Abstract

Growing Geographic Polarization and the Perpetuation of Electoral Disconnect

By

Iris Siu Wai Hui

Doctor of Philosophy in Political Science

University of California, Berkeley

Professor Henry E. Brady, Chair

Political scientists, journalists, and astute political observers agree that American political parties, at both the mass and elite level, have become more partisan over the past fifty years. The two national parties have increasingly moved apart on various social and economic issues, and elected representatives have become more ideologically divided over time. In response to party polarization, rank-and-file party identifiers have further sorted themselves into the Republican and Democratic parties. Their evaluation of political figures, as well as their positions over a range of political issues, is more likely to be influenced by their party identification now than decades ago. Yet when one closely examines the overall distributions of ideology and public opinions, one can hardly detect any changes in them over time. The electorate remains largely ideologically centrist and moderate.

Given frequent elections and the prevalence of watchdog groups and a savvy media, one would expect that representatives who deviate ideologically from the preferences of their constituents would get voted out. In principle, one would expect any electoral disconnect to diminish, if not completely disappear in the long run. Yet in reality, the opposite is true --- the electoral disconnect between the overall attitudes of the mass public and those of elites appears to have widened over time. The empirical puzzle is: H**ow can party polarization be sustained when the constituents who elect them are not ideologically divided?**

The answer is geography. Federal elections are geographically-based. There are four hundred and thirty five separate electoral districts for House seats, and fifty districts for Senate seats. Congressional members are single-minded re-election seekers who are held accountable to their home constituents---not to the national electorate. In order to understand what contributes to party polarization and electoral disconnect, one must begin by studying the spatial composition of voters across geographic regions. I argue that the increasingly skewed spatial distribution of partisan preferences, which I refer to as 'geographic polarization of partisan preferences', holds the key to the empirical puzzle.

There are two ways in which geographic polarization of partisan preferences can occur. One is through electoral behavioral change; another is through spatial compositional change.

By electoral behavioral change, I refer primarily to party sorting that began after 1980. As the two national parties pull apart ideologically, voters can easily differentiate between the major

parties and align themselves with the political party that lies closer to their political preferences. Because of party sorting, the connection between a person's socio-demographic characteristics and his or her partisan preference strengthens over time.

By spatial composition change, I refer to the condition in which the demographic make-up of geographic regions (or electoral districts) gets altered over time in ways that are politically relevant. There are two mechanisms that can induce spatial compositional change. The first mechanism is selective migration. When individuals' politically relevant socio-demographic characteristics and lifestyle preferences are correlated with both the migration decision and residential choice, then voters become geographically sorted over time in ways that matter for their political choices.

The second mechanism is place-varying generational replacement. The conventional notion of generational replacement suggests that cohorts coming of age in different time (or political) periods might develop distinct partisan preferences or beliefs. As younger cohorts replace older cohorts, the overall composition of the electorate might then change. While such conventional generational replacement continues to take place, I show that, after 1980, there is an additional form of generational replacement that is spatially dependent. In addition to the *time* in which one comes of age, the *place* in which one comes of age also matters. In California, I demonstrate that younger voters coming of age in pro-Democratic regions (the Bay Area and Los Angeles County) are systematically more likely to identify as Democrats than those growing up in pro-Republican regions. As these younger cohorts age, the spatial disparity in term of partisan preferences widens.

I use California as a case study because it is a very large and diverse state. There are many unique historic datasets, including individual-level opinion polls, voter registration data and yearly county-level demographic data. By assembling and examining various datasets, I show that selective migration began long *before* elite polarization resumed in Congress in the 1960s. Migration patterns have largely been stable over the past few decades. They are mostly driven by economic considerations and *not* by religious preferences. Over time, the accumulation of selective migration results in an increasingly skewed spatial distribution of voters of various socio-demographic characteristics. When the two national political parties began to pull apart on social and economic issues during the Reagan administration, voters took the cues and became more sorted by partisanship. Party sorting had two political impacts. First, it led to the onset of place-varying generational replacement. Second, it further accentuated the connection between the skewed spatial distribution of social-demographic characteristics and aggregate partisan preferences. Consequently, geographic polarization began to emerge in 1980 and continued to increase over time.

Prior to 1980, counties in California used to have fairly similar partisan preferences. The moderate, centrist distribution of ideology among voters was reflected by a bell-shape distribution of partisan preferences at the county level. By 2000, the distribution of partisan preferences at the county level had become bimodal --- counties either had gone more pro-Democratic or pro-Republican, with very few electorally competitive counties in between. Through the interaction of electoral behavioral changes and spatial compositional changes, the moderate, centrist electorate is now spatially arranged in partisan polarized districts. These districts perpetuate party polarization at the elite level as Congressional candidates must appeal

to either strongly Democratic or strongly Republican electorates within their districts. Lastly, I argue that since party sorting and the pattern of selective migration are deeply entrenched in the electorate, geographic polarization and electoral disconnect are likely to be sustained in the long run.

Chapter 1
Divided Congress, Divided Country But Not Divided Electorate

Section 1.1 Introduction

> "I'm going to go in there with a spirit of bipartisanship and a sense that both the president and various leaders in Congress all recognize the severity of the situation right now and want to get stuff done."[1]
>
> Barack Obama. First news conference as President-Elect. November 7, 2008.

'Change' was the main theme in Barack Obama's campaign when he ran for President in 2008. Upon taking office, he called for bipartisan cooperation in Congress. To reach out to his opponents, he attended the annual House Republican Retreat in January 2010 and offered to discuss the key political concerns with the Republicans. The visit took place in the midst of heated debates on health care reform. During the Q&A section, Congressman Hensarling (R-Texas) and President Obama had the following exchanges.

Congressmen Hensarling:

> Mr. President…the Republicans proposed a budget that ensured that government did not grow beyond the historical standard of 20 percent of GDP. It was a budget that actually froze immediately non-defense discretionary spending. It spent $5 trillion less than ultimately what was enacted into law, and unfortunately, I believe that budget was ignored. And since the budget was ignored, what were the old annual deficits under Republicans have now become the monthly deficits under Democrats…*(author's omission)*

President Obama:

> Jeb, I know there's a question in there somewhere, because you're making a whole bunch of assertions, half of which I disagree with, and I'm having to sit here listening to them. At some point I know you're going to let me answer. All right.

Congressman Hensarling:

> That's the question. You are soon to submit a new budget, Mr. President. Will that new budget, like your old budget, triple the national debt and continue to take us down the path of increasing the cost of government to almost 25 percent of our economy? That's the question, Mr. President.

President Obama:

[1] The full transcript can be found at http://www.cnn.com/2008/POLITICS/11/07/obama.conference.transcript/

> Jeb, with all due respect, I've just got to take this last question as an example of how it's very hard to have the kind of bipartisan work that we're going to do, because the whole question was structured as a talking point for running a campaign.

This kind of partisan exchanges is hardly an exception in today's politics. Close observers of politics have noted that the once civil tone and cooperative spirit have been replaced by overt partisan hostility in the Capitol (Sinclair 2006; Polsby 2004). The health care reform in 2010 offers a good example of how partisan rivalry has damaged the legislative process. Acting as a moderator, President Obama called a special forum on health care reform in February 2010 with the intention of providing a platform for the party leaders to work out their differences. Instead of reconciling their differences, Congressional members seized the opportunity to promote themselves and to appeal to their home constituents. The eight-hour televised forum not only failed to find common grounds, it further accentuated the insurmountable differences between the two camps.[2] The deep distrust between the parties deteriorated into policy gridlock as the two parties were too skeptical of another and too entrenched in their policy positions to negotiate. Although the Democrats managed to pass the landmark health care reform in March 2010, the passage of the legislation only drove the two parties apart and further divided their supporters. A poll conducted by the CBS News/New York Times in the same month reported deep division between Republican and Democratic voters. Over 80% of respondents who identified themselves as Democrats approved of the president's job performance, but only 11% among Republican identifiers.[3] Rank-and-file Republican voters vowed to avenge their loss by voting against any Democratic candidates in the coming November general election.[4]

Political scientists, journalists, and astute political observers agree that American political parties, at both the mass and elite level, have become more partisan over the past fifty years. The two national parties have increasingly moved apart on various social and economic issues, and elected representatives have become more ideologically divided over time (Brady & Han 2006; McCarty et al. 2006; Theriault 2008; Polsby 2004; Stonecash et al. 2003; Sinclair 2006; Lee 2009). In response to party polarization, rank-and-file party identifiers have further sorted themselves into the Republican and Democratic parties. Their evaluation of political figures, as well as their positions over a range of political issues, is more likely to be influenced by their party identification now than decades ago. Yet when one closely examines the overall distributions of ideology and public opinions, one can hardly detect any changes in them over time (DiMaggio et al. 1996; Fiorina 2005, 2009; Fiorina & Levendusky 2006; Fiorina & Abrams 2008). The electorate remains largely ideologically centrist and moderate. In a recent book titled 'Disconnect: the Breakdown of Representation in American Politics', Fiorina (2009) provides a thorough account of the widening electoral disconnect between ideologically polarized elites and the ideologically centrist electorate.

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[2] "President Urges Focus on Common Ground." NYTimes. February 26, 2010.
[3] The CBS News/New York Times Poll was conducted between March 18 and March 21, 2010.
[4] "Revenge of the White Men". LA Times. March 22, 2010.
"How GOP Can Rebound from Its 'Waterloo'" David Frum on CNN.com. March 22, 2010.

would get voted out. In principle, one would expect any electoral disconnect to diminish, if not completely disappear in the long run. Yet in reality, the opposite is true --- the electoral disconnect between the overall attitudes of the mass public and those of elites appears to have widened over time. The empirical puzzle is: H**ow can party polarization be sustained when the constituents who elect them are not ideologically divided?**

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There are two ways in which geographic polarization of partisan preferences can occur. One is through electoral behavioral change; another is through spatial compositional change.

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The second mechanism is place-varying generational replacement. The conventional notion of generational replacement suggests that cohorts coming of age in different time (or political) periods might develop distinct partisan preferences or beliefs. As younger cohorts replace older cohorts, the overall composition of the electorate might then change. While such conventional generational replacement continues to take place, I show that, after 1980, there is an additional form of generational replacement that is spatially dependent. In addition to the *time* in which one comes of age, the *place* in which one comes of age also matters. In California, I demonstrate that younger voters coming of age in pro-Democratic regions (the Bay Area and Los Angeles County) are systematically more likely to identify as Democrats than those growing up in pro-Republican regions. As these younger cohorts age, the spatial disparity in term of partisan preferences widens.

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selective migration began long *before* elite polarization resumed in Congress in the 1960s. Migration patterns have largely been stable over the past few decades. They are mostly driven by economic considerations and *not* by religious preferences. Over time, the accumulation of selective migration results in an increasingly skewed spatial distribution of voters of various socio-demographic characteristics. When the two national political parties began to pull apart on social and economic issues during the Reagan administration, voters took the cues and became more sorted by partisanship. Party sorting had two political impacts. First, it led to the onset of place-varying generational replacement. Second, it further accentuated the connection between the skewed spatial distribution of social-demographic characteristics and aggregate partisan preferences. Consequently, geographic polarization began to emerge in 1980 and continued to increase over time.

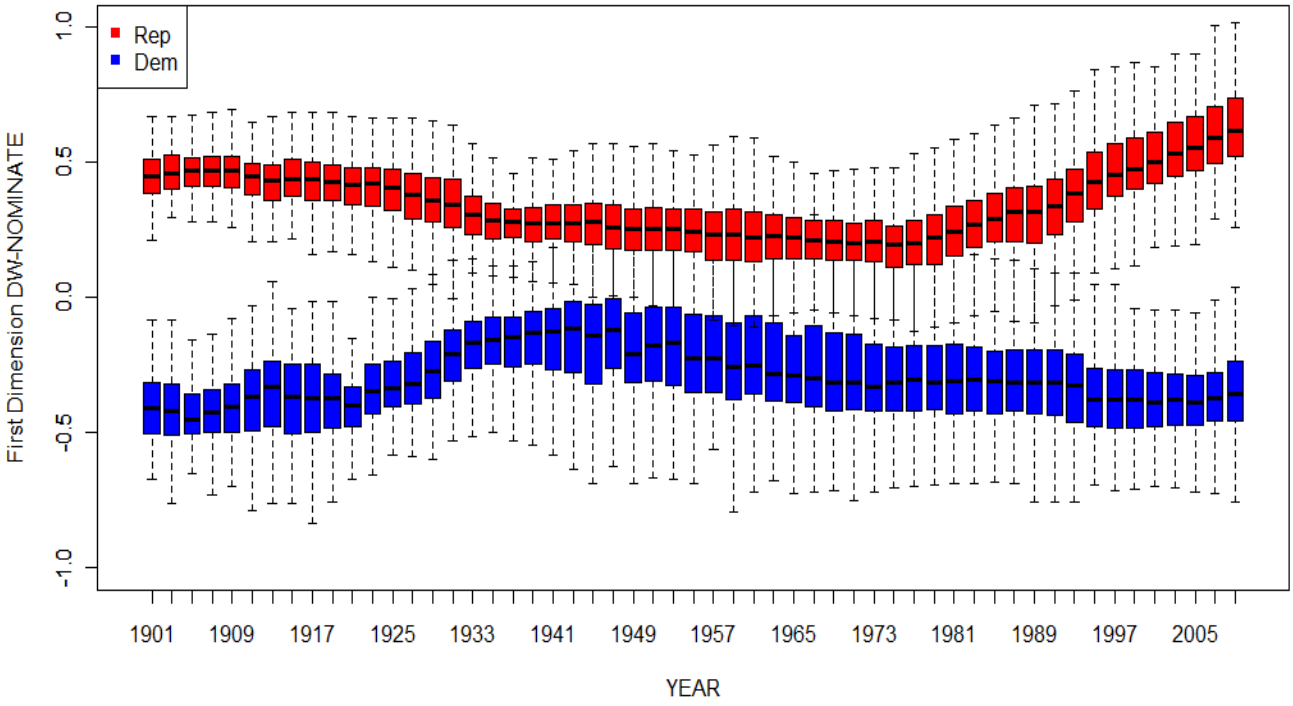
Prior to 1980, counties in California used to have fairly similar partisan preferences. The moderate, centrist distribution of ideology among voters was reflected by a bell-shape distribution of partisan preferences at the county level. By 2000, the distribution of partisan preferences at the county level had become bimodal --- counties either had gone more pro-Democratic or pro-Republican, with very few electorally competitive counties in between. Through the interaction of electoral behavioral changes and spatial compositional changes, the moderate, centrist electorate is now spatially arranged in partisan polarized districts. These districts perpetuate party polarization at the elite level as Congressional candidates must appeal to either strongly Democratic or strongly Republican electorates within their districts. Lastly, I argue that since party sorting and the pattern of selective migration are deeply entrenched in the electorate, geographic polarization and electoral disconnect are likely to be sustained in the long run.

Section 1.2 Brief Overview of Party Polarization in Congress

Newspapers, blogs and cable news channels supply numerous anecdotes about the increasing rivalries between the two parties in the Capitol. These accounts have largely been supported by empirical evidence in the political science literature. Carroll et al. use roll call votes to construct the DW-NOMINATE scores for all Congressional sessions since 1901.[5] These scores are commonly used to place members of Congress on a left-right ideological spectrum. One can contrast the ideological placement of the two political parties by comparing their scores overtime. Figure 1.1 plots the DW-NOMINATE scores for the two parties in the House of Representatives from 1901 to 2008. The red box-plots show the distribution of scores for the House Republicans, the blue box-plots display that for the House Democrats.

[5] DW-NOMINATE scores with bootstrapped standard errors can be found via the following website: http://www.voteview.com/dwnomin.htm

Figure 1.1 DW-NOMINATE for the House of Representatives, 1901-2008



Data: Carroll et al. DW-NOMINATE project

Figure 1 reveals two important findings. First, the between-party differences initially decreased in the first half of the 20th century, then gradually increased since the 1960s. There used to be some overlapping of members from the two parties. For example, in the 82nd Congress (1951-1952), congressmen from different geographic regions and political parties, such as Case (R-New Jersey), Canfield (R-New Jersey), Fulton (R-Pennsylvania), Burdick (North Dakota), Redden (D-North Carolina), Burton (D-Virginia), Boykin (D-Alabama) and Brooks (D-Louisiana), received similar DW-NOMINATE scores. The differences in their DW-NOMINATE scores were within 0.05, indicating a blend of ideology between the two parties. These moderates have all disappeared by late 1990s. In the 110th Congress (2007-2008) for example, the DW-NOMINATE score difference that separates the most liberal Republican (Jones, R-North Carolina) and the most conservative Democrat (Childers, D-Mississippi) was 0.26. The ideological gap grows more apparent even to those who are less attentive to politics.

Second, it appears that the within-party variation has also diminished. In what is usually referred to as 'ideological polarization' or 'political polarization' or 'elite polarization' or 'party polarization' in Congress, the two parties have become more homogeneous within but differentiated across the political spectrum, and the middle-ground has largely disappeared. Ideological polarization among elites is not only limited to the House of Representatives. What is intriguing is that an identical polarizing pattern can also be found in the U.S. Senate which has significantly bigger geographic constituency. McCarty et al (2006) trace the party distance for both chambers. They observe both trends track almost perfectly, with a correlation of 0.9.

Both House and Senate experience similar increases in ideological polarization over time. Other scholars who have examined the ideological positions of Congressional members over time with other measures, such as interest groups' ADA scores, report similar polarized patterns (Theriault 2008; Stonecash et al. 2003).

Origin of Party Polarization: Electoral Realignment in 1960s

Party polarization plays a vital role, both in shaping the country's legislative agenda as well as the American electorate. But is party polarization a new phenomenon that is unprecedented in U.S. history? When and how did it emerge? What are the social and institutional factors that help to generate it?

