

## **Chapter 4**

### **Why is Voting Behavior so Regionalized in Mexico?**

#### **Political Discussion and Vote Choice in the 2006 Election**

**Andy Baker<sup>1</sup>**

Mexico's political landscape is dominated by a regional cleavage. During and after the 2006 election campaign, "blue" and "yellow" became pundits' shorthand for expressing the divide between the mostly conservative North with its blue National Action Party (PAN) states and the more left-leaning South awash in yellow Party of the Democratic Revolution (PRD) states.<sup>2</sup> The stark regional concentration of each party's support base was actually not new in 2006; such a division has existed ever since Mexican elections became competitive in the late 1980s and early 1990s. With the gradual decline of the PRI, however, the regional cleavage has captured pundits' attention.

To date, scholars have attributed Mexico's regional cleavage to individual-level traits, such as differences in wealth and issue attitudes that correlate with region, or they have left it unexplained entirely. In this chapter, I argue that the reasons for Mexico's most salient political cleavage remain poorly understood. I introduce political discussion to the study of Mexican voting behavior, arguing that politically colored conversations among citizens reinforce and sustain Mexico's regionalized politics because such exchanges expose citizens to the political biases of their immediate social environments. In other words, voters' social milieus shape the availability of each candidate preference among their potential discussion partners. For example, Northerners were more likely than were Southerners to have conversations with committed PAN partisans during the 2006 campaign, whereas Southerners were more likely to encounter and

discuss politics with PRD supporters. These interactions were often persuasive enough to shape voting behavior.

In the next section of this chapter, I discuss the nature and individual-level sources of Mexico's regional political cleavage and place it in a comparative perspective. The third section proposes immediate social environments and political discussion as an additional reason behind the high degree of preference regionalization in Mexico, laying out the theoretical foundations for how such factors might play this explanatory role. The remainder of the paper conducts two types of statistical analyses with the panel survey data. One is descriptive and conveys the nature of political discussion networks in Mexico's 2006 campaign to see if their overall makeup is compatible with the theory and to place them in comparative perspective. The second is explanatory and links the supply of political preferences in voters' immediate social environments to their eventual voting behavior and also illustrates how this helps to account for the regionalization of voting behavior in Mexico.

### **Regionalism in Mexican voting behavior**

As the hegemony of the Institutional Revolutionary Party (PRI) began to crack in 1988, opposition parties rushed to fill the void. They did so, however, in a geographically uneven manner. Throughout the 1990s, the PAN was a capable challenger to the PRI in elections that occurred in the North, while the PRD was the primary challenger in the South. Neither of the two main opposition parties, however, had any meaningful presence in the other's stronghold. This arrangement led some analysts to speak of an electoral "bifurcation" or of "two separate two-party systems" instead of a three-party system (Klesner 1995: 143). Many Northern states

featured competition between only the PRI and the PAN, while only the PRI and the PRD competed in Southern states.

The historic presidential election of 2000 marked a change in the political landscape. PAN candidate and eventual winner Vicente Fox had enough of a national following that he actually out-pollled the PRD candidate, Cuauhtémoc Cárdenas, in many Southern states. However, this result reflected the overall weakness of Cárdenas's candidacy more than it did any fundamental shift in Mexico's political geography: Fox's best draw was still in the North and Cardenas's was in the South. The PRI, for its part, remained a "national" party, albeit a losing one, as its vote was much more evenly distributed across Mexico's different regions.

The 2006 presidential election saw a further decline of the PRI, as it gave way to the PRD and PAN as the front-running challenger in numerous states. PAN candidate Felipe Calderón had much greater success in the North than the South, while leftist candidate Andrés Manuel López Obrador (AMLO) outran Calderón in the South. Calderón won all but 3 of the 18 states lying to the north of Michoacán's and Hidalgo's northern borders, and López Obrador won all but 2 of the 14 states (including the Federal District) lying to the south of this obvious political fault line.

Scholars of Mexican voting behavior have thus stressed region as a primary, if not *the* primary, "cause" of vote choice (Dominguez and McCann 1996, Klesner 1993, Klesner 1995, Magaloni 1999, Poiré 1999). "Region, not class, remained the dominant cleavage in electoral politics [in 2006]. Our findings thus support the conventional wisdom that Mexico has increasingly become a nation of 'blue states' and 'yellow states'" (Lawson 2006: p. 2, 4; also see Klesner 2007). Indeed, comparative data do tend to suggest that (1) preferences in Mexico are highly regionalized and (2) grew more so in 2006. Table 4.1 documents both of these facts, showing political regionalization in each of the Western Hemisphere's three most populous

countries: Mexico, the United States, and Brazil. Regionalism is measured by the standard deviation of each presidential candidate's vote share across all states. For each candidate, a variable was created that recorded his percentage of the vote in each of his country's states. (Each case is thus a state.) Candidates with support bases that were highly regionalized—i.e., much higher in some states than in others—have a large standard deviation on this variable. Candidates with support bases that were more evenly spread across the country have a small standard deviation. As standard deviations, each summary number is in the original units (percentage of state vote), but these results are best understood in comparison to each other.

[Insert Table 4.1]

The first two columns depict geographical concentration in Mexico's 2000 and 2006 elections. Rows are shaded to aid comparisons within parties but across the two elections. In 2000 PRI candidate Francisco Labastida had the least concentrated vote base, whereas those of the two opposition candidates, Fox and Cárdenas, were less evenly spread across the Mexican states. By 2006 this distinction sharpened: the PRI's vote base became even more evenly spread while that of the PRD and PAN grew all the more concentrated.

