when controlling for the total

11As some literature has suggested Latinos who have been in the U.S. for generations have more restrictive immigration preferences, an alternate specification of the model was estimated including a measure of district-wide immigration opinion. While significant, this variable was heavily correlated with ideology and resulted in collinearity problems. Interactions between immigration opinion and district demographics were not significant.
number of one-minute speeches delivered in Congress indicating these are not just members
who are particularly chatty and speak on any issue at any time, but instead, are members
who are making a conscious choice to speak on issues relevant to themselves or their district.
Regarding the legislators who just are particularly chatty, the results presented in Tables 2
and 3 confirm the findings of previous literature with the ideologically extreme and “insti-
tutionally disadvantaged” legislators making greater use of one-minute speeches across all
issue areas.

The evidence in support of Hypothesis 3, that minority members of Congress and those
who represent a district with a large share of minorities will take a more liberal position on the
issue of immigration comes from the second set of models and is also strong. The analysis
indicates Latino members of Congress deliver more liberal speeches on immigration than
their non-Latino counterparts. Members of Congress representing districts seeing a greater
increase in the Hispanic population – not just those who have large Hispanic populations –
also deliver more liberal speeches, though to a lesser extent than their Latino colleagues.

The analyses presented here do have some limitations, namely the argument that there
are more important issues of concern to minority constituents than race and immigration.
This point is well taken, and supplementary analyses were performed on the speeches re-
lating to health care and unemployment, two issues also falling under the top five most
important issues facing Latinos and non-Latinos in the United States (Gallup 2012). While
the results were not included in this paper, the findings did not indicate any differences
in behavior between minority representatives and their non-minority colleagues, or between
members with large minority constituencies and those with more homogenous districts on
these issues, suggesting policy areas with a cultural or ethnic basis to be more useful in under-
standing minority representation. Issues where minority preferences align with non-minority
preferences (controlling for factors such as partisanship, location, etc.) did not produce any
differences in behavior. Instead, where I expect minority representation in speech to differ is
on issues relating to minorities – and this is in fact what the results presented here support.
Nevertheless, this research makes two key contributions to the literature on representation and minority politics. First, it expands our current understanding of representation in Congress by illustrating the relationship between descriptive representation and legislative speech - a legislative activity more common than a recorded vote, but vastly understudied. Second, by exploring not just the topic covered in speech but the actual content delivered on the floor, this research is able to shed light, not just on who is likely to use (or not use) one-minute speeches, but how they are likely to position themselves on certain issues. In this way I explore representation not as a binary yes or no vote, but as nuanced process where each relevant word has meaning. Given the amount of time politicians spend crafting the seemingly perfect statement, exploring language use is not only politically relevant, but politically important. And, with respect to the topic at hand, as recent data suggest the immigration policy stance of elected officials is directly tied to winning the Latino vote (Barreto 2013), combined with the 58 percent of Latino voters who now rate immigration reform as the most important issue they want Congress and the President to address, the positions legislators take on this issue can have clear and immediate political implications.

Appendices

A
These figures plot the estimate for each member of the House who delivered a one-minute speech on immigration in the 109th Congress with the associated 95% confidence intervals.

[Figure 1 about here.]

B
To confirm the position estimates produced by Wordfish, I examine the validity of the results using the word parameters. I expect that words used frequently (e.g., conjunctions, articles,
prepositions, and in the case of the data being examined here, immigrant, immigration, and the like) should not discriminate between speakers because they do not contain any political meaning. Therefore, they should have relatively large fixed effects and weights close to zero (Slapin and Proksch 2008). On the other hand, as words are mentioned less frequently, they are more likely to be part of politically relevant language and discriminate between speakers. These words should therefore have smaller fixed effects and more extreme weights (either positive or negative) depending on whether the words place the speakers on the left of right (Slapin and Proksch 2008). To help illustrate this point, Figure 1 plots the estimated word fixed effects against the word weights for each bill being examined. The scatterplot confirms expectation and takes the shape of an “Eiffel Tower of words.”

[Figure 2 about here.]