Drawing from datasets of historical election outcomes, legislative voting and survey data, Han and Brady (2007) point out ideological polarization in Congress has been the norm in the United States. The bipartisan era after the Second World War was an exception to the norm. They describe the polarization in Congress as having happened in three phases. Throughout the 1950s and early-1960s, party discipline was weak. Cross-party voting was common in both presidential and congressional elections --- liberal voters voted for the Republican Party candidate and conservative voters chose the Democratic Party candidate. The quest for civil rights in the 1960s led to the breakdown of the New Deal Coalition. The transition of the solidly Democratic South to the Republicans sharpened the ideological differences, and the two national parties began to pull apart and a massive electoral realignment began. Taking cues from the national parties, the level of cross-party voting among voters declined in presidential elections. However, cross-party voting in congressional elections remained strong due to incumbency advantage and long-cultivated personal votes. Some legislators faced cross pressures from a more ideological national party and in their moderate home constituents. It was only until these cross-pressured legislators retired or lost re-election bid in the late 1970s and 1980s then both national parties and Congress reverted back to the polarization norm. As illustrated in Figure 1, the extent of political polarization continued to grow through the late 2000s.

Social Bases of Party Polarization

The electoral realignment in the 1960s was brought on by the revival of the Republican Party in the South. Despite the passage of the 13th, 14th and 15th Amendments that granted African Americans the rights to vote, they were mostly barred from the polls until the 1960s due to the presence of local suffrage restrictions, such as poll taxes and literacy test. The Voting Rights Act in 1965 significantly increased the number of enfranchised blacks three-fold from 1,009,000 (in 1952) to 3,112,000 (in 1968) (Stonecash et al. 2003). The passage of the Act, however, greatly exacerbated conflict within the Democratic Party as appeals to these black voters led to alienating conservative white Southern voters (Sinclair 2006; Stonecash et al. 2003; Polsby 2004). Following the passage of Civil Rights legislations, the number of Democratic identifiers among these conservative white Southerners dropped precipitously (Giles & Hertz 1994).

This electoral realignment was further accelerated by demographic shifts. The concentration of minorities, along with college-educated and younger voters in the North gave the Democratic

Party an advantage in urban settings (Stonecash et al. 2003; Theriault 2008; Han & Brady 2007). In what is nicknamed as the 'air-conditioning' theory, Polsby (2004) argues that the availability of air conditioning systems at home, combined with other socio-economic factors, allowed more white migrants to move to the South. As black voters continuously migrated to Northward, the 'swap' changed the constituent makeup of Southern districts (Gregory 2007). The influx of new white migrants supplied new perspectives to the Republican Party as they were not historically tied to the Democratic Party in the South. In the 1964 presidential election, Barry Goldwater who had voted against the Voting Rights Act as a U.S. Senator; ran on a conservative platform. He managed to carry five Southern states, Alabama, Georgia, Louisiana, Mississippi and South Carolina, and his home state, Arizona. His victory in the South signified the end of the New Deal Coalition era. It also inspired and recruited a new generation of conservative figures to the Republican Party, such as Trent Lott and Newt Gingrich, who later led the Party to its revival in the 1980s.

Another constituency-level change that has been associated with party polarization is the increase in income inequality. Although the micro-level socio-political mechanism associating income disparity with party polarization remains unclear, McCarty et al. (2006) observe that the increase in income inequality closely corresponds with the growth in ideological polarization in Congress. As immigrants who are ineligible to vote tend to occupy lower income strata, elites are more responsive to the most affluent and less responsive to the working class (Bartels 2008). The growth in income disparity enables elites to cater to the 'haves' and at the expense of the 'have-nots'.

Institutional Bases of Party Polarization

Apart from the above socio-demographic factors, party polarization was also facilitated and perpetuated by several institutional arrangements.

Congressional scholars have turned to how changes in congressional rules, the committee system, party discipline, and leadership have pulled the two parties apart. The Rules Committee in the House of Representatives has become an extended arm of the party leadership. Restrictive rules which limit the number of amendments, time allotted for debates, numbers of revisions etc., ensure that the rank-and-file members can only vote on the party leadership's preferred version of a bill (Hetherington 2009; Sinclair 2006). In addition, party leaders are more likely to adopt omnibus legislation that contains a wide array of provisions. Members of each party can either cast a singular 'yes' or 'no' vote, but cannot alter parts of the bill. These two tools combined allow the legislative outcome to be closer to the party's median position (Sinclair 2006; Polsby 2004; Theriault 2008).

Apart from the restrictive rules, party leaders have greatly tightened party discipline. In 1994, Newt Gingrich dispensed with the seniority system in favor of party loyalists, sending a clear message that voting along party-line would be generously rewarded. The power of committee chairs has also been weakened by party leadership practices, such as using task forces to bypass committees on major legislation and by implementing leadership-controlled conference committees. Party leaders are more likely to funnel campaign dollars or other financial incentives to reward members who share similar political viewpoints (Heberlig et al. 2006). Moreover, the hectic legislative agenda, as well as the rising demand for fund-raising activities

has deprived representatives of the time to socially connect with other each other and to build cross-party friendships. The decrease in cross-party interpersonal connections has led to less bipartisan collaboration (Sinclair 2006; Polsby 2004). The once collegial atmosphere has given way to competitive team spirit.

The conditional party government theory attests that when members of the same party are more homogenous in ideology, they become more willing to delegate enhanced power to party leaders (Rohde 1991). As a result, party polarization creates its own momentum---once it is set in motion, it continues to self-perpetuate. Lee (2009) examines a wide array of non-ideological votes and procedural votes. She reports deep partisan divide even on matters that are unrelated to ideology. Minority party members would object to any bills advocated by the majority party. The division among party elites in present era is beyond ideology. Hence, instead of referring to the current division in Congress as ideological polarization, she contends that a better term is 'party polarization' as this term reflects both the ideological and non-ideological division.

Aside from congressional rules, Sinclair (2006) notes that the larger political environment has facilitated the revival of the conservative movement. Between 1964 and 1980, conservatism became 'respectable'. Conservatives, frustrated by the failures of the Great Society under the Lyndon Johnson administration, reaffirmed the belief that government not only cannot solve major societal problems, but it can be a source of problems. A decade of stagflation (i.e. recession combined with high inflation) and energy crises in the 1970s further convinced them of the perils of government. The Tax revolt in 1978 and the eventual passage of Proposition 13 in California paved the way for a return of fiscal conservatives into the mainstream politics (Sears & Citrin 1982). Apart from the rise of fiscal conservatism, the political awakening of evangelical Christians and the subsequent organization of the Christian Coalition movement reconstituted the core of the Republican Party's base (Sinclair 2006; Sheler 2006; Wallis 2008; Fowler et al. 1999). Social issues, such as abortion and gay rights, became highly politicized and further pulled the Republican Party to the right (Wald 2003; Lichtman 2008; Domke & Coe 2008).

Outside of Congress, redistricting, or gerrymandering, is another frequently identified institutional arrangement that gives rise to political polarization. Some critics blame the recent advances in Geographic Information System (GIS) techniques for providing politicians with laser-like precision in crafting districts that are electorally uncompetitive (Schaffner et al. 2004; Cox & Katz 2002). Others point to the biased composition of commissions that are in charge of the redrawing process (Carson & Crespin 2004; McDonald 2004; Rallings et al. 2004; Butler & Cain 1992). Districts are often tailored to protect incumbents which shield them from electoral reprisal even when they are out of political alignment with their constituents (Schaffner et al. 2004). As turnout tends to be lower in primary elections, the preferences of the party activists usually dominate the electoral outcomes. Candidates who are ideologically extreme compete better in primaries than moderate, centrist candidates (King 2003; Gerber 2002).[6] Through retirement and electoral replacement, these newcomers to Congress drag the two parties further apart.

[6] By examining data from exit polls and the 2006 Cooperative Congressional Election Study, Abramowitz (2008) finds that primary voters are not ideologically more extreme than the general election voters. He argues that it is the overall electorate that has become more ideological. Hence elites cannot adopt moderate positions in fear of losing support from their electoral bases.

The actual impact of redistricting on party polarization is subject to extensive debate. Analysts have pointed out that the Senate, which is not subject to either reapportionment or redistricting, also exhibits a similar extent of ideological polarization (Mann 2006; McCarty et al. 2006). Besides, gerrymandering is a political skill long perfected before any GIS or computer system (Altman et al. 2005). It is perhaps the shifting demographic composition of locations, rather than technological advance, that facilitated gerrymandering. Using simulations, McCarty et al. (2006) argue that after accounting for demographic shifts over time, the contribution of redistricting is minimal. Rodden and Chen (2010) find that there is a consistent partisan bias given the imbalanced residential settlement patterns of the two party's voters. In an analysis of dozens of alternative redistricting plans in California, Cain et al. (2006) report that even when one single-mindedly attempts to maximize the number of potentially competitive districts, nearly half of the congressional districts would remain uncompetitive due to their fundamentally uneven socio-demographic composition.

Section 1.3 Political Ramifications of Party polarization

The subject of political polarization has become a central topic of study because the extent of polarization has major political ramifications. The increasingly acrimonious relationship between political parties has made the political bargaining process difficult and has contributed to more policy gridlock (Jones 2001; Brady et al. 2008; Binder 2003). Stranded relationships have caused delays in enacting needed reforms and slowed responses to pressing issues. As it takes sixty votes to override a filibuster in the U.S. Senate, bills that get passed are sometimes distorted outcomes of political compromises. Legislative outputs, some studies report, may reflect the more extreme position of a subgroup in the population rather than the general population (Hetherington 2009; Hacker & Pierson 2006; McCarty et al. 2006). Combined with the rise in income inequality, politics has become an even more intense struggle between the 'haves' and 'have-nots'. Recent research finds bigger representational distortion where voices of certain privileged subgroups get disproportionately large influence in politics. Bartels (2008) finds that elected representatives are more responsive to richer citizens than to average Americans. The ideological positions of elected representatives are, according to some research, increasingly traceable to the campaign contributions they received from corporations and PACs (Wright 1990; Hall & Wayman 1990; Heberlig et al. 2006).

Apart from representational distortion, political polarization in Congress is associated with three, perhaps, paradoxical developments in the electorate. The first is the widening 'electoral disconnect'. Elected representatives have become far more ideologically extreme than the generally moderate constituents they represent (Fiorina 2005, 2009). The breakdown in the electoral connection harms the health of representational government and democracy. A poll conducted by CBS/New York Times between June 16-20, 2010 found that only 19% of Americans approved of the performance of Congress, and 47% approved of the job performance of President Obama.[7] The Gallup Poll routinely asks respondents about their level of confidence over a range of political institutions. While over half of the respondents reported having either 'quite a lot' or 'a great deal' of confidence in police, only eleven percent of

[7] Results obtained from Pollster.com (accessed 15 July, 2010)

respondents said so for Congress.[8] The level of confidence in Congress was even lower than that for big business (19%) and health maintenance organization (HMO) (19%), two institutions that have been consistently portrayed negatively in the mass media. The antagonistic and divisive atmosphere in Congress is typically blamed for the decline in public trust in government (King 1997).

Some scholars believe political polarization has led to a 'divided public' (the term is in quotation marks as I will return to the validity of this idea in the next section). The battleground for partisan fights extends beyond the confines of Capitol Hill --- with numerous media outlets, the fights play out in public, on the air waves and in every living room in America. The 'get-in-your-face' style of reporting and 'game-centered' coverage replaces neutral, rational, open-minded policy discussion with empty and emotionally charged partisan rhetoric (Mutz 2006). The proliferation of media outlets and online news coverage also makes self-selection easier. Viewers can simply tune into radio or TV programs, or click to favorable online media coverage, that agrees with their viewpoints and be entirely shielded from opposing viewpoints (Stroud 2008; Andina-Diaz 2007).

Citizens look up to party leaders for political cues, and media have played a bigger role in funneling elites' messages to their constituents. When elites are ideologically divided, party identifiers become as divided as their elected leaders (Zaller 1992; Brody & Shapiro 1989). Contemporary research has reported that the division is particularly sharp among the most loyal partisan identifiers. Time series data from sources such as the American National Election Studies (ANES), the General Social Surveys (GSS) and the Roper surveys all show that political activists have grown more ideologically polarized since the 1980s (Hetherington 2001; Abramowitz & Stone 2006; Abramowitz 2006, 2010; Verba et al. 2010; Theriault 2008). Through cohort replacement, the moderates in the parties dropped out and have been replaced by newcomers who tend to be more ideological (Polsby 2004).

The third development is the change in the geo-political landscape of the country where the partisan division among the electorate is manifested through residential settlement patterns. Congress is not the only institution that has grown more polarized over time, the country itself also exhibits the same polarizing trend. Journalist Thomas Frank (2004) observes that geography is associated with different political preferences. Voters in red states care more about moral issues than their fellow citizens in blue states. Using ANES data from 1952 to 2004, Black & Black (2008) examine political patterns in four stable historic regions, namely, the Northeast, Pacific Coast, Midwest and Mountains/Plains. They find distinct forces within each region that drag the country in different directions. Gimpel & Schuknecht (2004) provide careful analyses of how geographic sectionalism evolved in America. Morill et al. (2007) detail the typology of 'red' vs. 'blue' across counties. They observe that demographic factors and lifestyle preferences, such as vehicle ownership, the concentration of blacks, the prevalence of public transit, and family composition, can distinguish a Republican-leaning from a Democratic-leaning county.

Despite Obama's landslide victory, analyses of 2008 presidential returns confirm the persistence of geographic divergence between inland and coastal states (Gelman et al. 2009,

[8] Results obtained from Pollingreport.com (accessed 25 July, 2010). The Gallup poll was conducted between July 8 and 11, 2010.

Lesthaeghe & Neidert 2009). Geographic regions translate into differential partisan support --- the coastal states solidly vote for the Democratic Party while the inland states support the Republican Party. Bishop (2008) is intrigued by the rapid increase in the number of non-competitive counties between 1976 and 2004. In what he calls the 'big sort', he hypothesizes that selective domestic migration primarily contributes to this decrease in electoral competitiveness at the county level. He speculates that people segregate themselves into homogeneous neighborhoods based on their economic, social and lifestyle preferences. Bishop reasons that the geographic concentration of like-minded people can pose a threat to democracy. On the one hand, such interaction may lead to 'group polarization', where individuals socialize one another into more ideologically extreme and illiberal positions over time (Sunstein 2002, 2009). On the other hand, in a polarized opinion climate, people may refrain from participating in publicly observable political activities that make them vulnerable to scrutiny and criticism by others who hold opposing political viewpoints (Hayes et al.2006).

Section 1.4 Evidence of Mass Polarization?

In a democracy, the power of the government belongs to the people. The electoral connection is the basic premise that link constituents' preferences with the actions of their legislators (Mayhew 1974). Whitby and Gilliam (1991) analyze the voting behavior of Southern members in the House of Representatives between 1969 and 1988. They find that Southern Democratic incumbents, even the senior ones, altered their voting patterns in response to the increasing political empowerment of the Southern black electorate. By the mid 1980s, Southern Democrats, on average, emerged to be as liberal as non-Southern Democrats in their voting behavior on civil rights issues. In the article 'out of step, out of office', Canes-Wrone et al. (2002) find that elites do shift their ideological position in response to their changing constituents for fear of electoral reprisal. Citizens make up the country, they also create the institutions. It is no surprise that many researchers believe the root of party polarization must be found among those who elect them. That is, what lies underneath a divided Congress and a divided country must be a divided electorate.

I put 'divided electorate' in quotations in the previous section because the empirical evidence suggests otherwise. Contrary to the strong evidence on elite polarization, there is hardly any evidence of popular polarization (DiMaggio et al. 1996; Wolfe 1998; Fiorina 2005, 2009; Fiorina & Abrams 2005; Fiorina & Levendusky 2006; Evans et al. 2001). While activists have become more ideological like the elites, they comprise less than ten percent of the total electorate (Fiorina & Levendusky 2006). DiMaggio et al. (1996) study the distribution of aggregate public opinion on various social and economic issues. They explore whether any of these aggregate opinions have grown polarized over time. After thoroughly examining any changes in means, medians, variance and kurtosis, they report the distribution of these aggregate opinions have barely changed over time. Studies have also squarely rejected Frank's speculation that red state voters place heavier weight on moral issues than economic issues. Researchers confirm the continual importance of economic self interest over moral values, regardless of region of residence (Bartels 2006; Ansolabehere et al. 2006). In addition, moral and social issues carry heavier weight now than three decades ago.

Fiorina (2005) examines the controversial issues, such as abortion and homosexuality, that are suspected to have divided the electorate. He finds no evidence for a culture war of any kind ---

the public is mostly moderate and centrist. Nonetheless, he argues the distribution of ideology has also remained stable, with little evidence of significant increase in the number of ideologues in the country. As the two national parties grow more distinct, the linkage between party label and ideology gets clarified. Once ordinary voters notice the clarification, they align themselves with the party that is closer to their underlying preferences. There is less cross-over between ideology and party affiliation --- groups like 'liberal Republicans' or 'conservative Democrats' have largely disappeared. Fiorina attests that voters have not grown more ideologically polarized, they are simply more sorted by partisanship. The decline in the number of competitive electoral districts reflects the limited choices offered by the political parties, rather than a polarized electorate.

Section 1.5 The Empirical Puzzle: Divided Congress, Divided Country but Not Divided Electorate?

The United States of America is merely an empty territory without its citizens. People make up the country. They also elect the representatives. If the electoral connection really works, at equilibrium, we would expect preferences of the constituents to match up with those of their elected representatives. Any electoral disconnect would be corrected by frequent elections --- out-of-step legislators would either be recalled or voted out of office. And only those who truly follow the pulse of their constituents could stay.

Yet what we observe today is the exact opposite. The electorate has remained largely stable and ideologically moderate, the distribution of aggregate public opinion and ideology has also barely moved over time. But the two national parties have been consistently pulling towards two opposing ends since 1960s. The country also appears more geographically polarized in terms of partisan preferences. The question is--- how could these disequilibria be sustained? How did a divided Congress emerge and a divided America grow out of a moderate, centrist and rather stable electorate?

Two Hypothetical Scenarios

Let me begin with two simple hypothetical scenarios in Table 1.1 and 1.2. For ease of illustration, suppose there are two regions (or electoral districts) and religiosity is the main predictor of vote choice. There are pre-existing differences in the composition of voters at time period 1. Region I has a larger share of religious voters (200 out of 300 residents) than Region II (only 100 out of 300 residents).