Cross-national comparison indicates the extent to which the Mexican vote was regionalized in these two presidential contests. The 2000 election in the United States introduced the world to the red-state/blue-state distinction, a now famous shorthand for the political and cultural differences between the Democratic coastal and Great Lakes states and the Republican Southern and Central states. Fox's vote base in Mexico's transformative 2000 election, which occurred 5 months before the US election, was just as regionally concentrated as were Bush's

and Gore's; by 2006 the degree of regionalization in Mexico had surpassed that in the red-and-blue-obsessed U.S. The high degree of regionalization in Mexico is even more striking when compared to Brazil, where *all* candidates in 2002 had, at least by Mexican standards, relatively national degrees of support. Brazil's most regionally concentrated parties resembled the PRI in 2000 more than they did Mexico's opposition parties. In short, analysts were clearly correct in identifying region as a powerful force in Mexican politics.

There are many reasons for the regionalization of voting behavior, but in general scholars have mentioned the following four. (See Joseph Klesner's contribution to this volume.) First, the most frequently cited reason is the regional disparity in living standards and overall levels of economic development (Magaloni 2006: p. 95-97). Northern states are more economically developed, featuring higher living standards and higher rates of industrialization, literacy, and education (Klesner 1995). Since wealthier, middle-class voters tend to be more attracted to the market-oriented policy proposals of the center-right PAN, the more highly developed North leans toward its candidates while the less developed South favors the PRD. Moreover, NAFTA and the rise of the export-oriented, in-bond processing (*maquila*) sector have been partially responsible for the North's relative prosperity and its thriving middle class. As such, pro-market rhetoric no doubt resonates more favorably among middle-class Northerners than among poor Southerners who see few benefits from integration with the United States.

Second, the PAN is a culturally conservative party—opposing capital punishment, abortion, and the inclusion of the “morning after pill” in the government health insurance plan—with historically tight bonds to the Roman Catholic Church. Numerous Northern and Central states and cities, especially Guadalajara and Monterrey, feature higher than average levels of church attendance and more conservative dispositions on religious, moral, and cultural issues.

For example, residents of Mexico's Central region launched the 1927 Cristero rebellion in reaction to the government's anti-clerical policies. In contrast, the secularist PRI and PRD tend to pull from voters with less traditional beliefs who disproportionately reside in the Federal District and the South, with the rule-proving-exception of heavily Catholic Yucatán state.

Third, Mexico's urban/rural divide is an important political cleavage that could have regional consequences. Even at the height of its hegemony in the 1960s, the PRI polled more strongly in rural areas than in urban ones, with the PAN enjoying greater relative success in Mexico's urban centers (Klesner 1993). After the late 1980s, the left crept into the PAN's urban redoubt by competing with it for opposition voters, eventually establishing a stronghold in the Federal District (DF), where much of Mexico City is located. As such, urbanization has sharply stratified PRI versus non-PRI voters since the late 1980s. Yet despite the left's incursion onto the PAN's urban territory, the PAN remained the strongest urban party throughout the 1990s and 2000s, especially outside the Federal District (Klesner 1993, Klesner 1995, Klesner 2004). The urban/rural divide may thus induce a regional effect since the South is more rural than the North.

A final factor relates to the brief history of democratic contestation in Mexico (Lawson 2006). As elections became more free and fair, Mexico's plurality-rule contests for governors, mayors, and most federal deputies encouraged two-party competition at the state and local levels. Most voters also tended to approach competitive elections with the "regime cleavage" foremost in their mind, asking themselves above all whether they wanted to prolong the hegemonic rule of the party of the state (Dominguez and McCann 1995, 1996). For the PRI's opponents, *which* opposition party won was often secondary, so voters chose merely between the PRI and the strongest opposition party. This fact gave tremendous "first-mover" advantages to the opposition party in each state that established an organizational presence and emerged as the PRI's most

viable challenger in the early 1990s (Greene 2007, Hiskey and Canache 2005, Lawson 2006). A positive by-product of achieving this early “front-running challenger” status was the emergence of a much larger pool of partisan sympathizers in the state down the road. This explanation cannot by itself explain why preferences initially clustered so much in contiguous states, but it can account for the persistence of the divide.<sup>3</sup>

### **What are regional “effects”?**

Scholarly work on Mexican voting behavior has demonstrated that these four factors certainly help to account for Mexico’s regional divide, yet they only explain a small part of Mexico’s regional “effects.” After all, statistical models of Mexican voting behavior tend to control for these factors, yet they often still reveal statistically significant regional effects (typically measured with dummy variables). These lingering regional effects can be thought of in two useful ways.

From one perspective, they exist because scholars find that respondents with identical individual-level traits but with varying regional locations have vastly different probabilities of voting for each candidate. To find statistically significant regional effects simply means that, to take an example, a college-educated, middle class, economically liberal, highly observant, culturally conservative, urban woman enjoying increased real income and residing in a Northern state has a much higher probability of voting for the PAN than a woman in the South with equivalent traits. Both voters share prototypically pro-PAN traits, but the voter from the North ends up choosing the PAN with greater likelihood than the voter from the South. The precise reasons for and causal mechanisms behind this lingering differential, however, remain unclear and even unexplored when regional variables remain statistically significant.

In more technical terms, regional dummy variables fail to “drop out” of multiple regression models—that is, when they remain statistically significant and explain residual variance that the individual-level demographic and ideational factors cannot. Regional dummy variables are thus acting as atheoretical “fixed effects” variables or “proper nouns” that are merely identifying important *unexplained* group-level behavioral differences (Przeworski and Teune 1970). Regional effects variables merely indicate that these remaining differences exist; they do not explain *why* they exist.