A closer examination shows the words at the top of the tower are indeed not politically relevant, while the words at the base have more political meaning. To illustrate the point further, certain words have been highlighted for clarity purposes. For example, some of the words on the right we see include “feloni” (referencing the illegality of immigration), “fake” (documents), and “fenc” (a desired policy objective for the border) as being politically relevant with high weights and low fixed effects. On the left we see “edward” and “roybal” (referring the deceased Latino Congressman from California and his work on behalf of immigrants and Latinos), “latina” (in discussions of the contribution of immigrant women), “undocumented” (referring to the unauthorized population), and “pathway” (arguing for a pathway to citizenship) as being politically relevant. Additionally, the word “bueno” is also highlighted as it is only the more liberal legislators who use Spanish language in their one-minute speeches (and even they do so very sparingly, with the focus primarily on Spanish-language greetings). The words with the largest fixed effects, and therefore not politically relevant, include “the,” “to,” and “of,” their associated weight is close to 0.
References


Gallup Poll. 2012.


U.S. Census Bureau. 2010.


Figure 1: Wordfish Position Estimates on Immigration

Rhetoric Estimates for Immigration

Keller.txt
Fusco.txt
McHenry_20.txt
P Bibb.txt
Capito.txt
Pearce.txt
Beauprez.txt
Brown_Walker.txt
Gingrey.txt
Campbell_CA_2.txt
Delary_2.txt
Wilson_SC.txt
Foley.txt
Weldon.txt
Miller_MN.txt
Sharp.txt
Rangel_2.txt
Rangel_1.txt
Berkeley_26.txt
Davis_TN_6.txt
Casper.txt
Price.txt
Reid.txt
Blackburn_SC_2.txt
Turner.txt
Bryce.txt
Henselbach_12.txt
Johnson_TX_15.txt
Steamer.txt
Griffiths_KY_4.txt
G_Miller_CA_3.txt
Emmanuel.txt
Taormina.txt
Field.txt
King_AK_2.txt
Peacock.txt
Dreier.txt
Haysworth_2.txt
G_Green_TX_4.txt
Duncan_AZ_R.txt
Billings.txt
Polivka.txt
McDermott_OD_22.txt
Pitkin.txt
Holt_2.txt
Waters_30.txt
Davis_10.txt
Crowley_SC_4.txt
Blumenstein_46.txt
Crowley_TX_4.txt
Cardoza_6.txt
Payne.txt
Carter_1.txt
Price.txt
McHaffey.txt
Davis_10.txt
Barton_TX_4.txt
Shuster_3.txt
Thetford.txt
Sekula_Gibbs.txt
Cullar_3.txt
Jackson_Lei.txt
Cher_1.txt
Devey.txt
Doggett_MN_2.txt
Koch.txt
DeLauro_5.txt
Hudson_FL_2.txt
Rangel_2.txt
Frankel_AZ.txt
Garrett_NJ.txt
L_Sanchez_Ca.txt
Ros_Lehtinen.txt
Figure 2: Word Weights vs. Word Fixed Effects

Word Weights and Word Fixed Effects
Table 1: Summary Statistics

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<th>Std. Dev.</th>
<th>Min.</th>
<th>Max.</th>
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<td>438</td>
<td>421</td>
<td>421</td>
<td></td>
</tr>
</tbody>
</table>

† p < .10; * p < 0.05; ** p < 0.01; *** p < 0.001
Table 3: Predicted Counts of Speeches  
Variables of Interest set to Min and Max Value