Suppose at time 1, 60% of religious voters and 40% of non-religious voters support the Republican Party. Based on this ratio, the Republican Party would garner 53% of votes from Region I (i.e. 160/300=53%) and 47% of votes from Region II (i.e. 140/300=47%). The vote share difference between the two regions would be 6 percentage points. Then at Time 2, the electoral behavioral of voters changes --- the importance of the religious cleavage *strengthens* such that 80% of religious voters would vote for the Republican Party. Based on this revised ratio, the Republican Party would gather 60% of votes from Region I (180/300=60%) but only 40% from Region II (120/300=40%). As a result, the regional difference would widen from 6 percentage points to 20 percentage points.

Table 1.2 presents an alternative scenario. It starts off with the same baseline at time 1. However in this alternate scenario, voters change their location of residence rather than their electoral behavior. Voters choose to live with others who share their religious beliefs. Because of selective migration, at time 2, all religious voters are found clustered in Region I and non-religious voters are found in Region II. Even if the relationship between religiosity and vote choice remained unchanged, the regional difference would also widen from 6 to 20 percentage points.

Table1.1 Hypothetical Partisan Sorting Scenario

	Time 1		**Time 2**	
	Total	Voting Preferences	Total	Voting Preferences
Region I				
Religious	200	120 Republicans; 80 Democrats	200	160 Republicans; 40 Democrats
Not Religious	100	40 Republicans; 60 Democrats	100	20 Republicans; 80 Democrats
Region II				
Religious	100	60 Republicans; 40 Democrats	100	80 Republicans; 20 Democrats
Not Religious	200	80 Republicans; 120 Democrats	200	40 Republicans; 160 Democrats

Table 1.2 Hypothetical Selective Migration Scenario

	Time 1		**Time 2**	
	Total	Voting Preferences	Total	Voting Preferences
Region I				
Religious	200	120 Republicans; 80 Democrats	300	180 Republicans; 120 Democrats
Not Religious	100	40 Republicans; 60 Democrats	0	
Region II				
Religious	100	60 Republicans; 40 Democrats	0	
Not Religious	200	80 Republicans; 120 Democrats	300	120 Republicans; 180 Democrats

Undoubtedly reality is far more complex than these hypothetical scenarios. There are numerous cleavages that are relevant to voting decisions, and without loss of generality, one can substitute religiosity in the example for ideology or any socio-political characteristics. These simple scenarios, however, offer two key insights in which a divided Congress and a divided country arise from a moderate and centrist electorate.

Note that in both scenarios, the aggregate number of religious and non-religious voters did not change at all across time. The setup is akin to the finding in the current literature that there has been no change in the distribution of ideology over time. The scenarios illustrate two ways in which polarization can happen even when the aggregate distribution of voters'

characteristics remains unchanged over time. First, if there were pre-existing differences in the spatial composition of voters, even *without* any residential sorting, political polarization could happen when the linkage between voters' composition and partisan preferences strengthened. I refer to this as 'electoral behavioral change' (or simply 'behavioral change'). Alternatively, even if the linkage between voters' characteristics and partisan preferences remains unchanged, selective migration could alter the *spatial* composition of voters, such that regions, or electoral districts, could become further distinct in demographic characteristics. I refer to this later scenario as 'spatial compositional change' (or simply 'compositional change').

Section 1.6 Two Main Mechanisms

Mechanism 1: Electoral Behavioral Change

There are two areas of literature that are relevant to the study of electoral behavioral change. The first area is realignment and the second area is party sorting. I will begin with a brief discussion of these two literatures. I argue that party sorting is the primary mechanism that accounts for the emergence of geographic polarization since 1980.

Realignment

With the election of Franklin Roosevelt in 1932 and the subsequent emergence of the New Deal Coalition, the once Republican-dominated electorate transformed into predominantly Democratic in less than a decade. This electoral change is often referred to as 'electoral realignment'. And the election in which such realignment takes place is usually referred to as 'critical election' or 'realigning election'. There are two ways to measure whether electoral realignment has happened. First, from the macro-partisanship perspective, electoral realignment occurs when the overall balance of party support in the electorate shifts from one party to another. Second, from the party coalition perspective, it happens when the social bases that make up a political party change. In addition to the 1932 election, there are other examples of realignment in the U.S. history. Realignment happened when Southern whites abandoned the Democratic Party and switched to support the Republican Party after the success of the Civil Rights Movement and the passage of Civil Rights legislations in the 1960s. Some scholars suggest, perhaps, the elections of 1980 and 1994 constitute other examples of realigning election (Hurley 1989; Meffert et al. 2001).[9]

How did electoral realignment happen? According to the conversion hypothesis, at the individual-level, electoral realignment happens when a significant number of voters 'convert' to another political party. Erikson and Tedin (1981) find evidence for the conversion hypothesis among the mass public. By analyzing Literary Digest polls, they show that votes were volatile between 1924 and 1936. Much of the Democratic gain came from the established Republican voters who switched and began voting Democratic. After 1936, they find vote shifts became minimal and party identification became highly consistent with presidential vote choices. Their evidence suggests a crystallization of the New Deal realignment by the late 1930s. Even

[9] Meffert et al. (2001) argue 1980 election was accompanied by a marked change in macropartisanship. But other indicators, such as presidential approval ratings and consumer sentiment, do not offer supportive evidence of realignment.

lifelong partisans are not immune to conversion. An analysis of 1988 presidential campaign activists reveals that about one-third of the Republican activists coming of age in the New Deal era were 'converts' from the Democratic Party (Clark et al. 1991).

The field remains divided on the frequency and intensity of realignment. Some scholars believe that party realignment constitutes an abrupt change brought upon by realigning election (Key 1955; Burnham 1970; Nardulli 1995). Critical realignment occurs on occasions when short-term forces run so massively against the majority party that the forces convert a large segment of the electorate to the minority party. Mayhew (2002) disagrees. He argues that changes are never abrupt. Rather realignment is brought on by the accumulation of subtle, incremental changes that took place over a decade or longer.

Party Sorting

Another concept similar to the notion of realignment is party sorting. Party sorting is the mechanism in which the connection between a person's socio-demographic characteristics and his/her partisan preference strengthens over time. In my first hypothetical example (Table 1.1), initially only 60% of religious voters would vote for the Republican Party. When party sorting takes place, the correlation between religious affiliation and partisan preference strengthens such that 80% of religious voters would vote for the Republican Party.

How did party sorting happen? Based on the vote proximity model, rational voters would support the political party that is closer to their preferred position. The practice of proximity voting can be facilitated when a) voters have clear preferences; b) voters have abundant information about the candidates and the positions they take; c) voters can connect their own preferences and identify the candidate who is closest to them. As the parties take distinct positions on major issues such as a woman's right to abortion, homosexuality, environment protection and welfare spending, voters can differentiate candidates simply based on their party label.

Recent studies shed light on the psychological motivation behind party sorting. Hetherington & Weiler (2009) argue the underlying partisan difference among voters stems from a differentiated 'worldview', which they refer to as 'authoritarianism'. Race, women's place in the society, gay and immigration issues are some of the dimensions of one's worldview. Each issue, in its own way, threatens to unsettle one's established view towards the way of life in the country. Another psychological predisposition that underlies voters' attitudes on various social issues is ethnocentrism (Kinder and Kam 2009). In-group favoritism and out-group hostility extends beyond racial tension to one's attitude towards immigration, aid to the poor, income redistribution and gay rights. When the two political parties begin to take more differentiated positions on these issues, these underlying psychological predispositions are challenged. Layman & Carsey (2002a) theorize that voters can respond either by adjusting their party ties to conform to their party's new issue positions, or by adjusting their issue positions to conform to their party identification. Through both mechanisms, they show that party identifiers who are aware of party polarization bring their social welfare, racial and culture issue attitudes toward the consistently liberal or consistently Republican elites (Layman & Carsey 2002b). Using a 1992-1996 panel data from ANES, Levendusky (2009) further argues that once

individuals develop certain attachment, they can be gradually converted to more extreme partisan position over time.

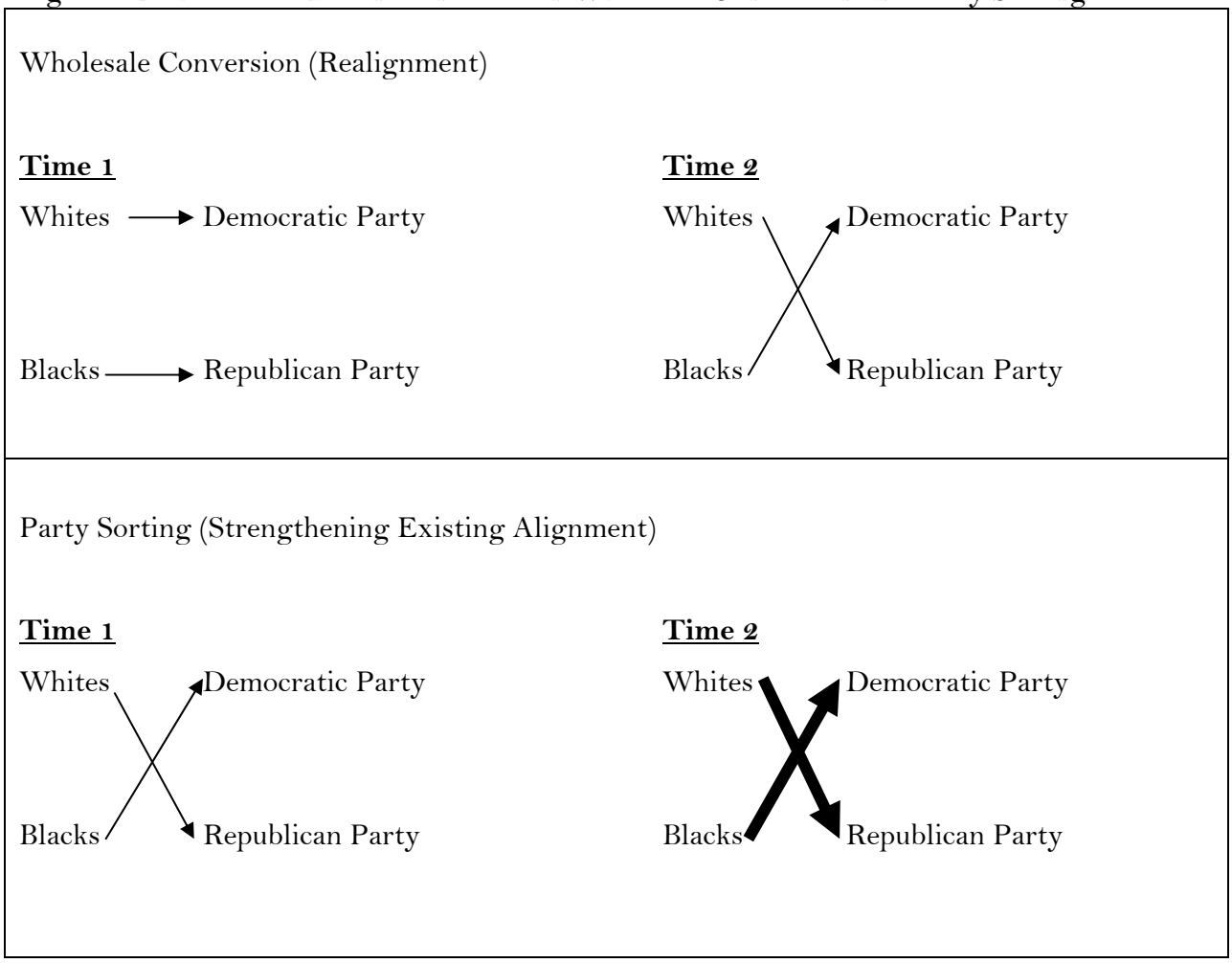
The advantage of party sorting is that voters can vote 'correctly' as if they have detailed information about the candidates. Researchers observe a notable increase in ideological constraint among ordinary voters as they can pick up 'what goes with what' (Baldassarri & Gelman 2008). The disadvantage of party sorting is that it can lead to the use of a party label as a filtering mechanism. Partisan loyalty can taint one's evaluation towards subjective measures (e.g. how to evaluate the performance of the President and Congress), political preferences (e.g. how to handle illegal immigration, how to close the budget gap), as well as objective measures (e.g. how to assess the current state of the economy) (Brady & Hui 2009; Hetherington 2008).

Realignment vs. Party Sorting

The concepts of realignment and party sorting have several overlapping features. First, they both describe an electoral behavioral change at the individual level that can ultimately alter the overall macro-partisanship in the country. Second, both mechanisms involve 'conversion' where some voters in the electorate switch affiliation from one party to another. Third, both mechanisms are elite-driven and are induced by changes in the ideological positions of the national parties.

There are several distinctions that separate these concepts. I summarize and contrast these distinctions in Figure 1.2. I begin with a simple example. Suppose race is an important electoral cleavage and there are two social groups, namely blacks and whites. At Time 1, whites would identify with the Democratic Party, and blacks would affiliate with the Republican Party. Realignment takes place when there is a 'wholesale conversion'. That is, at Time 2, white voters would affiliate with the Republican Party while black voters would identify themselves as Democrats. The top diagram in Figure 1.2 illustrates the switch in party affiliation. The Southern realignment after the Civil Rights Movement is a good example of this type of conversion, where the mapping between social groups and party affiliation experienced a dramatic shift.

Figure 1.2 Theoretical Distinction Between Wholesale Conversion and Party Sorting



Contrary to realignment, party sorting involves strengthening of *existing* alignments. In Figure 1.2, I use thicker arrows to represent the increase in magnitude. Note that the mapping between social groups and their party affiliation remains largely unchanged. The only difference is that, at Time 2, a larger share of white voters would affiliate with the Republican Party and a bigger portion of black voters would identify themselves as Democrats. Similar to realignment, party sorting involves conversion at the individual level --- some white voters who were previously not affiliated with the Republican Party would now be converted at Time 2. However, unlike realignment that involves wholesale conversion, party sorting is associated with 'marginal conversion'. That is, the mapping between social groups and political parties remains unchanged --- only the magnitude of association strengthens gradually over time.

As previously discussed, the Civil Rights Movement led to the Southern realignment in the 1960s. In Chapter 4, I use the Field Poll data to examine the relationship between voters' socio-demographic characteristics and their partisan preferences between 1970 and 2008. The data offer little evidence of wholesale conversion. I show that social cleavages remain largely stable during these four decades. Hence party sorting is more appropriate to describe the electoral behavioral changes after the Civil Rights Movement. In Chapter 4 and 5, I demonstrate how party sorting led to the onset of geographic polarization since 1980.

Mechanism 2: Spatial Compositional Change

Places have no political meaning unless one takes into account the types of voters who occupy the space. Fenno (1978) describes how members of Congress see their district in four concentric circles: the geographic constituency, the re-election constituency, the primary constituency and the personal constituency. The geographic constituency is the broadest among the four circles, and it is clearly defined by physical boundaries. Therefore in order to understand the behaviors and motivations of members of Congress, one must begin by studying the socio-political composition of their home districts. I argue that there are two mechanisms that can alter the spatial composition of voters over time. The first mechanism is selective migration. The second mechanism is place-varying generational replacement.

Selective Migration

America is a country of migrants. In 2005, the Current Population Survey estimated that about 12% of adults who were at least 18-year-old moved within the previous twelve months, and nearly 40% changed residence at least once within five years. Not to be confused with immigrants who migrated to the U.S. from another country, migrants can be any U.S. residents who change their place of residence. This latter group accounts for a larger fraction of residential movement in the country than immigrants. In my previous hypothetical example (Table 1.2), I show that the geographic polarization of partisan preferences can emerge when voters of certain characteristics cluster spatially. In that example, religious affiliation correlates with partisan preferences. When the religious voters segregate themselves from the non-religious voters, their spatial concentration makes the inland area more Republican in the second period.

It is important to distinguish 'selective migration' from the general concept of migration. By 'selective migration', I refer to a particular type of migration where the socio-demographic characteristics of migrants are correlated with their relocation decisions. In Chapter 3, I show that both residential mobility and residential choices are not random. Migrants who are native-born Caucasians, who are in the middle of the socio-economic spectrum (i.e. with moderate income and educational attainment) are more likely to move inland or out of California. Migrants who are at the bottom and at the top of the socio-economic spectrum are more likely to move to the pro-Democratic regions in the state. Over time, the accumulation of selective migration results in an increasingly skewed spatial distribution of voters of various socio-demographic characteristics.

In addition to altering the spatial composition of voters, selective migration can leave other economic, demographic and political impacts in the electoral districts.

Economic and Demographic Restructuring

From the Gold Rush to the recent flows of temporary workers to North Dakota[10], employment and economic opportunities have been prime motivations for migration. Selective migration can affect the economic, demographic and political compositions at both origins and destinations. Richer, more educated, higher-skilled and younger residents tend to have higher residential mobility. When regional economies revamp, the out-migration of these residents leaves their hometowns desolate as the remaining population becomes insufficient to support vibrant economic activities (Cushing 1999). Detroit, Cleveland, and many of the formerly industrial cities experience this kind of 'brain-drain' outflow when the once remunerative manufacturing and managerial jobs vanished. At the destinations, the concentration of finance, high-tech and major businesses attract skilled workers into metropolitan cities which in turn expands the pool of talented workers and attracts more business. The creation of the professional class simultaneously creates a demand for low-skilled and low-wage service workers (Kirn 1987). Regions with heavy in-migration may find their economies transformed as certain sectors, such as transportation and construction, grow rapidly (Pandit & Withers 1999). Immigrants provide a stable source of cheap labor for these lower paying jobs. Ethnic social networks funnel these newcomers into specialized economic activities where members of their ethnic group pass on 'insider jobs' (Waldinger 1996). Thus major cities typically feature an increasingly eclectic mix of high-skilled professionals and low-skilled and foreign born workers. This is why cities that have undergone rapid economic expansion tend to be more ethnically, culturally and politically diverse.