In this chapter, I claim that social context (i.e., the arena in which one engages in interpersonal interaction) explains why individuals with identical traits and beliefs exhibit different voting behavior patterns that correspond to their region of residence. Voters do not decide which party to favor in a social vacuum. They reach political decisions amidst ongoing interpersonal exchanges. They discuss politics and openly deliberate over their choices with family and friends, accepting advice and information from others while at times attempting to persuade. In short, citizens are embedded in social networks that sustain politically relevant interpersonal exchanges. These interactions have the ability to induce disparities between individual-level patterns and aggregate outcomes (Huckfeldt et al. 2004).

Consider, yet again, the two prototypical PAN voters with identical individual-level traits. A crucial but largely overlooked distinction between the Northerner and the Southerner is that the former lives in an environment in which she is far more likely than the Southerner to encounter other PAN supporters. The supply of PAN discussants that may persuade her to convert away from a non-PAN option or, alternatively, reinforce her partisan predispositions is relatively high in her blue state. In contrast, the Southerner would find far fewer pro-PAN interlocutors to reinforce her “natural” pro-PAN predispositions. Even though inclined to favor

the PAN, she may often find herself in the uncomfortable position of supporting a minority viewpoint when discussing politics. Since the “socially heroic partisan is a rare event,” she is more likely than her blue state counterpart to “cave” to the majority position (Huckfeldt, et al. 2004: 43, Asch 1951, Lazarsfeld et al. 1948, Noelle-Neumann 1984). In sum, the lingering effects that make region in Mexico more than the sum of its individual parts may be due to differences in the relative supply of reinforcing versus countervailing discussants.

### **Political Discussion and Social Networks in Mexico: Descriptive Evidence**

If this network approach can help explain regional effects, then evidence should at the very least indicate that (1) Mexicans discuss politics and (2) they tend to do so with people with whom they agree politically. This section describes how frequently and with whom Mexicans discuss politics by reporting average network size, discussion frequency, and attitudinal homogeneity among discussion partners. The section also places Mexicans in comparative perspective on these dimensions. To gauge *Political discussion frequency*, the 2006 Mexico Panel Study contained a straightforward question asking respondents if they discuss politics with other people “daily,” “a few times each week,” “a few times each month,” “rarely,” or “never.” To gauge *Network size*, the final two waves of the panel each contained a political discussant “name generator.” The battery read as follows: “Could you tell me the name of the three people with whom you must discuss politics? If you would like, you may tell me their complete names or just their first names and last initials.”<sup>4</sup> These name generator data are the first of their kind for the Mexican case.

The median response in both waves was “a few times each month.” Relatively few Mexicans—less than 10 percent—discussed politics daily. Moreover, a plurality of Mexicans

said they “rarely” discuss politics. At the same time, however, the vast majority of citizens *did* discuss politics at some point: only about 15 percent claimed they “never” did so, and about 35 percent of citizens discussed politics more than just a few times per month. It is worth adding that the overall rate of discussion did not change substantially through the campaign. In short, wide variation in discussion frequency existed around a rather low—but still positive—mean response.

*Network size*, or the number of political discussants that respondents named, also had a large variation: The two most frequent categories were the two extremes: “Three” and “Zero.” In the second wave 38 percent of respondents named three discussants, while 40 percent mentioned none. The number of named discussants increased between May and Election Day, as the percent reporting no discussants fell to 28 percent in the third wave. The overall mean reflects this shift: the mean respondent reported 1.47 political discussants in wave 2 and 1.76 in wave 3. In sum, the campaign did not increase the perceived frequency of political discussion, but it *did* increase the number of different people with whom Mexicans discussed politics. The campaign encouraged citizens to broaden their political discussant contacts.

Taken together, these results appear to be generally consistent with standard characterizations of citizens living in most democracies: average citizens are clearly not preoccupied with politics such that it permeates their daily conversations (Lippmann 1922). However, multi-country data do reveal that the frequency of political discussion and network size in Mexico were low by international standards. In particular, according to the 70-nation World Values Survey (2000), Mexicans were in the 20<sup>th</sup> percentile in their self-reported rate of political discussion. They were also tied for last (with the United States and Russia) in an eight-nation comparison of network size.<sup>5</sup>

Do these findings about a *relative* dearth of discussion in Mexico portend that politicized conversations may not matter and, in particular, may not be a mechanism for Mexico's regionalization? Three reasons suggest that the answer is "no." First and most important, most individuals engaged in some politically relevant conversations, even if only occasionally. Only a minority of citizens mentioned no discussants or reported never discussing politics. Second, Mexico's urban majority does talk about politics with impressive frequency. The panel data reveal a meaningful divide between Mexico's politically "mute" *rural* residents, who constitute a minority of the population, and its politically "chatty" *urban* majority. Urban residents reported on average two discussants, sixty percent more than the number reported by rural respondents and a number that is much closer to the international mean. In other words, urban settings in Mexico *do* feature rich networks of interpersonal exchange, but the nation's overall mean is pulled down by rural dwellers.

Third, the political nature of social networks is just as important as their size in determining the extent to which discussion can reinforce political biases in one's surroundings. In particular, the level of *Network political heterogeneity* is a crucial characteristic of discussion networks that is particularly relevant for understanding the capacity of discussion to strengthen regionalized voting. Network heterogeneity reflects the extent to which individuals in a network disagree—that is, hold politically divergent viewpoints. Networks are homogenous when individuals tend to talk only with like-minded individuals, and they are heterogeneous or "diverse" when individuals tend to engage in conversations with different political opinions. Individuals embedded in heterogeneous networks hear countervailing viewpoints while those in homogenous networks are more insulated from differently-minded beliefs (Granovetter 1973, Huckfeldt, et al. 2004, Mutz 2006).