<table>
<thead>
<tr>
<th>Variables of Interest</th>
<th>Model 2 All Topics</th>
<th>Model 3 Race</th>
<th>Model 4 Immigration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>ΔProb</td>
</tr>
<tr>
<td>Ideological Extremity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.06</td>
<td>37.85</td>
<td><strong>36.78</strong></td>
</tr>
<tr>
<td></td>
<td>[.55,1.58]</td>
<td>[18.86,56.84]</td>
<td></td>
</tr>
<tr>
<td>Hispanic MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.2</td>
<td>0.06</td>
<td><strong>-0.13</strong></td>
</tr>
<tr>
<td></td>
<td>[.14,.26]</td>
<td>[-.02,.15]</td>
<td></td>
</tr>
<tr>
<td>Freshman MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.63</td>
<td>11.44</td>
<td><strong>5.80</strong></td>
</tr>
<tr>
<td></td>
<td>[4.75,6.50]</td>
<td>[5.72,17.1]</td>
<td></td>
</tr>
<tr>
<td>Female MC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.36</td>
<td>11.28</td>
<td><strong>5.91</strong></td>
</tr>
<tr>
<td></td>
<td>[4.49,6.23]</td>
<td>[6.76,15.79]</td>
<td></td>
</tr>
<tr>
<td>Prior Vote Share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.76</td>
<td>4.03</td>
<td><strong>-3.72</strong></td>
</tr>
<tr>
<td></td>
<td>[5.47,10.05]</td>
<td>[2.31,5.74]</td>
<td></td>
</tr>
<tr>
<td>Pct. Hispanic in CD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.08</td>
<td>8.13</td>
<td><strong>8.05</strong></td>
</tr>
<tr>
<td></td>
<td>[.03,.12]</td>
<td>[-4.17,20.45]</td>
<td></td>
</tr>
</tbody>
</table>

Note: These figures are the predicted counts for the entire range of the variable. Some counts are not significant across the entire range of the variable, due to the small sample size overall and for some conditions of the variables. For example, Pct. Hispanic in CD is only significant in increasing speech until the population reaches about 60% Hispanic. At this point the confidence intervals cross zero and the estimates are imprecise due to the small number of districts comprised of more than 50% Hispanic.
Table 4: Summary Statistics for Rhetoric Estimates on Immigration by Party

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrats</td>
<td>-0.305</td>
<td>0.942</td>
<td>-1.718</td>
<td>1.108</td>
<td>28</td>
</tr>
<tr>
<td>Republicans</td>
<td>0.254</td>
<td>1.003</td>
<td>-1.740</td>
<td>1.724</td>
<td>46</td>
</tr>
</tbody>
</table>
Table 5: Heckman Selection Model of Speech Position on Immigration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef.</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimate: Rhetoric</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>0.694**</td>
<td>(0.258)</td>
</tr>
<tr>
<td>Hispanic MC</td>
<td>-1.598*</td>
<td>(0.675)</td>
</tr>
<tr>
<td>African American MC</td>
<td>-0.311</td>
<td>(0.470)</td>
</tr>
<tr>
<td>Female MC</td>
<td>0.296</td>
<td>(0.291)</td>
</tr>
<tr>
<td>Pct. Hispanic in CD</td>
<td>0.006</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Pct. Change in Hispanic</td>
<td>-0.004†</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Border CD</td>
<td>-0.249</td>
<td>(0.320)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.624</td>
<td>(0.487)</td>
</tr>
<tr>
<td><strong>Selection: Speech</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Party</td>
<td>0.107</td>
<td>(0.192)</td>
</tr>
<tr>
<td>Ideological Extremity</td>
<td>3.058***</td>
<td>(0.572)</td>
</tr>
<tr>
<td>Hispanic MC</td>
<td>-0.991*</td>
<td>(0.473)</td>
</tr>
<tr>
<td>African American MC</td>
<td>0.012</td>
<td>(0.325)</td>
</tr>
<tr>
<td>Freshman MC</td>
<td>0.158</td>
<td>(0.266)</td>
</tr>
<tr>
<td>Female MC</td>
<td>0.175</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Prior Vote Share</td>
<td>-0.009</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Pct. Hispanic in CD</td>
<td>0.028***</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Pct. Change in Hispanic</td>
<td>-0.002</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Border CD</td>
<td>-0.355</td>
<td>(0.245)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.245***</td>
<td>(0.537)</td>
</tr>
</tbody>
</table>

ρ   0.680* (0.321)  
σ   0.012 (0.145)  
N   421

Note: The coefficients for Hispanic MC are not directly interpretable due to the prevalence in both the selection and outcome equation. Using Sigelman and Zeng’s (1999) approach to calculate the adjusted beta, we can assess the sensitivity of the estimates. Using their method, the average of the new variable is -1.12, which is close to the estimated beta.

† p < .10; * p < 0.05; ** p < 0.01; *** p < 0.001