Florida (2002) observes that the growth in job opportunities in the cities is concentrated in the 'creative class' sector, and not the traditional blue-collar or managerial jobs. These occupations, such as high-tech engineers, web developers, artists and investment analysts tend to put a higher premium on originality and creativity. The characteristics of these workers can be represented by 3Ts--- talents, technology and tolerance. Florida finds that these creative class workers cherish cultural diversity and are usually more tolerant toward minorities or other socially marginalized groups, such as gays and atheists. They enjoy urban living not only because of the job opportunities, but because they enjoy the unique multicultural experiences the places offer. Hence residential choices reflect both economic standing as well as lifestyle preferences.

Migration can rapidly rewrite the spatial composition of a place through two types of out-migration. On the one hand, the influx of black residents may have caused the existing white residents to move out. On the other hand, poorer residents may be forced-out from their neighborhood reluctantly through gentrification. Selective migration has been facilitated by an increase in wage differentials in the last two decades. As income disparities grow, so does residential segregation by income. Sociologists have observed an intriguing phenomenon--- after the racial desegregation in the South, residential segregation in the country has actually gone up (Fischer & Hout 2006; Madden 2003a, 2003b). Income has become an increasingly powerful social sorting factor, signified by the growth in the number of socio-economic homogeneous gated communities. In what they refer to as 'American Apartheid', Massey & Denton (1993) argue that income segregation has profound social ramifications. The loss in population in inner cities reduces state and federal transfers. Furthermore, the fleeing of the

[10] 'A State with Plenty of Jobs but Few Places to Live.' New York Times. April 20, 2010.

economically productive middle class also deprives communities of tax dollars that can be used for schools, hospitals, police and other social services. Concentrated poverty correlates with high unemployment rates, high crime rates, poor school performance and low graduation rates. Such social deprivation results not only in low social mobility among the current residents, but also creates a perpetual underclass that lasts for generations. The increase in income inequality therefore takes on a spatial dimension --- the uneven spatial distribution of income classes translates to the uneven distribution of resources available in the communities.

Political Restructuring

Bishop (2008) observes that the reason why 'red counties' are gaining population faster than 'blue counties' is not because residents in the red counties have a higher birth rate. When births and deaths are calculated, he finds that natural increases account for only ten percent of the growing difference in the population between Republican and Democratic counties. Domestic migration accounts for the remaining ninety percent. According to his calculation, between 1990 and 2006, 13 million people moved from Democratic to Republican-dominated counties.

Studying the effect of migration on political restructuring can be challenging methodologically as very few panel data exist. Glaser & Gilens (1997) compare the racial attitudes of white migrants who relocated between the racially conservative South and the more liberal North. Racial attitudes are believed to be deeply ingrained in one's psychology and there are significant regional differences. They find some striking differences between migrants and non-migrants in both North-to-South and South-to-North directions. They find that those who chose to leave are different from those who remained. Those who left the South are considerably more liberal than all Southern whites. Similarly, those who migrated from the North to the South also tend to be more conservative than their Northern counterparts. Using various attitudinal measures, the authors report that migrants are quite different from other residents of their former region, but are quite comparable to the averages of their new environment.

Thad Brown (1981, 1988) has examined the political consequences of internal migration for citizens. He shows that internal migration has pronounced effects on citizens' political actions, loyalties and beliefs. Contrary to the conventional belief that early socialization immunizes migrants from political influences present in new surroundings, his evidence lends support to the life-long openness thesis. He classified ANES respondents according to whether they moved to 'congruent', 'mixed', or 'incongruent' political environments. Migrants neither exit nor enter areas on the basis of partisan concentration. Once they settle down, they do gradually adapt to local political environments. Among those who moved into incongruent environments, he argues that they partially adapt to the new political environment by becoming political independents. They modify some of their political beliefs in the direction of their new environment. Thus relative to non-migrants, these incongruent migrants tend to exhibit a low degree of attitude consistency in policy preferences. By contrast, migrants who are in congruent settings are likely to have their existing political attitudes reinforced.

Using ANES data, Gainsborough (2001) shows that living in a suburb is associated with distinctive political preferences --- residents of suburbs are significantly more likely to support the Republican Party and Republican congressional candidates. They are also more likely to

support cutting federal aid to cities. Her finding suggests that the rise of a distinctive suburban politics is a relatively recent phenomenon since the late 1980s. As the number of suburban congressional district increases, the spatial disparity in partisan preferences allows the Republican Party to enjoy an electoral advantage.

In sum, selective migration can widen the spatial disparity in neighborhood resources, which in turn can lead to social deprivation and inequality. It can also increase the spatial disparity in policy preferences and exert pressure on members of Congress to respond to more polarized demands. Moreover, as electoral districts are geographically-based, the uneven distribution of socio-demographic characteristics can tip the partisan balance in Congress.

Place-Varying Generational Replacement

Apart from selective migration, I argue that there is another mechanism that can alter spatial composition in the long run--- place-varying generational replacement. In my second hypothetical scenario (Table 1.2), instead of having religious voters migrate and residentially cluster inland, one can imagine another scenario in which younger voters coming of age inland are more likely to be registered Republican while their counterparts in coastal region are more likely to develop a Democratic affiliation. As older voters pass away in the second period, the spatial disparity in partisan preferences among the younger voters leads to geographic polarization.

When I discuss realignment in the above section, I suggest that realignment can happen when voters convert from one political party to another. Some political scientists question whether such conversion is sufficient to account for any dramatic shifts in macro-partisanship. The skepticism is based on the belief that an individual's partisan identification is an 'unmoved mover' (Campbell et al. 1960; Green et al. 1998). Once a person develops an attachment to a political party, the affiliation tends to be persistent throughout his/her life. Given such durability and stability, some researchers argue it is not feasible to convert a large number of existing voters to dramatically alter the mapping between social groups and their party affiliations.

In response to such skepticism, scholars argue that conversion can happen primarily among the new voters. Generational replacement theory, also known as mobilization theory, hypothesizes that electoral realignment happens mostly among those who were previously uninvolved in politics. As the younger cohorts and those who were previously marginalized did not have strong attachment to any political parties, these groups are more susceptible to mobilization. Because it takes at least eighteen years for newborns to enter the electorate, the impact of generational replacement on the electorate often takes decades to become fully realized.

Norpoth (1987) reports a 'generational fault line' separating those who were born before 1905 and after 1910. When the economy dipped into major depression in the early 1930s, the latter group broke away from the Republicans and delivered the core votes Roosevelt needed to implement his reform programs. This group remained more likely to identify with the Democratic Party relative to other cohorts. Another fault-line is found among those who came of age in the early 1980s. He finds no evidence that the Republican Party has managed to convert Democrats to any significant degree. Rather, the Republican gain came primarily from

the younger group (under 30-year-old in 1985). This generation has largely abandoned the predominantly Democratic identification of their parents and responded to the new conservative movement.

Abramson & Inglehart (1992) argue that generational replacement is the main contributor to the growth of post-materialism values in eight Western European countries. Miller (1992) attributes the decline in aggregate voting turnout in the U.S. between the 1950s and 1980s to the changes in the generational composition of the electorate. The post- New Deal generation (first presidential vote in 1968 or later) votes at a lower rate than the older generations. The generational disparity is driven by differences in party identification and social connectedness (measured by indicators such as home ownership and church attendance). Lyons & Alexander (2000) revisit this question with recent data. They also confirm Miller's earlier finding that generational differences account for significant decrease in turnout among American citizens.

The entrance of new voters not only alters the composition of the electorate, but also modifies aggregate political preferences. Some social movements and major shifts in norms are believed to be induced by generational replacement. For example, recent polls report generational differences in attitudes towards homosexuality and gay marriages. In 1977, less than 30% of registered voters in California approved legislation that would legalize same-sex marriage. The support rose to 42% in 2003 and 51% in 2008.[11] One of the main reasons for this change is that voters coming of age in the last two decades are usually more receptive towards gay marriage than the older electorate. In 2008, Californians who are between age 18 and 29 favored gay marriage by a greater than two-to-one margin (68% support, 25% against). Those who were in the age group between 30 and 39 approved of this arrangement by 24 percentage points, whereas voters who were 65 years or older disapprove it by a wide margin (55% to 36%). As the younger cohorts continue to make up a bigger share of the electorate, the expectation is that the majority opinion will tilt in favor of same sex marriage.

While such conventional generational replacement continues to take place, in Chapter 4, I show that there is an additional form of generational replacement that is spatially dependent. And it first began in 1980. That is, in addition to the *time* in which one comes of age, the *place* in which one comes of age also matters. In Chapter 5, I demonstrate how selective migration and place-varying generational replacement combined reshape the spatial composition across geographic regions.

Section 1.7 Causal Theory

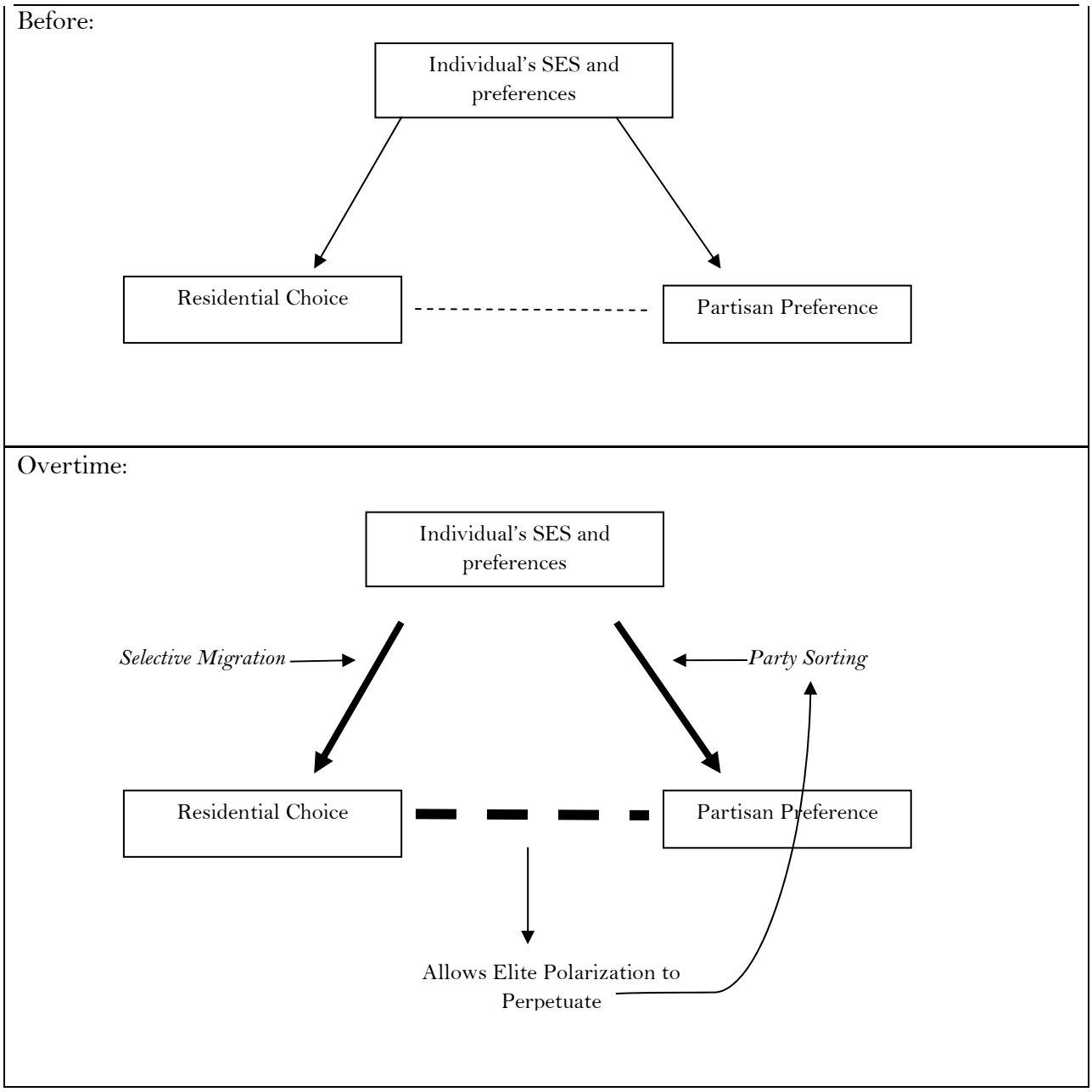
Theriault (2008) theorizes that political polarization has been brought about by three political processes. First, party sorting allows voters to sort themselves ideologically. Second, the creation of safe electoral districts results in more lopsided elections. Third, the increasingly polarized party activists in the nomination process leads to more ideologically extreme congressional candidates. While these processes sound very plausible, one critique is the lack of specific timing (McCarty 2009). Which mechanism took place first? Does geographic sorting make the creation of safe districts possible? If yes, then did selective migration occur prior to elite polarization? Do people 'vote with their feet' and migrate in response to changing politics?

[11] Field Poll Report, May 28, 2008.

Good social sciences begin with five Ws---who, what, when, where and why. The first two Ws are clear. The empirical puzzle is how can the country and Congress become more ideologically divided while the people composing them are not divided at all? The remaining three Ws, when, where and why, hold the answer to the puzzle.

Figure 1.3 graphically presents the causal mechanism proposed in this dissertation. The top diagram illustrates the basic components of the causal model. The bottom diagram explains how the dynamics among these components change over time. By studying various historic demographic datasets in Chapter 3, I show that selective migration long *preceded* party polarization. People of various socio-demographic backgrounds have different preferences for residential settlement. Over time, the accumulation of selective migration results in an increasingly skewed spatial distribution of voters of various socio-demographic characteristics. That is why the arrow that connects individual's socio-economic characteristics and residential choice is thicker in the bottom diagram.

Figure 1.3 Causal Mechanism



In Chapter 4, I examine the Field Poll Cumulative File and find strong evidence of party sorting that began in 1980. Party sorting happens as a response to the growing party polarization in Congress. It helps to clarify and strengthen the linkage between individual voters' socio-demographics and their partisan affiliation. This increase in correlation is again represented graphically by a thicker arrow in Figure 1.3.

Note that I use a dotted line, not an arrow, to represent the real but causally spurious association between residential choice and partisan preference. When party sorting began in 1980, it drew upon the pre-existing skewed spatial distribution of socio-demographic

characteristics and strengthened the ties between partisan preferences and socio-demographic characteristics. This led to an increasing correlation between place of residence and partisanship. At the same time, the partisan affiliation of new generations entering the electorate became more correlated with the partisan make-up of the geographic region in which they lived. Younger voters coming of age in pro-Democratic regions were more likely to be Democrats, and those in Republican regions were more likely to be Republicans. Consequently, geographic regions became more and more distinctive in their aggregate partisan preferences. As federal elections are geographically based, the increasingly skewed spatial distribution of partisan preferences helps to perpetuate party polarization.

There are several questions I need to address before I can establish this causal theory. First, there is strong and clear evidence for elite polarization but the current literature on divided America is weak. Our eyes can fool us by seeing a geographic pattern even when there is none. Is there empirical evidence on geographic polarization? If yes, *when* and *where* did geographic polarization of partisan preferences emerge? Do we observe clear geographic clusters immediately after realignment in the 1960s? Or do geographic clusters emerge only recently, for example, after the competitive 2000 presidential election?

Second, when did electoral behavior begin to change? Does the evidence lend support to the realignment or party sorting theory? Other than religiosity, are there other electoral cleavages that get strengthened over time?

Third, as Fiorina aptly observes, the presence of non-competitive districts can simply be the result of polarized choices forced by the elites onto their voters. The decline in competitive electoral districts does not necessarily indicate the presence of selective migration. Many researchers have pointed to the social bases for party realignment in the mid 1960s, yet the empirical evidence is slim. Did demographic changes occur *temporally* prior to elite polarization? Is migration alone sufficient to explain the emergence of geographic polarization?

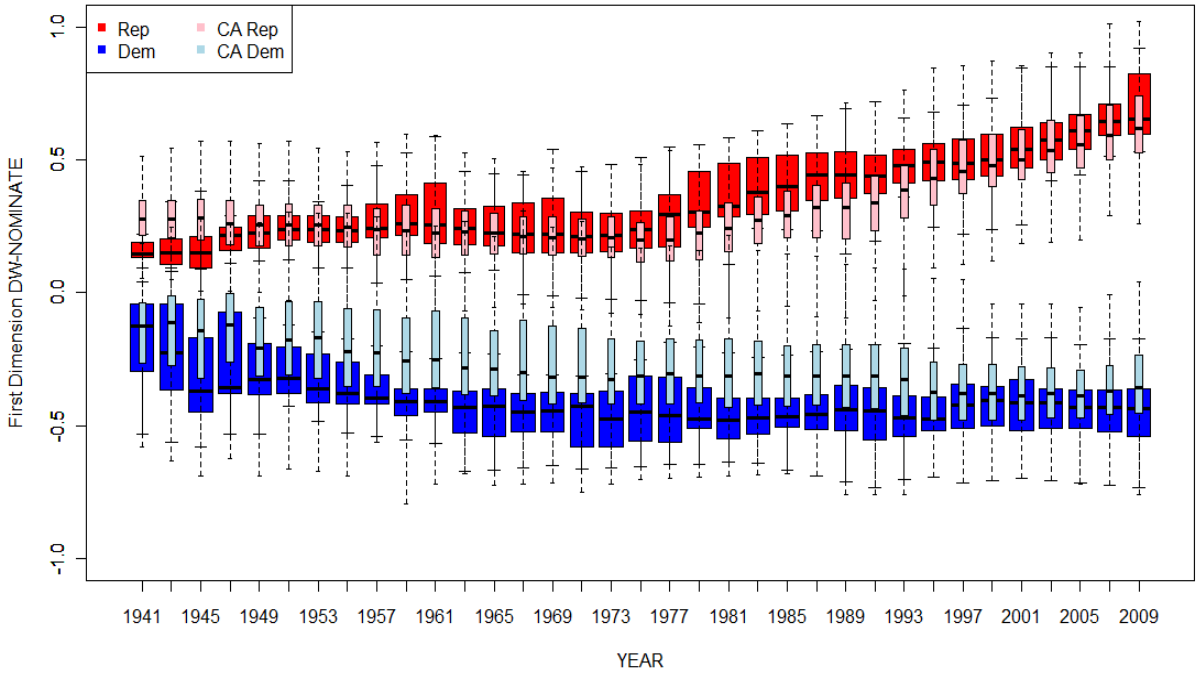
Forth, if significant selective migration has taken place, what are the motivations? Are moves driven by political consideration? Some people may speculate that the inland has turned more Republican due to the influx of religiously devout voters--- these voters, it is argued, vote with their feet by fleeing urban cities. Is that speculation correct? Can one observe an increase in the concentration of religious voters inland?