If voters are not more likely than random chance to discuss politics with like-minded individuals—that is, if they do not tend to cluster together with discussants that share their candidate preference—then discussion cannot possibly explain regionalized voting in Mexico. In contrast, if discussion is responsible for the regionalization of voting behavior in Mexico, then at a minimum discussion networks in the country should feature reasonably high levels of political agreement among their members. When preferences are highly regionalized, the supply of discussants in one’s immediate social environment is more highly skewed in favor of one candidate within particular states and municipalities than it is nationwide. Thus, the supply of differently-minded discussants in one’s immediate social environment will tend to be much smaller in such a context. High rates of agreement are therefore a necessary, but not sufficient, condition for establishing the link between discussion and regionalization.

The panel study followed each discussant name generator battery by asking for whom each named discussant was voting in the presidential race. Using these results, Table 4.2 indicates the extent to which Mexican discussion dyads were characterized by political agreement. A “discussion dyad” is any pairwise combination of panel respondent and one of her or his named discussants.<sup>6</sup> Political agreement exists in a dyad when the discussant’s presidential candidate preference (at least as perceived by the respondent) was the same as that of the respondent. Disagreement exists when they preferred two different candidates.<sup>7</sup>

[Insert Table 4.2]

Agreement was clearly the rule in Mexico. Column 1 shows that in both waves, a large majority of about 70 percent of dyads featured agreement; only 30 percent were characterized by

disagreement. Only about 40 percent of respondents had at least one disagreeing discussant. That citizens tended to cluster with like-minded individuals is not at all surprising or rare: cross-national evidence shows rates of agreement in discussion networks to be much higher than sheer chance would dictate (Huckfeldt, et al. 2005). But do Mexicans shy away from conversation with disagreeing interlocutors more than is typical? Table 4.2 provides two points of comparison: Brazil and the United States. Column 1 suggests that the rate of agreement in American and Brazilian dyads was essentially equivalent to that observed in Mexico, but these raw rates of agreement mislead. After all, the nature of party competition, and in particular the number of party or candidate options, establishes different cross-national probabilities in the overall potential for disagreement. Two randomly chosen people in a system where votes are divided evenly between eight parties have a much higher probability of disagreeing (.875) than do two such people in a two-party system (0.5). As such, any international comparison of how amenable citizens are to engage in disagreement must adjust for these differences.

Column 2 thus reports the probability—based on the actual election results—that two randomly chosen voters would agree.<sup>8</sup> Americans and Brazilians had more opportunities for agreement than did Mexicans, which casts the equivalent raw rates of agreement from column 1 in a new light. Mexicans, despite having a more limited supply—at least at the national level—of like-minded discussants, were just as likely to find them as were Americans and Brazilians. Column 3 illustrates these cross-national differences most effectively: *Mexicans were more than twice as likely as chance to have agreeing discussants*, whereas Brazilians were just 1.7 times as likely and Americans just 1.5 times as likely.<sup>9</sup> In short, Mexicans have a comparatively high propensity to discuss politics with like-minded individuals, thus suggesting a mechanism by which regionalism is propagated.

### **Can discussion account for regional effects?**

If these discussion networks help explain the regionalization of Mexican politics, two conditions must hold. First, the distribution of preferences in one's broader social environment must influence the make-up of one's discussant network. Second, discussion itself must influence vote choice. If it does not, then the distribution of preferences in one's immediate social environment is irrelevant to regional variation in partisan support.

I address the first issue by considering whether social environment conditions the political leanings of each respondent's discussant network. The distribution of preferences in one's social environment establishes the *supply* or relative availability of each political preference among potential discussants. Therefore, even if voters choose discussants randomly from their social environment, supply will shape the distribution of political preferences that they encounter in conversation (Huckfeldt and Sprague 1988). For example, PRI supporters living in the Federal District, where only 9 percent of residents voted for Madrazo, are likely to end up discussing politics with differently-minded persons because they have a hard time finding fellow PRI discussants. If so, *aggregate factors such as region hold the potential to influence individual-level political choice because they constrain the availability of viewpoints to which citizens are exposed in everyday conversations.*

It is unlikely, however, that citizens choose their discussion partners in random fashion. Rather, voters probably exercise discretion in choosing discussants from among the available supply. As a result, citizen *demand* for discussants may also play a role and may even cancel out supply effects. Citizens may be so politicized that they seek out like-minded discussants even in contexts where they may be hard to find, preferring pleasant conversation with like-minded

discussants to conflictual discourse with differently minded ones (Huckfeldt and Sprague 1988, Mutz and Martin 2001). For example, PRI partisans in the DF may still seek out sympathetic conversation partners and avoid political conversation with citizens who comprise their environment's majority opinion (Finifter 1974). If so, then the aggregate distribution of political preferences in their social environment may be irrelevant.

To decipher among these explanations, I model three separate dependent variables with the 2006 panel data: the *Number of pro-Calderón discussants* a respondent has, the *Number of pro-AMLO discussants* a respondent has, and the *Number of pro-Madrazo discussants* a respondent has. Each of these variables ranges from 0 to 3. For example, a respondent with two pro-Calderón discussants, one pro-AMLO discussant, and (thus by virtue of having capped discussants at three) zero pro-Madrazo discussants received scores of 2, 1, and 0, respectively. Respondents reporting no discussants or not knowing any of their discussants' preferences received a score of 0 on all three.

To measure the supply of each type of discussant in a respondent's social environment, I use local-level election results—each candidate's *Vote share in the respondent's county*—as the key independent variables.<sup>10</sup> If the aggregate distribution of vote preferences matters, then these county-level variables will have an important impact on the types of political preferences that the respondents encountered in their political conversations. To measure demand-side factors, I include various measures of respondent political preferences, such as partisanship, past vote choice, and candidate evaluations. All such variables, the statistical model, hypotheses tests, and a more thorough discussion of the results are reported in the on-line appendix. To stay focused on the concept of region, I discuss in detail only the impacts of supply-side factors and depict them graphically here in the chapter.