Lastly, how can the electoral behavioral and spatial compositional change explain the perpetuation of political and geographic polarization? Based on historic and current migration trends, can one predict whether the disequilibria will persist in the long run?

Section 1.8 California As Case Study

California is chosen as a case study for both theoretical and empirical reasons. First, the empirical conditions in the state mimic those at the national level. Figure 1.4 compares the distribution of DW-NOMINATE scores for all House members from the California delegation relative to those of all House members from 1941 to now. Note that Californian Congressional members do not deviate from the national norm. In fact, the over time pattern is almost identical to the national trend --- one can observe the ideology of members from the two parties diverge over time.

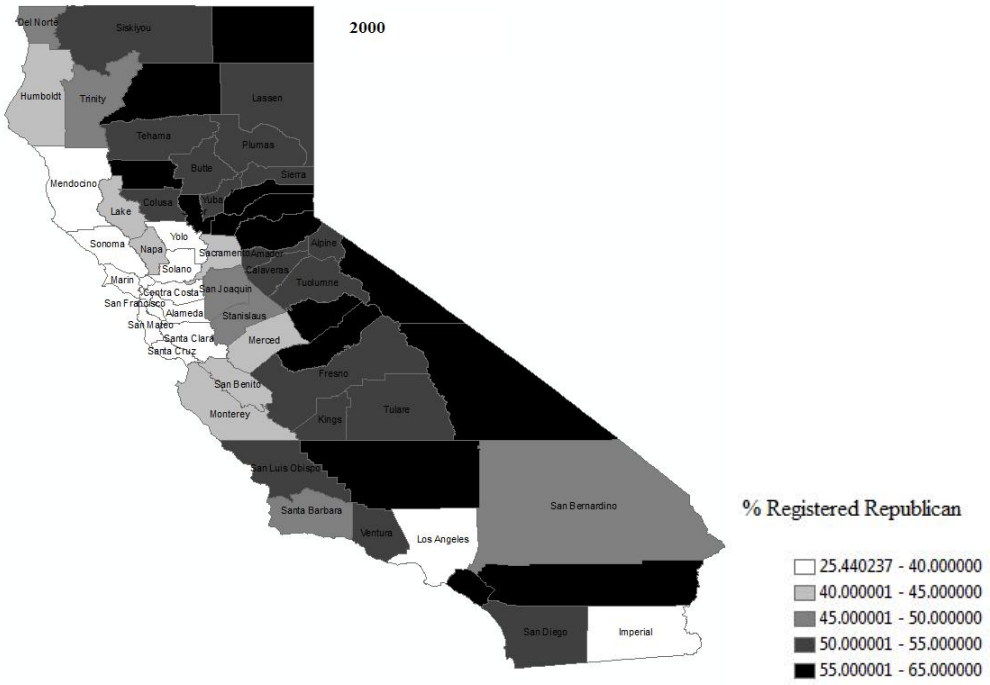
Figure 1.4 DW-NOMINATE Scores for House of Representatives, National vs. California Delegates



Data: Carroll et al. DW-NOMINATE project

While California has been a steady vote generator for the Democratic Party in recent presidential elections, the state is far from being politically homogeneous. Many analysts have observed that the pattern and extent of the inland-coastal divide in California rivals that at the national scale (Douzet & Miller 2008; Hui 2008; Kousser 2009). Figure 1.5 plots the percentage of two-party registrants who registered with the Republican Party in 2000. The coastal counties, especially those in the Bay Area, tend to a have higher average income than inland counties. These counties are also more likely to support the Democratic Party. This regional division is also apparent for the results of many ballot initiatives, such as Proposition 8 which attempted to ban same-sex marriages in California in 2008. Marin County opposed the initiative by a 3-to-1 margin (75% No, 25% Yes), whereas Fresno County supported it with a 70%-30% split.

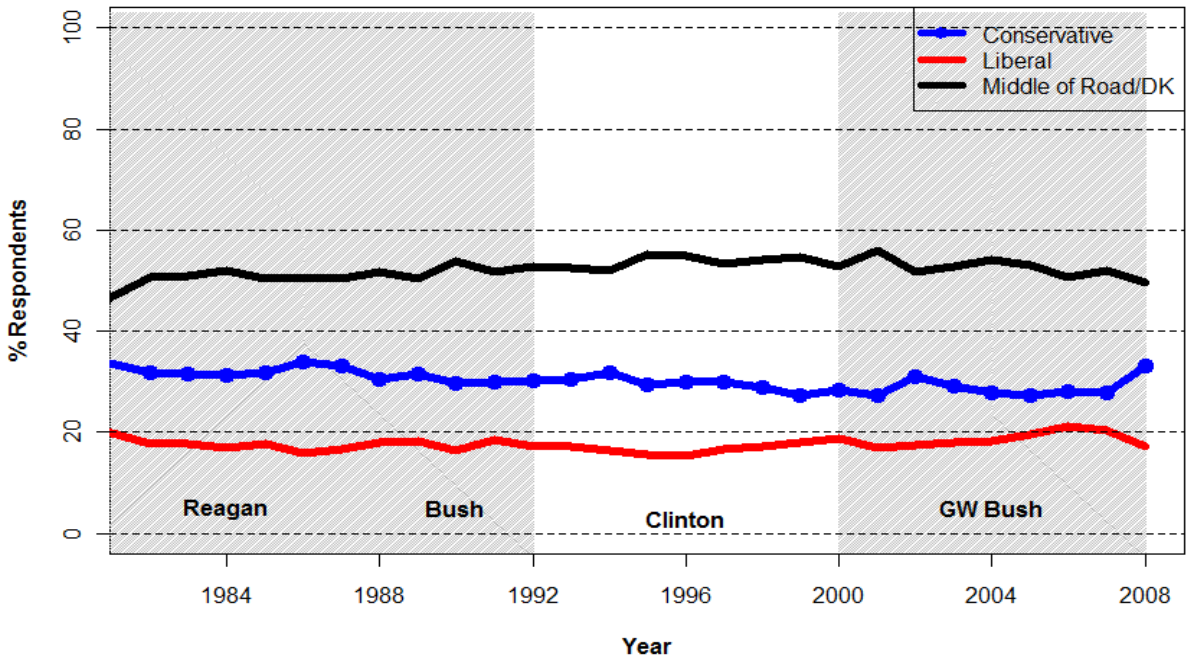
Figure 1.5 Percentage of Two-Party Republican Registration in 2000



Data: CA Secretary of State Registration Records

These two Figures offer preliminary evidence on elite and geographic polarization. What is intriguing is that beneath these polarizing trends, California voters are not divided at all. The Field Poll has consistently surveyed public opinion in the Golden State. Although it has questions tapping into the ideological preferences of the respondents since the late 1950s, the question wording changes significantly over time such that it is difficult to compare questions asked in different time periods. From1982 onward, the Field Poll consistently adopted the question, 'Generally speaking, in politics do you consider yourself as conservative, liberal, middle of the road, or don't you think of yourself in these terms?' I combine those who answered 'middle of the road', 'don't think in these terms' and 'don't know' into one category. Since some earlier Field Polls sampled adults instead of only registered voters, I only include registered voters to make the samples comparable over time. Figure 1.6 plots the percentage of respondents when identified themselves as 'liberal', 'conservative' and in the middle. The result echoes that reported by Fiorina (2005) using national data. Except for slight sampling fluctuations, the three trends are largely stable. Nearly half of the respondents consider themselves in the middle of the road. There is no evidence that the California electorate has become more ideologically extreme in either the conservative or liberal direction.

Figure 1.6 Distribution of Ideology Among Respondents 1982-2008.



Data: Field Poll cumulative file

The second reason for using California as a case study is a theoretical one. As discussed above, scholars have argued that the Southern realignment following the Civil Rights Movement in the 1960s marked the onset of elite polarization. The enfranchisement and empowerment of African American voters are believed to be the main catalysts for political changes. Realignment can either be brought upon by generational replacement or changes in electoral behavior among the electorate. In terms of the timing of events, Southern electoral realignment completely overlapped with the onset of elite polarization. That temporal overlapping creates a chicken-and-egg dilemma --- which came first? Did voters respond to changes in elites' behaviors? Or did elites respond to changes in the demographic composition of their constituents?

The California case offers a solution to this endogeneity problem. Figure 1.4 shows that the ideological positions of the Californian delegates track with that of the national parties. Yet the state has a relatively small black population and did not experience a drastic increase in the size of the black electorate. Prior to 1950, less than 2% of the state's population was black. In 1950, the percentage doubled to 4.4%. Between 1970 and 2000, African Americans comprised about 7% to 8% of the state's population.[12]Undoubtedly the Civil Rights Movement in the 1960s had a large political impact on California. It, however, had a smaller impact on the *composition* of the Californian electorate than for many Southern states. Therefore the elite polarization at the

[12] The figures were obtained from the "Historical Census Statistics on Population Totals by Race", published by the Census Bureau.

national level can be considered an exogenous shock that allows for separating the spatial compositional changes from elite polarization.

The third reason for using California as a case study is related to data availability. Empirically, studies on political polarization often employ historic county-level presidential electoral outcomes or national opinion polls.[13] There are several limitations with the national data. First, the American National Election Studies (ANES) and the General Social Surveys (GSS) are the most commonly employed datasets. These datasets are conducted every other year (prior to 1994, the GSS was usually conducted once a year). The sample sizes are relatively small and are not representative at the state level. Any analyses of social groups at the sub-national level are rendered unreliable. Second, presidential elections tend to be candidate-centered. Any measures of underlying political attitudes and partisan preferences obtained during an election cycle may have been affected by the intense presidential political campaign itself. Bill Clinton's campaign in 1992 is a good example. His hometown advantage enabled him to carry several Southern states, including Arkansas. His victory in the South, however, reflects a deviation rather than a real electoral realignment in political geography.

The substantial variation within California can be viewed as a microcosm of the variation at the national level. These insights generated from the California example can be easily applied to study the national pattern. Furthermore, there are many invaluable time-series datasets that are simply not available at the national level. To disentangle the reasons for geographic polarization, I have assembled an array of datasets on California. These datasets can be classified into two types by the unit of analysis, either at the individual level or county level. By reconciling the micro (individual) and macro (county) level data, I can conduct more comprehensive analyses. The main dataset for individual level information comes from the Field Poll cumulative file 1956-2008. Unlike ANES or GSS, the Field Poll conducts at least four to six polls per year. The cumulative file tallies to approximately 300,000 cases. Because of the long time series and dense coverage, I can isolate short term fluctuations from long term shifts in public opinion and partisan preferences. I supplement the Field Poll surveys with polls conducted by the Public Policy Institute of California between 1998 and 2008 as the latter contain more attitudinal questions. Apart from public opinion data, I utilize the Current Population Survey (March Supplement) from 1963 to 2008 to document the extent and pattern of mobility among Californians.

The county level datasets come from official printed and electronic records published by the California Secretary of State, the Statewide Database, the Census Bureau, the Bureau of Economic Data Analysis, the Association of Religion Data Archive, Internal Revenue Service (IRS) and the California Department of Finance Demographic (DOF) Research Unit. Appendix I offers a detailed discussion of the sources and how these datasets have been cleaned to ensure they match up seamlessly. To take advantage of the long time-series and frequent measures, I will use party registration (or party affiliation, a concept to be explained in the following chapter) instead of presidential vote choice as the main dependent variable. This measure is a superior measure to capture changes in the latent partisan preferences over time.[14]

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[13] See, for example, Gelman et al. 2008; McCarty 2008; Ansolabehere et al. 2006.

[14] Since only voters who move and re-register update their records, the party registration information remains the same for those who do not move. One concern may be whether the voter registration data accurately reflects the changes in the partisan preferences in the electorate. There are two ways to address this concern. First, in Chapter

Section 1.9 Organization of Chapters

Chapter 2 picks up on the discussion of 'divided country'. I argue that the term 'divided country' is too vague for vigorous empirical inquiry. I define a new and more specific which I call 'geographic polarization of partisan preferences' (or shortened as 'geographic polarization'). I propose a theoretical framework to conceptualize and empirically measure this social phenomenon. Using public opinion data and official voter registration records, I pin down the spatial-temporal evolution of the geographic polarization of partisan preferences. Contrary to the speculation that geographic clustering might have taken place before the national parties pulled apart in the 1960s, my data show that there was hardly any evidence of a regional pattern in California prior to 1980. Spatial clustering of partisan preferences began during the Reagan administration and matured under the Clinton era. The spatial pattern which emerged during the 1980s remains stable and persistent. By 2000, Bay Area counties formed an unambiguous cluster that leaned toward the Democratic Party. Los Angeles County stood diametrically opposed to its adjacent neighbors in partisan preferences. The inland counties have consistently grown toward favoring the Republican Party.

What gave rise to the geographic polarization in 1980? As discussed previously, there are two potential mechanisms, namely electoral behavioral and spatial composition change.

One of the major critiques of the current literature is that researchers have claimed demographic shifts occurred *prior* to elite polarization and subsequently *led* to greater delegation to leaders, but there is very little evidence to back up the claim (McCarty 2008). Using Census and Department of Finance demographic data, I examine the patterns of selective migration in Chapter 3. Economic concerns, housing considerations and family reasons are the primary causes for migration. The economic boom and drop in interest rates in the early 1980s led to an expansion of new residential communities inland. These residential moves produce major political consequences as migrants' socio-demographic characteristics are tied to both their political preferences and their residential choices. It is <u>not</u> true that the inland voters have grown more religious than their coastal counterparts. The widening regional disparity is found mainly in educational attainment, income and ethnic composition. Through examining IRS county-to-county data, I find residential moves tend to be geographically-incremental. There is strong spatial connectivity among residents in adjacent counties. Furthermore, moves also tend to be 'politically-incremental'. It is unlikely one would move from a predominantly Republican neighborhood to a predominantly Democratic neighborhood. Rather, there is a certain extent of 'political stickiness' in relocation pattern where the partisan composition of the origin and destination tends to be similar.

Chapter 4 explores electoral behavioral change over time. Using Field Poll data, I examine how various socio-demographic characteristics are linked to partisan preferences. There is no evidence of massive electoral realignment or abrupt behavioral changes. The evidence points to increasing party sorting which primarily responds to elite polarization. Other than religious affiliation, I find that the linkages between other demographic characteristics such as education,

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3, I show that there is substantial residential movement. The voter registration data do largely reflect changes in the demographic and partisan composition of the electorate. Second, I will also employ public opinion data to validate my findings.

occupation, marital status and gender and partisan preference also strengthened since 1980. In addition, my findings identify significant increases in the 'place effect' over time--- other characteristics being held equal, young voters coming of age in a pro-Democratic region are systematically more likely to affiliate with the Democratic Party than those growing up in a pro-Republican region.

Chapter 5 ties the findings in the previous chapters together to explain how California can appear to be more polarized even when its residents are not. By tracing voter registration records over time, I find that geographic polarization of partisan preferences is largely driven by a) the influx of migrants who are substantially more partisan (either more pro-Democratic or pro-Republican) than existing residents; and b) replacement of older cohorts by younger cohorts who are more partisan. Combined with the steady flow of selective migration, voters' demographic characteristics become more strongly correlated with their place of residence and their partisan preferences. Behavioral changes combined with compositional changes help to perpetuate a divided Congress and divided country. Given the widening disparity in regional demographic composition, together with frequent interactions and mixing of residents, I speculate that the existing spatial divergence is likely to persist in the long run.

Chapter 4
Party Sorting, Place Varying Generational Replacement & Electoral Behavioral Changes

In Chapter 1, I laid out two potential scenarios for how geographic polarization can occur. The first one is caused by spatial compositional change, where voters of certain socio-demographic characteristics cluster geographically. In the second scenario, the spatial composition of voters remains the same. The only difference is electoral behavioral change, where the correlation between voters' socio-demographic characteristics strengthened. Chapter 3 examines the extent of residential mobility and documents spatial compositional changes over time. The goal of this Chapter is to examine electoral behavior changes at the individual-level. Using the Field Poll cumulative file, I will explore how various socio-demographic characteristics are related to partisan preferences, and whether the relationship changed over time.

Section 4.1 Evidence of Party Sorting

The Field Poll is a commercial public opinion poll. Unlike the ANES which stresses over time continuity and comparability, the Field Poll focuses on covering a broad range of 'hot' current political issues. In the mid 1970s, the Field Poll began substituting expensive in-person interviews with telephone interview. The transition was completed in 1980. The advantage of the telephone interview is that more polls can be conducted within a year. The trade-off is that the interview time is severely limited. Often key demographic variables, such as marital status or union membership, are left out with preference for questions tapping current events. Between 1973 and 1982, the marital status question sporadically showed up in surveys. The question on union membership was not on any surveys from 1989 to 1997. Furthermore, sometimes question wording and response categories vary significantly across polls. For example, prior to 1970, there are only three race categories---white, black and other. After 1971, Latino, Asian (initially referred to as 'Oriental') and other minority groups are gradually introduced into the survey. In order to select a subset of polls with the fewest missing variables, I limit my analyses to polls conducted from 1971 onwards.

As discussed in Chapter 1, some earlier polls only asked party identification but not party registration. Instead of excluding those polls, I created an outcome variable (Y) by combining both pieces of information. Party registration of a respondent is used whenever it is available. If not, I used the respondent's party identification as a substitute. I only examined two-party registration. The hybrid outcome variable is what I refer to as 'party affiliation' (1 if either registered or identified as a Republican; 0 if registered or identified as a Democrat).

Since I am interested in detecting changes in electoral behaviors over time, instead of pooling years of surveys, I ran the following logit model separately for each year:

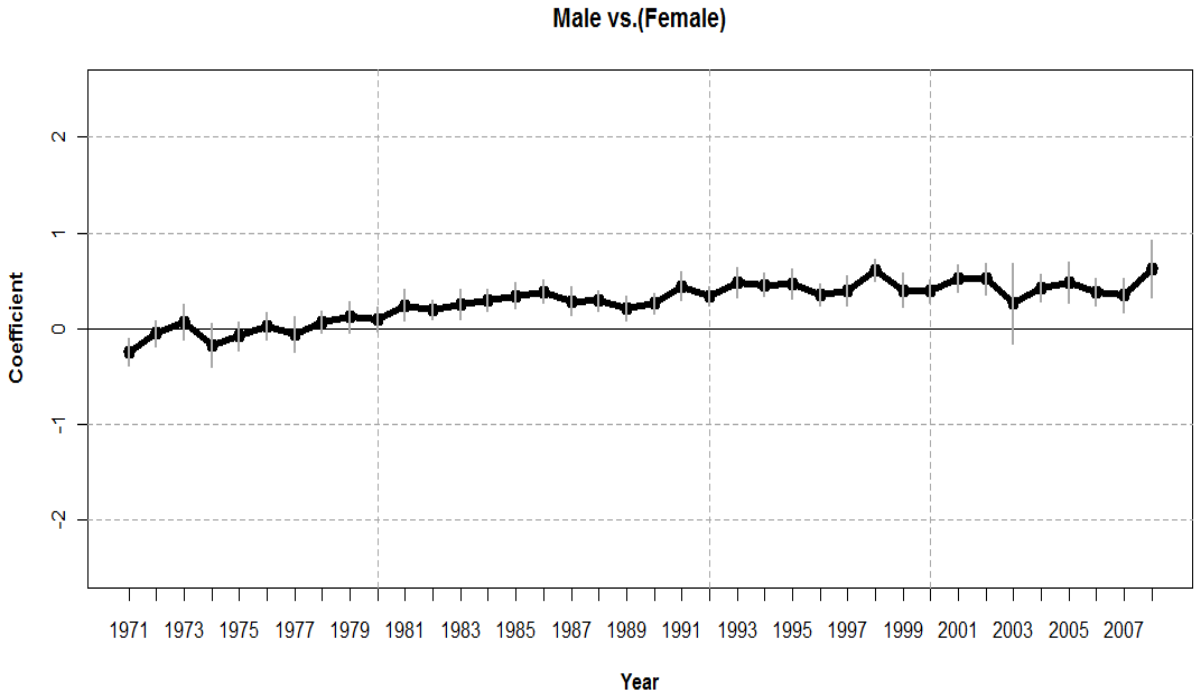
$$Y = \alpha_0 + \alpha_1 \text{Male} + \alpha_2 \text{Religion} + \alpha_3 \text{Education} + \alpha_4 \text{Income} + \alpha_5 \text{Race} + \alpha_6 \text{Age} + \alpha_7 \text{Region}$$

Male is in the form of a binary variable (1=male, 0=female). As for religious affiliation, I created dummies for Protestant, Catholic and Jewish. The baseline consists of respondents who say they do not have any religious preference or are affiliated with the 'other group'. For education, the baseline category is those who either did not finish or only graduated from high school. The other two dummies represent the respondents who have some college education, and those who graduated from college or have advanced degree(s). I use income quintile and create three dummies for the 2nd , 3rd and 4th (richest) quintile respectively. Race is represented by four categories, non-Hispanic blacks or others (baseline), non-Hispanic whites, non-Hispanic Asians and Hispanics. Lastly, I divide the respondents into five age groups, with the oldest group as the reference category.

Figures 4.1 to 4.7 plot the multivariate logit coefficients by year. The dots represent the logit coefficients, and the tails indicate the 95% confidence interval. Positive coefficients imply that having the characteristic makes the respondent more likely to affiliate with the Republican Party; negative coefficients suggest the respondent is more likely to affiliate with the Democrat Party. If one end of a tail touches the horizontal line at zero, it indicates the variable is not statistically distinguishable from the baseline category in that particular year.

Although there is little gender disparity in the level of electoral participation (Lien 1998; Bennett & Bennett 1992), men and women express different partisan preferences as shown in Figure 4.1. What contributed to the rise of the gender gap in vote choices? There are several theories. Economic theories argue that the increasing labor force participation by women directly contributed to the gap. Because women are more vulnerable in the labor force, they are also more likely to depend on public services for childcare and other family support (Box-Steffensmeier et al. 2004; Manza & Brooks 1998). The attitudinal theories attest that feminist teaching, as well as their liberal attitudes towards social service spending also orients women towards the Democratic Party (Manza & Brooks 1998). Figure 4.1 shows the logit coefficients for being male. Prior to 1980, the coefficients were around zero, indicating virtually no difference in partisan preferences between males and females. After 1980, it becomes clear that the coefficients are positive and statistically significant at 0.05 level. That is, men have grown more pro-Republican. The trend continues over time. Other studies at the national level also report a persistent gender gap that first emerged around 1980 (Manza & Brooks 1998; Box-Steffensmeier et at. 2004).

Figure 4.1 Logit Regression Coefficients for Male, 1971-2008



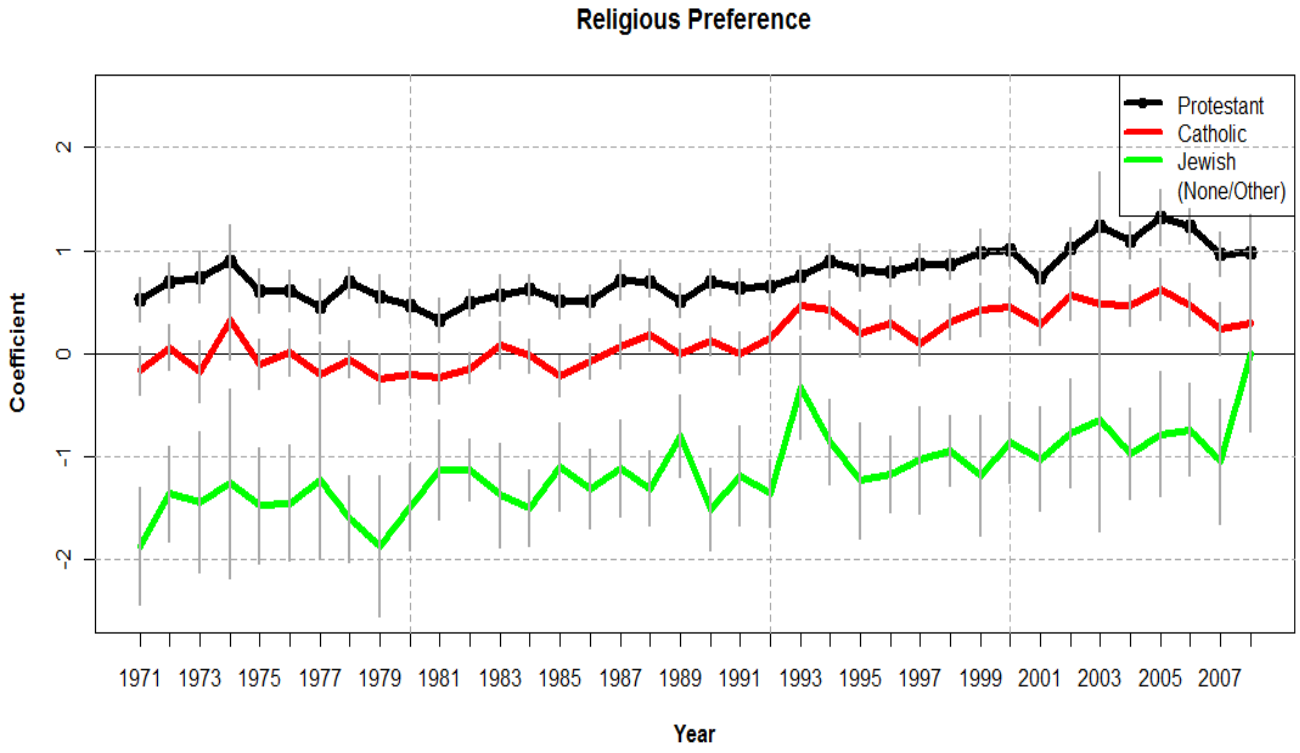
Data: Field Poll Cumulative File

Turning to religious affiliation, the literature has conflicting accounts on when the partisan preferences of various religious groups changed. Wilcox (1988) notes that a sizable bloc of Evangelicals began moving towards the political left endorsing McGovern. Olson & Green (2006), however, report that there was no sustained religion gap in presidential voting prior to 1992. Nixon and Regan received larger support from regular church attendees but the worship attendance gap remained relatively small. They argue that Reagan's presidency might have laid the seeds for the religion gap but the seeds took a decade to mature. George H. W. Bush was the first Republican presidential candidate to enjoy the overwhelming support from regular church attendees. By 2004, his son enjoyed an even larger advantage. The difference between the George W. Bush vote among the most and least frequent worship attendees was fully 28 percent points.

In terms of coalition building, Kellstedt et al. (1994) find that Evangelical Protestants solidified their affiliation with the Republican Party and formed a core voting bloc in the Party. Brooks (2002) explains that the shift is driven by family values. Evangelical Protestants who attend church regularly worry the most about declining family values in the society. They attribute divorce, single-parent families and other social problems to the breakdown of family. Mainline Protestants, typically in the middle of the political spectrum, deserted the Republican Party in support of Clinton and Perot. A similar pro-Clinton voting pattern was found among Catholics (Kellstedt et al. 1994). Stanley & Niemi (2006) find that the Republican Party's support came from a combination of Southern whites, a strong religious base of Catholics, regular church attendees and Protestant fundamentalists. For Democrats, the changes to the Party are defined by the loss of certain groups, including Catholics, union households and regular church attendees. The loss was compensated by the gain among women and Hispanic voters.

Unfortunately the Field Poll does not often have questions on frequency of church attendance or measures on one's strength of religious conviction. But it does have a regular question on religious affiliation. The California findings are comparable to those at the national level. Figure 4.2 shows that Protestant and Catholic have increasingly been drawn to the Republican Party, relative to the baseline group (those who have no religious preference or affiliate with other religion). The green trend shows the coefficients for Jewish people. The confidence intervals tend to be wider than the other two groups due to the small number of respondents who identified as Jewish in each survey. Note that since the line is always below the zero horizontal line, implying that the group always prefers the Democratic Party.

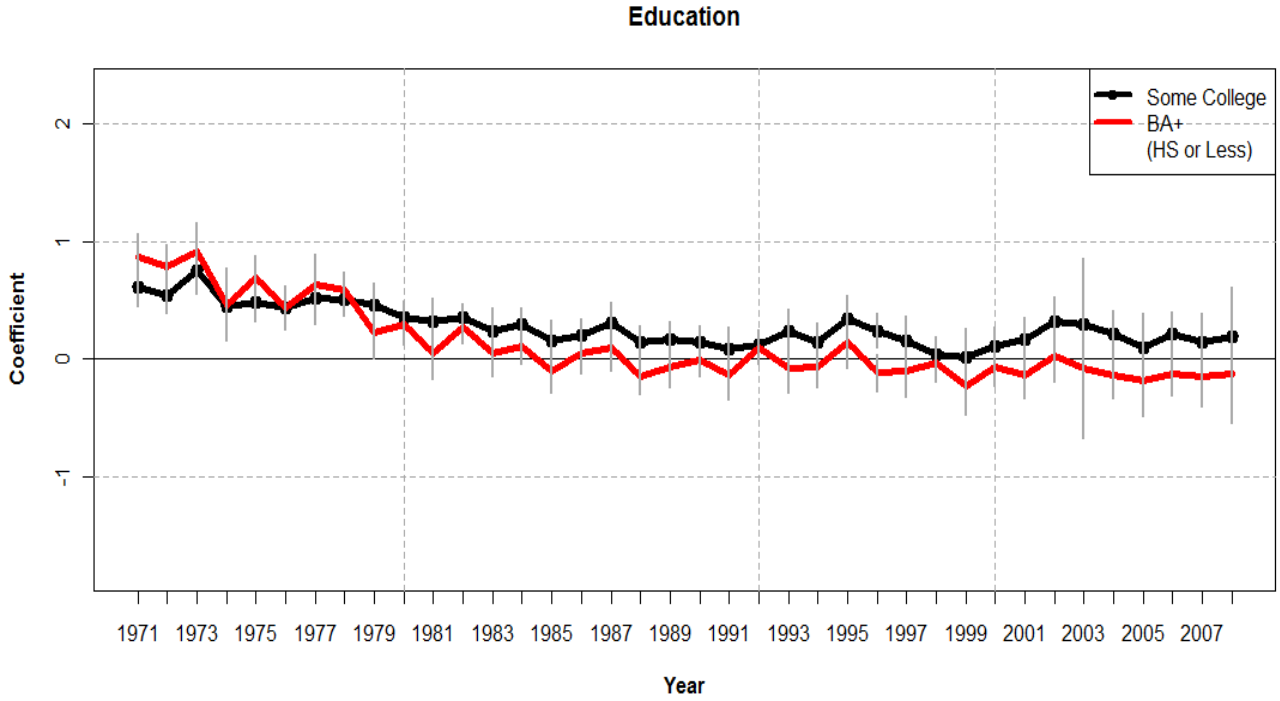
Figure 4.2 Logit Regression Coefficients for Religious Groups, 1971-2008



Data: Field Poll Cumulative File

Figure 4.3 plots the coefficients for the two educational groups, those who have some college education and those with at least a bachelor degree. In the early 1970s, these two groups were significantly more likely to affiliate with the Republican Party than the baseline group (those who had at most high school education). The trend has diminished, if not reversed, after the 1980s. Holding other demographic factors constant, it appears that those who have completed college or hold higher degree(s) are slightly more likely to turn to the Democratic Party.

Figure 4.3 Logit Regression Coefficients for Education, 1971-2008

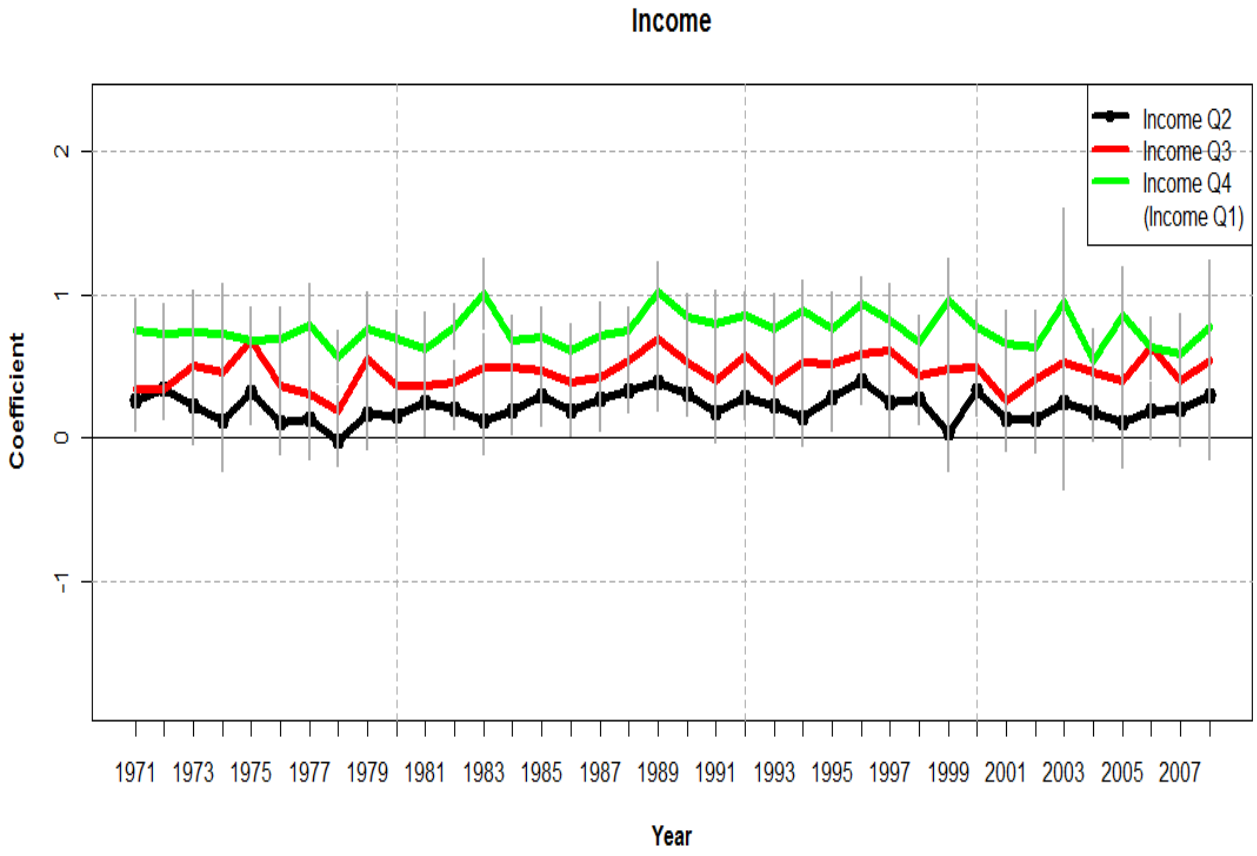


Data: Field Poll Cumulative File

Figure 4.4 shows the coefficients for the three income groups. Consistently with Gelman et al. (2007, 2008), at the individual level, higher income is associated with a higher likelihood of Republican Party affiliation. Some national studies find growing disparity across income groups over time (McCarty et al. 2006; Fiorina 2005). But this finding is not replicated in Figure 4.4. The discrepancy perhaps is driven by the creation of income quintiles in the Field Poll cumulative file. Not only did the number of income categories available fluctuate across polls, the range of dollar value captured by each category is also incompatible. The only way to make income responses consistent over time is to create equal size income quintile groups.[15] The bottom line is that class voting is not dead. Income remains a powerful predictor of partisan preferences.