Respondents' social environments, as measured by the distribution of preferences in their county, were statistically and substantively significant predictors of the types of individuals whom respondents mentioned as political discussants. Figure 4.1 depicts the effects of these environmental constraints on supply by showing predicted values from the statistical models for the average Mexican across three exemplary counties. Similar to the running examples discussed in the second section of this chapter, I consider the impact that county of residence has on three hypothetical citizens with equivalent individual-level traits. The three citizens are exceedingly typical Mexicans, ones with the average values on all individual-level political and demographic variables. They also have an equivalent number (the average) of discussants. The figure quantifies the isolated impact of social environment by taking these three citizens with identical individual-level traits and varying only their county of residence.

[Insert Figure 4.1]

The first such individual resides in Hermosillo, a mid-sized city of about 700,000 people that serves as the capital of Sonora state (in Mexico's Northern region). Sixty-two percent of Hermosillo's residents voted for Calderón.<sup>11</sup> The predicted number of pro-Calderón discussants for this individual is almost .40, as the leftmost black bar indicates. The adjacent grey bar indicates that this individual would have about .16 pro-AMLO discussants. The white bar indicates that the individual would have .14 pro-Madrado discussants. As the middle set of bars indicates, an equivalent individual residing in historic Xochimilco (part of Mexico City) would have a completely different predicted array of discussants. For a person in this PRD bailiwick (where 66% of voters chose López Obrador), the model predicts just .20 pro-Calderón

discussants, almost .45 pro-AMLO discussants, and less than .10 pro-Madrazo discussants. Of course, citizens do not speak with fractions of people, so another way of thinking about the differences between these two contexts is to note that the predicted ratio of pro-Calderón to pro-AMLO falls from more than 2:1 to less than 1:2 with this move from “blue” Sonora to “yellow” D.F.

A similarly sized shift occurs when considering the third individual, a resident of one of Mexico’s few remaining PRI redoubts. In San Juan Chamula, a small town of about 35,000 five miles from San Cristóbal de las Casas in Chiapas state, 65% of voters chose Madrazo in 2006. In this environment, the average individual would have .16 pro-Calderón discussants, .18 pro-AMLO discussants, and more than .30 pro-Madrazo discussants. The ratio of pro-Calderón to pro-Madrazo discussants falls from 3:1 in Hermosillo to 1:2 in San Juan Chamula. In short, social environments and the supply of potential discussants mattered above and beyond individual-level traits. These aggregate-level factors clearly determined the kind of politically colored information that Mexicans heard in their conversations during the 2006 campaign.

The following question remains: Did these politically relevant conversations influence voting behavior? To answer this question, I estimated a second set of statistical models to explain vote choice. The dependent variable is respondent’s vote choice on Election Day (i.e., from wave 3 of the panel), so the models are multinomial logits. The set of models accounts for potential discussant effects while also controlling for many of the individual-level factors—wealth, religiosity, urbanization, partisanship—that might help explain the sharp regionalization of preferences in Mexico. I report the full model results in the on-line appendix to Chapter 4 because many of the results are redundant with those reported by other authors in this volume. Moreover, the goal of this chapter is not to construct and support a comprehensive analysis of

Mexican voting behavior in 2006, but rather to assess whether discussant effects help account for regional differences in voting behavior. Thus, I again stay focused on the regional measures and discussant effects and, in particular, how the latter conditions the impact of the former. The main substantive points are presented graphically.

I estimated three different voter choice models. “Model 1: Regional Effects Only” contains just two independent variables: the two regional effects variables—again Calderon’s and AMLO’s vote share in the respondent’s county. (Only two are needed to specify the full distribution of preferences, at least across the three main parties, in each respondent’s social environment.) These are the same measures of social environment profiled as the key independent variables in Figure 4.1. “Model 2: Regional and Individual-Level Effects” contains as independent variables these two regional effects variables *plus* about 15 different independent variables that measure the individual-level factors (such as wealth, religiosity, urbanization, partisanship) that previous scholars have reputed as determinants of regionalism in Mexico. “Model 3: Regional, Individual-Level, and Discussant Effects” is the most fully specified model. It contains the regional effects variables and all of the individual-level factors of model 2, but it also includes discussant effects. Discussant effects are measured using six independent variables: the number of pro-Calderón discussants in panel Waves 2 and 3, the number of pro-AMLO discussants in Waves 2 and 3, and the number of pro-Madrado discussants in Waves 2 and 3. Measuring the preferences of discussion partners at  $t$  and  $t-1$  captures both short-term and medium-term influences from discussion.

The purpose of proceeding iteratively, or “building up,” to the most fully specified model is to observe the extent to which successively adding in individual-level factors and then discussion *eliminates* lingering regional “effects” (i.e., replaces the proper nouns with theoretical

variables). In other words, if these two sets of factors—individual-level characteristics and discussant networks—are the reasons behind the sharp regionalization of political preferences in Mexico, then the regional effects should attenuate (i.e., the coefficients on the county vote share variables should fall toward zero) as each set is added.

Figure 4.2 illustrates this process graphically. The figure plots the multinomial logit coefficients for the two regional effects variables—*AMLO's vote in R's county* and *Calderon's vote in R's county*—in each of the three models. For each of these two independent variables, each model produces three coefficients—that is, one for each candidate. The size of each coefficient is designated by its horizontal placement on the X-axis. As a result, the farther right is a candidate's name, the stronger is the positive impact of the corresponding regional effect variable (labeled on the Y-axis) on the probability that a respondent voted for that candidates.