[15] Refer to the official Field Poll cumulative file codebook for a thorough discussion on the creation of income quintiles and quarters. The codebook can be obtained from the website of UCDATA at UC Berkeley.

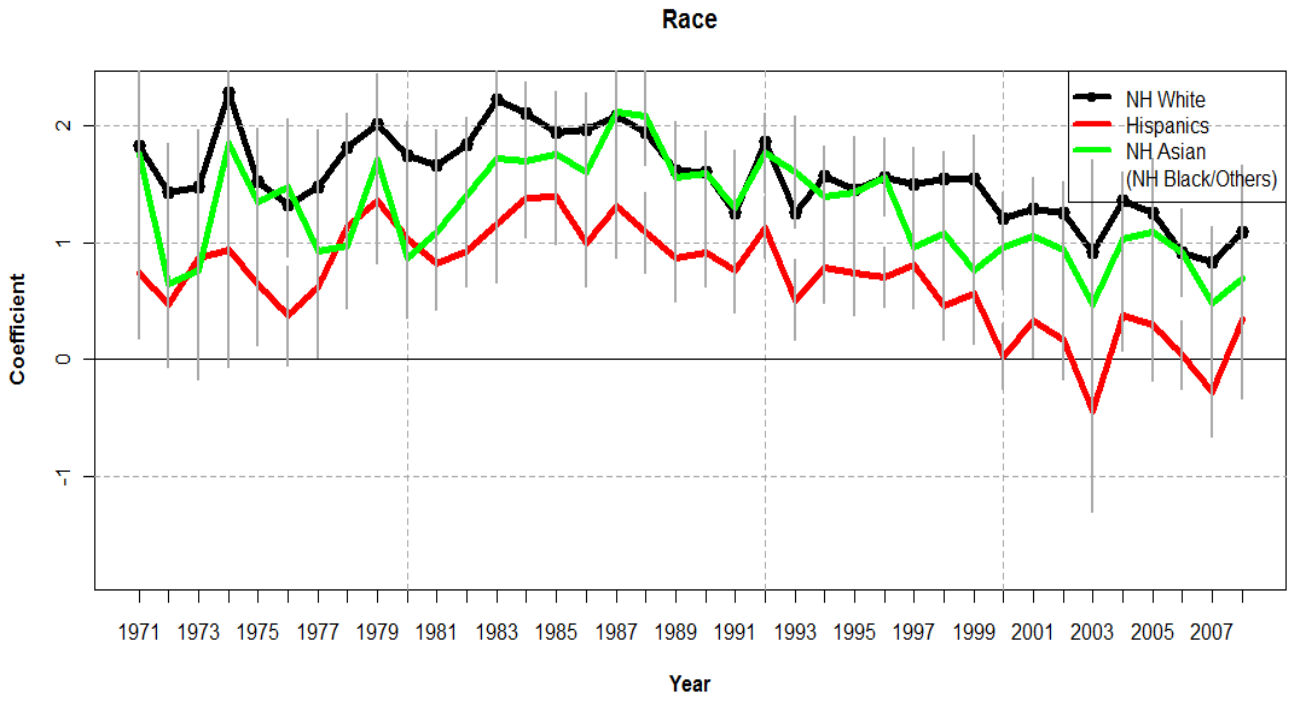
Figure 4.4 Logit Regression Coefficients for Income Groups, 1971-2008



Data: Field Poll Cumulative File

Brooks & Manza (1997) examine various social cleavages in the U.S. presidential elections between 1960 and 1992. They find no evidence of diminishing class cleavages. In fact, they report that the race cleavage has increased considerably since 1960 and the gender cleavage increased modestly in this period. My findings are comparable to their conclusion. The Field Poll began interviews in Spanish in 1992. The switch does not appear to have markedly influenced the results. Non-Hispanic blacks comprise of the baseline group in Figure 4.5. It should be of no surprise that this group is the most pro-Democratic Party while non-Hispanic whites are more likely to affiliate with the Republican Party. Although race remains the strongest predictor of partisan preference at the individual level, the racial disparity actually diminishes over time. By 2000, Hispanics and non-Hispanic blacks are affiliating with the Republican Party at similar rate.

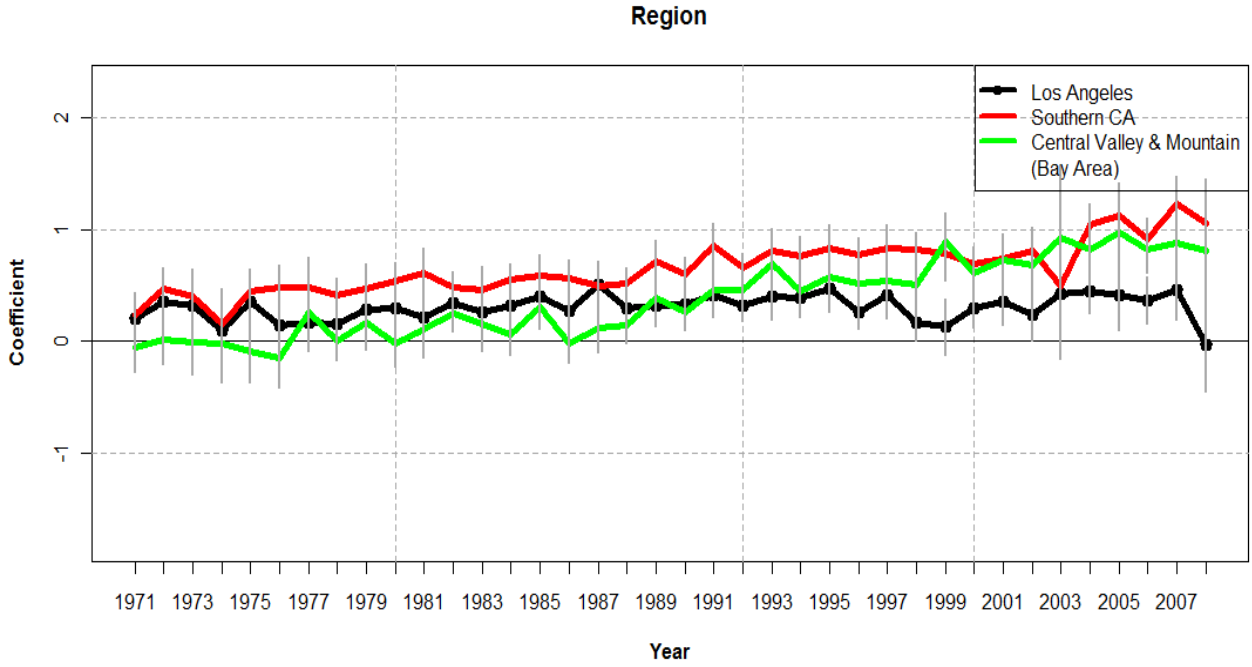
Figure 4.5 Logit Regression Coefficients for Racial/Ethnic Groups, 1971-2008



Data: Field Poll Cumulative File

Figure 4.6 reports the coefficients for the geographic regions. Echoing the results found in Chapter 2, holding other socio-demographic characteristics constant, respondents in Southern California (excluding Los Angeles County) and inland counties have grown more pro-Republican than respondents in the Bay Area (baseline category).

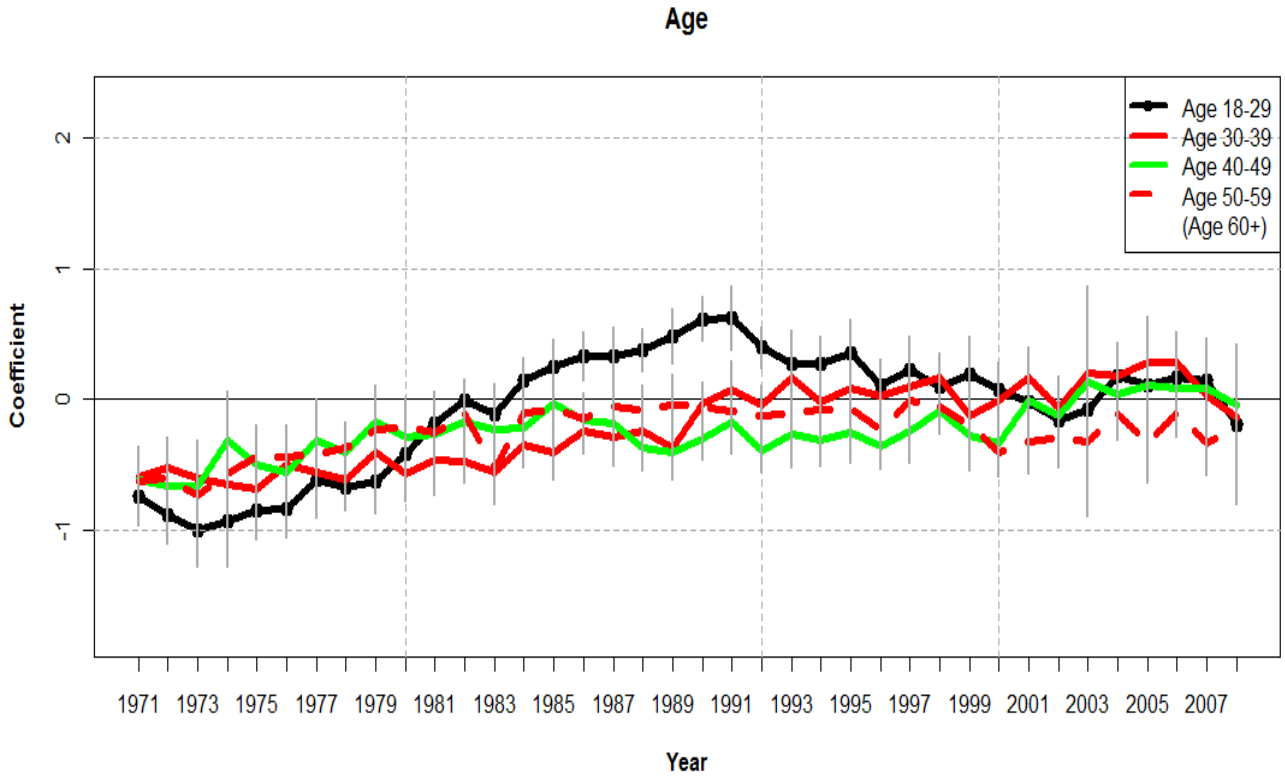
Figure 4.6 Logit Regression Coefficients for Regions, 1971-2008



Data: Field Poll Cumulative File

Figure 4.7 plots the coefficients for four age groups. I save this discussion to the last because the findings are the most intriguing. Respondents who are 60-year-old or above form the baseline category. Prior to 1980, age appears to be inversely related to the likelihood of affiliating with the Republican Party. The negative coefficients for the youngest group, age 18-29 (represented by the black solid line); indicate that this group was more drawn to the Democratic Party. However, the relationship is reversed after 1980. Consistent with the generational replacement theory, the youngest group responded favorably to the Reagan administration and became its strongest supporters. Between the mid 1980s and mid 1990s, this youngest group significantly deviated from other age groups in its pro-Republican leaning. The deviation gradually wore off after the mid 1990s. By 2000, the age differentials appear to have diminished.

Figure 4.7 Logit Regression Coefficients for Age Groups, 1971-2008



Data: Field Poll Cumulative File

Section 4.2 Spatially Dependent Generational Replacement

What can explain the "bulge" in Figure 4.7? Can it be an artifact of the Field Poll sample? In addition, is the pattern observed identical in every region in the state?

Before I proceed to investigate the age differentials in partisan preferences, I examine voter registration records obtained from the Statewide Database (SWDB). The SWDB datasets span from 1992 to 2008. For each election cycle, I obtained the voter registration file and the Statement of Vote file at the precinct level and aggregated the records at the county level (refer to Appendix I for more discussion of these datasets). Unlike the Field Poll samples, the voter registration files contain summary records for all registered voters. The dependent variable is the percentage of two-party voters who registered with the Republican Party (1=registered with the Republican Party; 0=Democratic Party).

Figure 4.8 show that cross-tabulation between age groups and party registration for four regions. I divided the registered voters into six age groups: age 18-24; age 25-34; age 35-44; age 45-54; age 55-64; age 65 or above. Each cell represents the percentage of registered voters in that age group who registered with the Republican Party. The color scale represents the variation in Republican registration, a light yellow color indicates that a low percentage of

voters registered as Republicans and dark red color indicates the opposite. Comparing the four diagrams, the SWDB data reveal an additional layer of complexity compared with Figure 4.7 ---- there is notable spatial variation. Younger cohorts in the Bay Area and Los Angeles County are less likely to register with the Republican Party, as indicated by the light yellow color. In addition to the spatial variation, the data also reveal variation by age and by year. Within the Bay Area and Los Angeles County, when comparing across age groups, it appears that the younger age groups are systematically more pro-Democratic than the older cohorts. This age contrast, though, is less pronounced in the other two regions. Nonetheless, by comparing across years, the election cycle in 2008 is associated with the highest number of Democratic registration across the board. Voters who are 34-year-old or younger were especially more receptive to Obama's get-out-the-vote campaign.

Figure 4.8 Republican Party Registration by Age Groups and Regions, 1992-2008

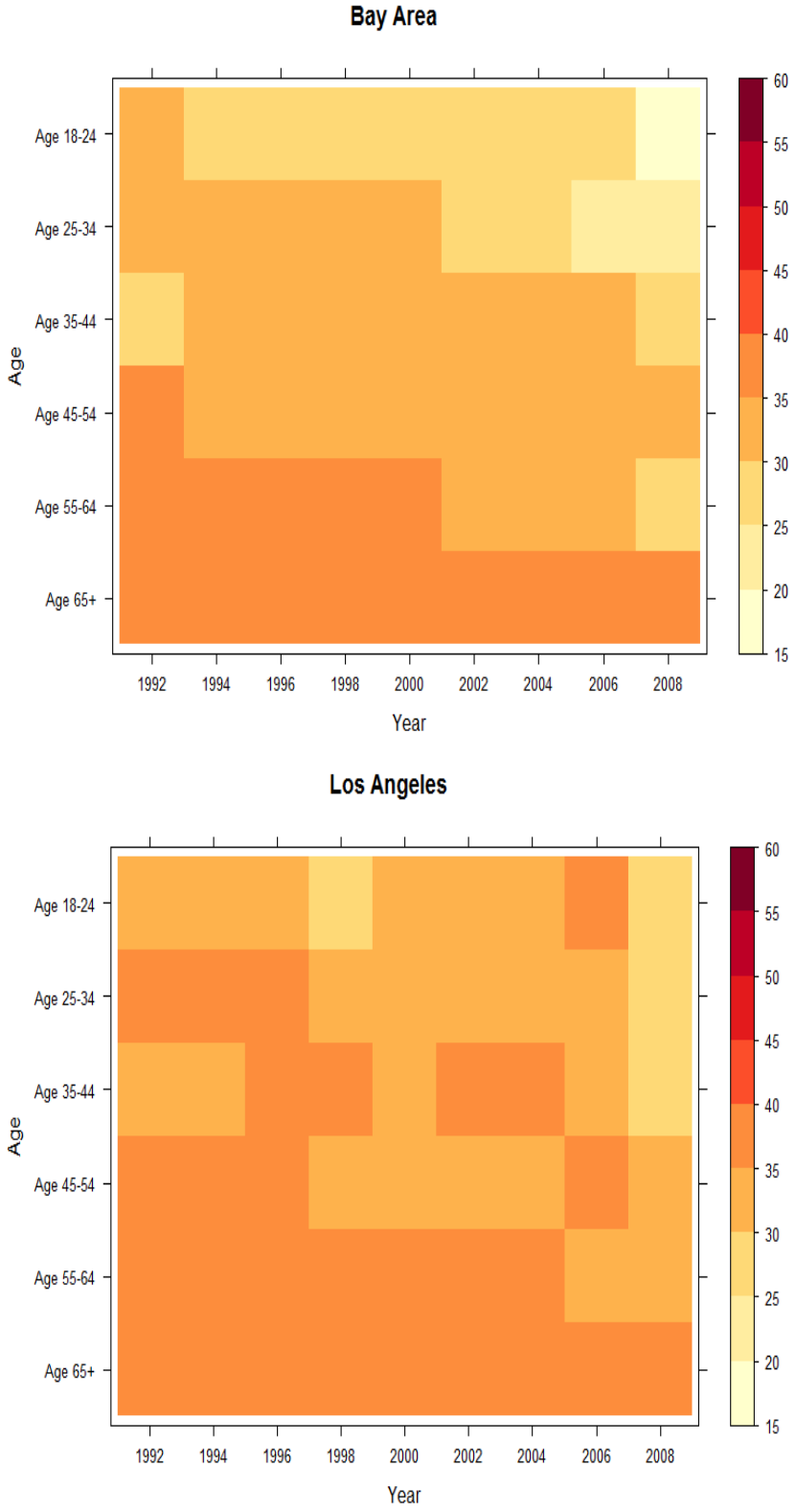
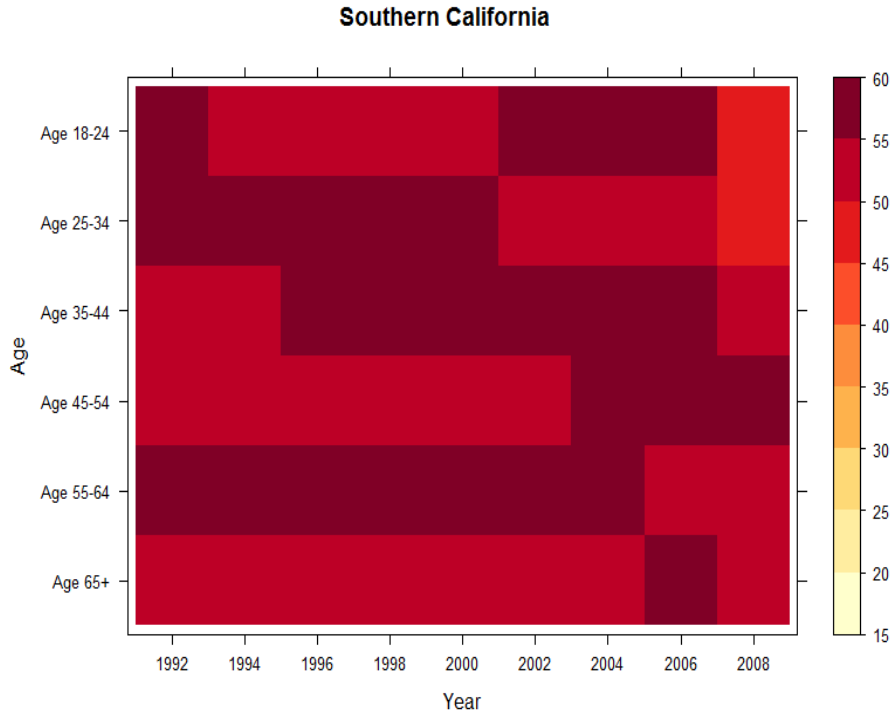
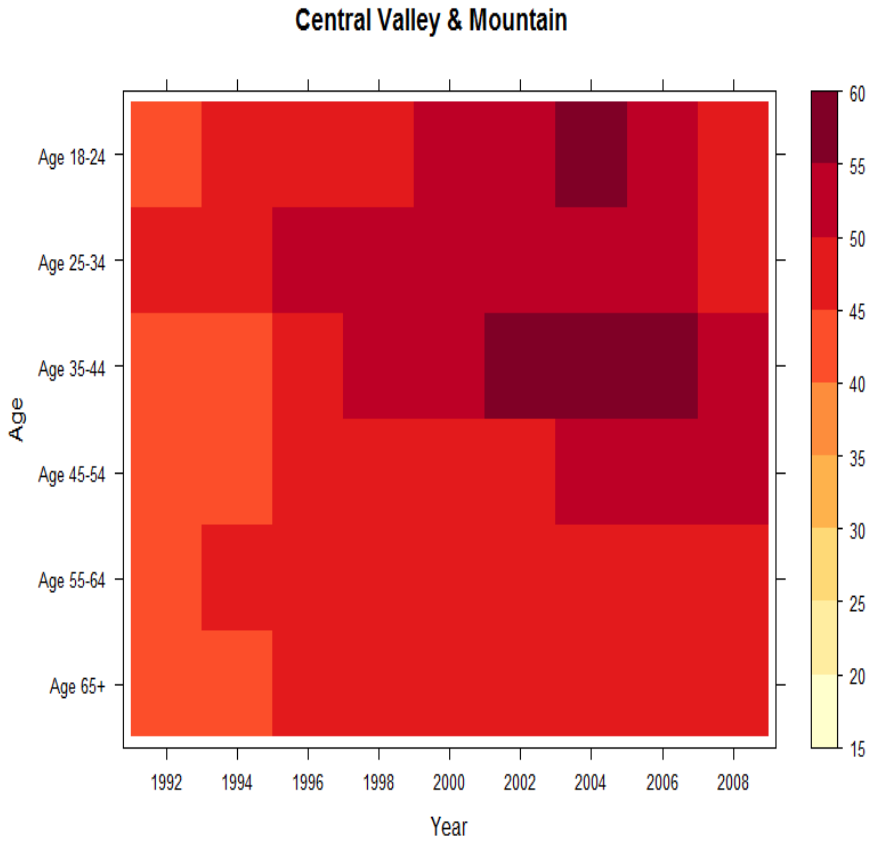