[Insert Figure 4.2]

For example, row 1 (Model 1) plots the three coefficients that quantify the impact of AMLO's vote share in the respondents' county when controlling only for the county's Calderón vote share. The logit coefficient for Madrazo is about -.09, that for Calderón is about -.05, and that for AMLO is 0. The relative, not the absolute, size of these coefficients is what matters because one of the coefficients is arbitrarily chosen to be anchored at zero. In other words, the zero coefficient does *not* mean that region has no relationship with the probability a respondent voted for AMLO. On the contrary, the large (horizontal) distance between the AMLO coefficient and the other two coefficients indicates that AMLO county-level vote is negatively related with the probability the respondent voted for Madrazo and Calderón and thus positively related with

the probability the respondent voted for AMLO. That the statistical analysis reveals this “regional effect” is neither surprising nor important; it merely indicates that the survey sample was more likely to find AMLO voters in counties where AMLO polled well than in counties where he did poorly. Quite obviously, *the goal should be to explain or reduce the relative differences in these coefficients (or the size of the horizontal gaps) rather than assign substantive meaning to them.*

Model 2 results in row 2 are a first attempt at doing so. Recall that Model 2 contains these county-level factors along with all potentially relevant individual-level political factors such as partisanship and issue attitudes. A comparison between this row and the top row shows how accounting for these individual-level factors results in a convergence among the three coefficients. The horizontal spread of the names shrinks dramatically between the Model 1 and Model 2 results, a sign that the coefficients are converging toward zero. Substantively, the so-called regional effect is weakened by inclusion of these theoretically sharper variables. In other words, Model 2 attributes less of the cross-individual differences in voting behavior to county-level political preferences because it accounts for variation in the *individual*-level differences that previous scholars of Mexican regionalism have highlighted.

The Model 3 results in row 3 reflect the size of regional effects when controlling for individual-level factors *and* discussant effects. Again, the coefficients have converged horizontally (toward zero) even further: controlling for discussant effects reduces lingering regional differences all the more. (Vertical distances are irrelevant, established only to ensure readability.) Given a Northerner and a Southerner with identical individual-level traits, Model 3 more satisfactorily explains why the former would be less likely to vote for AMLO than would the latter: the Northerner is less likely to have pro-Calderón discussants. Discussant effects were

particularly important for nearly eliminating the residual aggregate-level variance between Madrazo and Calderón voters. Still, Model 3 does not completely eliminate regional effects because the unexplained regional gap between Calderón and AMLO remains quite large.

The lower half of Figure 4.2, rows 4 through 6, walks through the same exercise for the other regional effect variable: Calderón's share of the vote in each respondent's county. The introduction of individual-level factors reduces the horizontal spread among the three coefficients considerably. (Compare rows 4 and 5.) Discussant effects (added in row 6) close the gap between AMLO and Calderón voters entirely, although they do little to bring the conditional mean of Madrazo voters closer to that among AMLO and Calderón voters.

One interesting commonality across the two independent variables (comparing the top half of the figure to the bottom half) is that individual-level and discussant-level factors fail to completely explain the gap between Madrazo and AMLO voters. For example, given a resident of the Federal District and a rural resident of Chiapas with identical individual-level traits and *identical discussant networks* (i.e., in terms of the political preferences they encounter), the one in Chiapas is still more likely to vote for Madrazo. The potential omitted factor might be clientelism and local political machines, which are particularly important for the PRI, but I leave to future research the goal of getting regional effects to completely “drop out” of statistical models. Regardless, discussion networks are clearly an important aspect of the theoretical infrastructure that explains voting behavior and regional effects in Mexico.

## **Conclusion**

According to advocates of “deliberative democracy,” the quality of citizenship and democracy is enhanced when citizens seek out a diverse array of political viewpoints and

deliberate in polite but reasoned exchange with differently minded associates (Gutmann and Thompson 2004). Citizens are alleged to be more tolerant, more knowledgeable, and more politically engaged when deliberating across lines of political difference. In reality, however, citizens rarely have the motivation to seek out political information in such a purposive and open-minded manner. Moreover, even if they did have such a motivation, the supply of diverse and differently minded viewpoints in their immediate social environments would circumscribe their ability to find them.

The constraints imposed by the supply of competing viewpoints in one's social environment can thus have a variety of consequences. In this chapter, I showed that one important consequence is to reinforce the regionalization of mass political preferences. In Mexico the impact of region is greater than the sum of its individual parts because citizens are embedded in political communication networks that vary greatly by their place of residence. Many Mexicans with identical or similar individual-level political predispositions nonetheless cast different ballots on Election Day. They have been exposed to a set of politically colored arguments through their interpersonal conversations that vary with the relative supply of beliefs upheld in their social environments.

The findings from this chapter should urge scholars of voting behavior to treat the existence of statistically significant regional "effects" (which are often in the form of dummy variables) not as a substantive conclusion but rather as a starting point for further inquiry into why regional differences remain unexplained. In the Mexican case, much work has in fact already been accomplished on this front. This chapter thus builds on, rather than refutes, previous interpretations of Mexican voting behavior, as it confirms that individual-level factors such as wealth and partisanship are partially responsible for Mexico's deepening blue-

state/yellow-state divide. The findings go a step further, however, to point out that political discussion reinforces this divide. Many individuals do not necessarily fit the dominant political profile of their regional context: plenty of Northerners are poor, a large number of Southerners are pro-NAFTA, and not all inhabitants of Mexico City are PRD partisans. Many such individuals, however, vote with the prevailing opinion of their surroundings by virtue of having absorbed it through political conversations.

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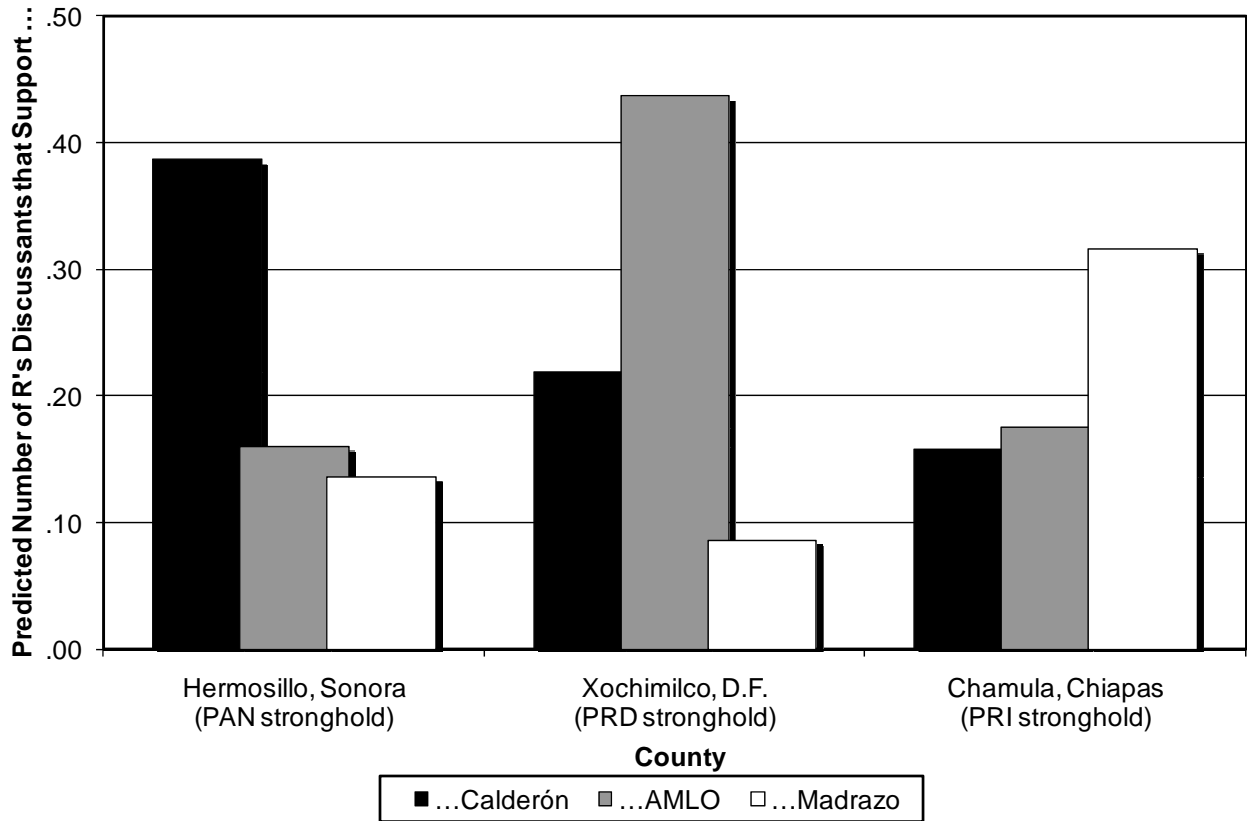
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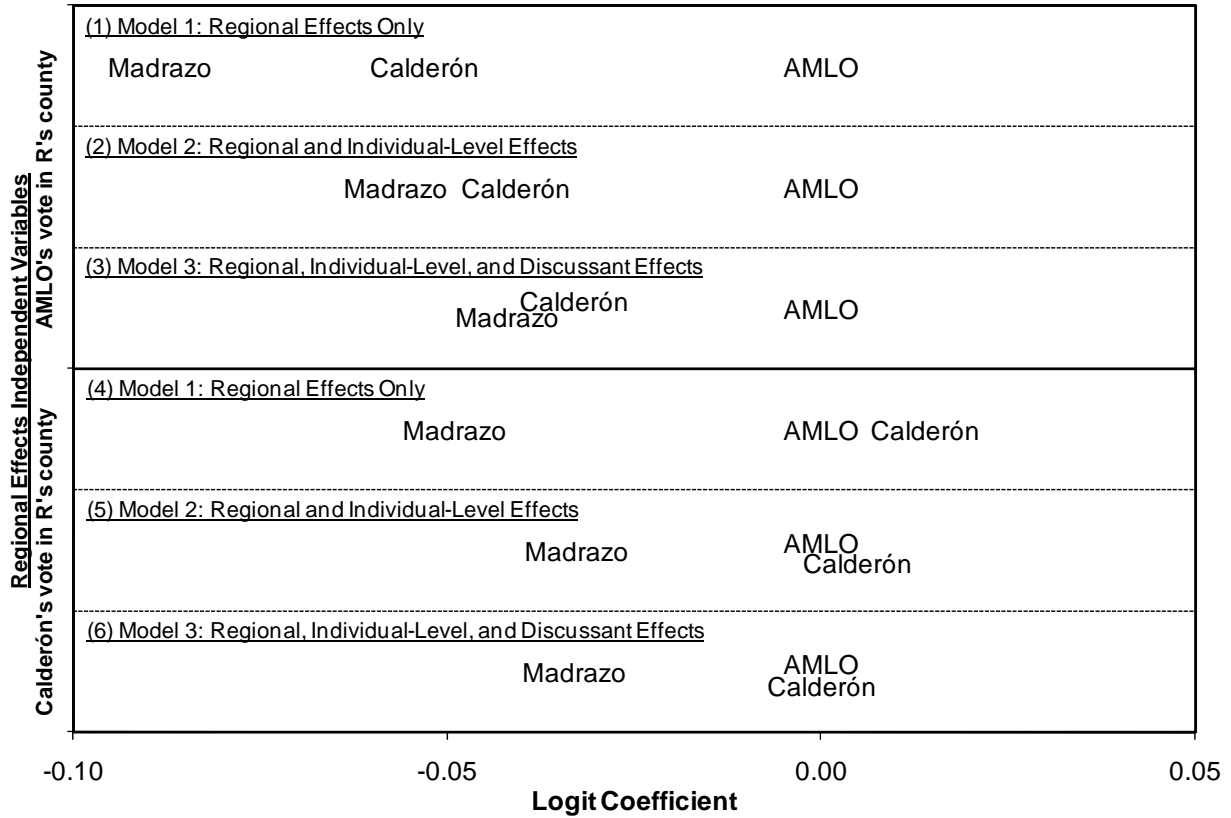
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**Figure 4.1: The Impact of Region on the Number of Discussants Supporting Each Candidate**



*Note:* Predictions are from Table 4.A in the on-line Appendix for Chapter 4. All variables except county-level election returns are set at their means, so these results are for an average respondent. “R” stands for “respondent.”

**Figure 4.2: The Impact of Region in Three Different Statistical Models**



*Note:* Each candidate name represents a “regional effect” logit coefficient generated from the three multinomial logit models reported in Table 4.B in the on-line appendix.

**Table 4.1: The Degree of Political Regionalization in Three Democracies: Standard Deviation of Each Candidate's Vote Share across the States**

<u>Mexico 2000</u>		<u>Mexico 2006</u>		<u>US 2000</u>		<u>Brazil 2002</u>	
Fox	10.3	Calderón	12.4	Bush	10.4	Lula	5.5
Labastida	7.1	Madrazo	6.3	Gore	10.2	Serra	7.6
Cárdenas	9.3	López Obrador	12.2			Garotinho	7.1
						Gomes	7.3
<i>N</i>	32	<i>N</i>	32	<i>N</i>	51	<i>N</i>	27

**Table 4.2: The Prevalence of Political Agreement in Mexico, Brazil, and the United States**

		(1) Share of dyads in which both partners agreed	(2) Probability two randomly chosen people agreed (based on election results)	(3) Observed agreement given random probability of agreement: (1)/(2)
Mexico 2006	Wave 2	.67	.32	2.11
	Wave 3	.70	.32	2.19
Brazil (2-city) 2002		.69	.41	1.68
United States 2000		.74	.50	1.48

## Notes

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<sup>1</sup> The author wishes to thank Chappell Lawson and Jorge Domínguez for their valuable comments on previous drafts.

<sup>2</sup> Pundits chose these color designations to match these two parties' symbolic colors.

<sup>3</sup> A fifth factor that scholars offered in the 1990s was that residents of some Northern states had lived under non-PRI governors that lowered the perceived risks entailed in opposition governance (Poiré 1999). In fact, however, Mexico's regional cleavages sharpened in elections occurring after 2000, after turnover at the federal level and in most states.

<sup>4</sup> This same battery asked respondents how they were related to each discussant.

<sup>5</sup> Comparative networks data are still rare because name generators have only been administered in a few countries. The eight nations are Brazil (from Baker, Ames, and Renno 2006), Bulgaria, Hungary, Poland, Russia, Spain, US (all from Gibson 2001), and Mexico. An “apples and oranges” issue exists, however, as some countries in the sample requested the names of those with whom the respondent discussed “important matters,” while others queried exclusively “political” discussants. The former question wording (asked in Bulgaria, France, Hungary, Poland, Russia, Spain, and the US) obviously queries a much larger pool of discussants than the latter (Brazil, Mexico, and South Bend), although research shows these measurement differences to be not as consequential as one might think (Huckfeldt, Johnson, and Sprague 2004).

<sup>6</sup> The results are for all possible dyads, even though this means counting many respondents (with multiple discussants) more than once.

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<sup>7</sup> Only dyads in which *both* members had a known preference are used in the analysis: In other words, dyads in which either the respondent or the discussant had no preference (due to abstention or indecision) or no known preference are not considered.

<sup>8</sup> Although Brazil has a much more fragmented party system than does Mexico, the probability of random agreement was actually higher in Brazil because one candidate, eventual winner Luiz Inácio Lula da Silva, received a near majority of the four-candidate vote share in 2002. Mexico's three-candidate race in 2006 was, by comparison, much more balanced. Brazilian results are based on the election returns in the two cities, while those for Mexico are based on nationwide results.

<sup>9</sup> Another dimension of networks measured in the panel study is *Network intimacy*, or the extent to which networks are comprised of family members. Intimacy is high when individuals tend to hold discussions only with spouses, blood relatives, and other relatives. In contrast, intimacy is low when most conversations take place among friends, co-workers, acquaintances from civil society groups, and other non-family members. To measure intimacy, panel respondents were asked to describe their relation to each discussant named. In both waves, 50 percent of named discussants were non-family members, and this figure did not vary at all between urban and rural areas. Interestingly, 50 percent places Mexico in the *least insular* half of countries with available network data, and means that Mexicans were less likely than the United States (60%) to name family members at this point.<sup>9</sup> In short, Mexican citizens are not abnormally segmented into insular, familial groups when they engage in interpersonal political exchanges.

<sup>10</sup> Of course, only two of these three variables can be used in any particular model since knowledge of two for a given state is enough to identify the value of the third. Using all three would induce near perfect collinearity.

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<sup>11</sup> Hermosillo is far from the most PAN county (San Julian, 72%) or even the most PAN city (León, 67%, and Celaya, 66%). I chose counties that were not maxima (or minima) so as to avoid skewing or exaggerating the results with outliers. That said, all three examples are around the 99<sup>th</sup> percentile.