Figure 4.8 Republican Party Registration by Age Groups and Regions, 1992-2008





Data: Statewide Database Voter Registration Data

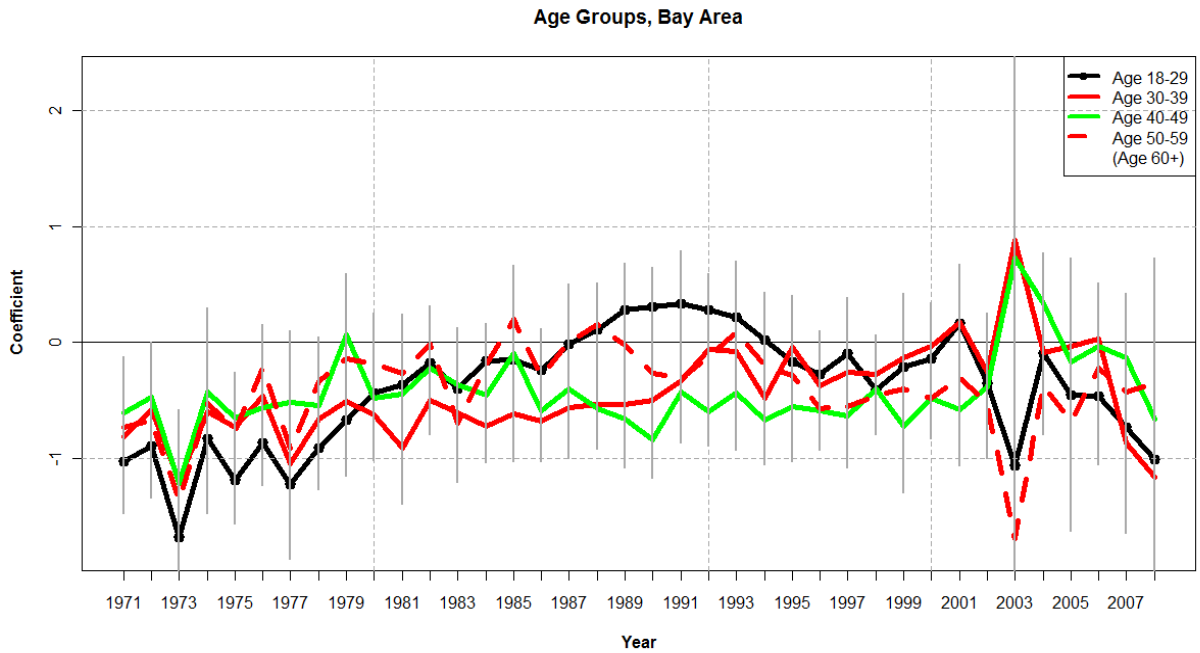
The SWDB data reveal significant spatial variation. I now return to the Field Poll data. To allow for spatial variation, I re-ran the above logit model separately for each region:

$$\Upsilon=\alpha_0+ \alpha_1\text{Male}+ \alpha_2\text{Religion}+ \alpha_3\text{Education}+ \alpha_4\text{Income}+ \alpha_5\text{Race}+ \alpha_6\text{Age Group}$$

Since the patterns in the Southern and inland counties are comparable, I combine these two regions in reporting. Figures 4.9, 4.10 and 4.11 employ the same setup as Figure 4.7. These Figures display the logit coefficients by regions. Recall that those who are 60-years-old or above form the baseline category. The logit coefficients represent that age differential between a selected group and the baseline group. Dissecting the data by regions increases the sample variability. That explains why these three Figures have more 'spikes' and are less smooth than the previous Figures using the full dataset. It is more important to focus on the overall trends, rather than a few irregularities in the diagrams.

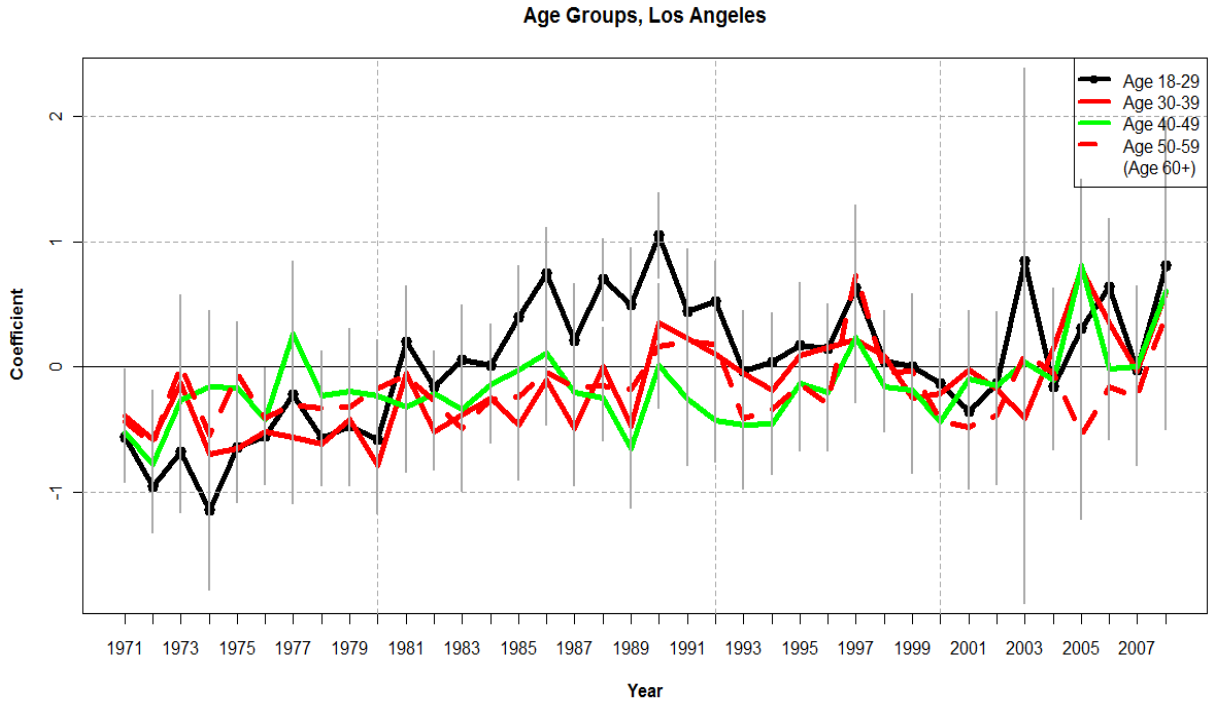
Notice that the 'bulge' that appears in Figure 4.7 re-appears in all three diagrams, suggesting that the youngest age group did respond more favorably to the Republican Party in the 1980s and early 1990s than the older age groups. However, the timing, as well as the 'enthusiasm' varies by regions. Among the respondents in the Bay Area counties, the youngest group gradually became more pro-Republican Party. The peak appears in the late 1980s, whereas in the other regions, the peak emerges a few years earlier. In terms of enthusiasm, it is apparent that the coefficients are significantly larger in the other regions than in the Bay Area. In fact, younger voters outside the Bay Area remain more supportive of the Republican Party than the older voters even after the 1990s.

Figure 4.9 Logit Regression Coefficients for Age Groups in Bay Area, 1971-2008



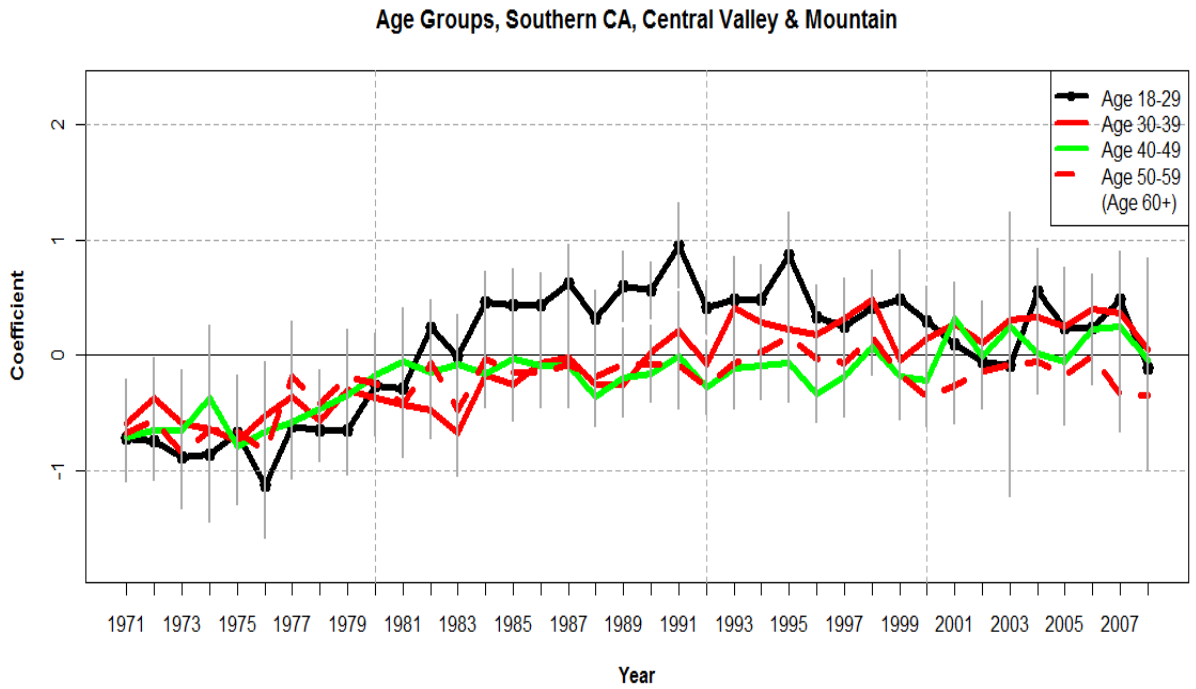
Data: Field Poll Cumulative File

Figure 4.10 Logit Regression Coefficients for Age Groups in Los Angeles County, 1971-2008



Data: Field Poll Cumulative File

Figure 4.11 Logit Regression Coefficients for Age Groups in Southern and Inland Counties, 1971-2008



Data: Field Poll Cumulative File

Figure 2.1 in Chapter 2 shows the changes in macro-partisanship over time. The George H.W. Bush administration witnessed the peak of the Republican Party registration. These three Figures provide strong empirical evidence that the growth in Republican Party affiliation was primarily induced by generational replacement --- where young voters coming into the electorate were more supportive of the Republican Party than their older cohorts.

Political socialization is a thoroughly researched topic in political science. Many scholars have written on how events we experience in different life stages can affect how we think, perceive reality, and interact with other members in a society. Scholars have identified several important socializing agents, for example, parents, schools, friends, media, members from the same social groups, or members from reference groups (Jennings & Niemi 1974; Campbell et al. 1960; Greenstein 1960; Jaros et al. 1968; Conway et al. 1981; Atkin & Gantz 1978; Orum 1972). In addition to people, major political events, such as the Watergate scandal, the Vietnam War or the September 11th terrorist attack, can also alter one's belief system (Sears & Valentino 1997; Hershey & Hill 1975; Damico et al. 2000). There are two contentious theories on when socialization occurs and matters. On the one hand, the 'lifelong openness' theory hypothesizes that socialization is a continuous process where individuals never stop learning. Studies have shown that as one continues with his or her life journey, new experiences and life-cycle changes can shake up an existing belief system (White et al. 2008; Glaser & Gilens 1997; Danigelis et al. 2007; Stoker & Jennings 1995). On the contrary, the 'persistence' theory argues that socialization occurs early in life and pre-adult socialization tends to persist into adulthood (Jennings & Niemi 1974, 1978; Campbell et al. 1960; Greenstein 1960). Some researches find evidence in favor of both theories (Miller & Sears 1986; Glaser & Gilens 1997).

Without a long panel data that tracks a set of individuals over time, it is hard to adjudicate whether socialization continues throughout one's life journey or not. But the literature largely agrees that late adolescence and the college years belong to an important 'formative phase' for developing political identity and belief system (Vollebergh et al. 2001; Edelstein 1962; Orum 1972; Newcomb 1943). The political period in which one 'comes of age' is more informative than one's age alone. Apart from that, age can be hard to interpret in a long time-series. An 18-year-old who responded to the Reagan conservative movement in 1980 would be a 28-year-old in 1990 and a 38-year-old in 2000. In order to tease out the age-period-cohort effect, I created a new battery of variables which I refer to as 'coming of age' variables. The first step is to compute the year of birth for each respondent. I subtracted the age of the respondent from the survey year. Then I computed the period in which the respondent would celebrate his or her 18th birthday. Because specific age is only available in surveys since 1976, I have to limit my analyses to respondents interviewed between 1976 and 2008. Table 4.1 provides some simple examples. For example, for someone who was born in 1940, he would turn 18 in 1958 and would be classified into the '1950s cohort'. Similarly, for someone who was born in 1950, he or she would turn 18 in 1968 and would belong to the '1960s cohort'. Someone who turns 18 in 1990 or 1999, for example, would belong to the same '1990s cohort'. My last survey ended in 2008, which implies the youngest respondent would have been born in 1990. Given that there are very few respondents in the '2000s cohort', I combined them with the '1990s' cohort. Altogether, there are six 'coming of age cohorts':

1) on or before 1940s (i.e. coming of age before 1949);
2) 1950s (i.e. coming of age between 1950 and 1959);
3) 1960s (i.e. coming of age between 1960 and 1969);
4) 1970s (i.e. coming of age between 1970 and 1979);
5) 1980s (i.e. coming of age between 1980 and 1989);
6) 1990s (i.e. coming of age between 1990 and 2008).

Table 4.1 Examples of Birth Year, Coming of Age Year and Coming of Age Cohort

Birth Year	Year At 18-year-old	Coming of Age Cohort
1940	1958	1950s
1945	1963	1960s
1950	1968	1960s
1962	1980	1980s
1970	1988	1980s
1980	1998	1990s
1985	2003	2000s
1990	2008	2000s

Figure 4.12 shows the distribution of these cohorts by year for the three regions. As discussed in Chapter three, Hispanics tend to have higher fertility rates than non-Hispanic whites. The difference in fertility partly accounts for the bigger presence of younger cohorts in Los Angeles County. In addition, international immigrants arriving in that region also tend to be younger. The graph illustrates the extent of gradual generational replacement. In 1976, and as this subset of Field Poll data begins, the 1940s cohort accounts for sixty percent of the samples. The size of the cohort shrinks to ten percent or less by 2000.

The same Figure also provides preliminary evidence of how generational replacement can reshape the spatial composition of voters across geographic regions. Imagine a case where there is no age differential in partisan preferences, in other words, the period in which someone comes of age is uncorrelated with his partisan preference. In that case, the political impact of generational replacement would be minimal. Now imagine that the younger cohorts are diametrically different from the older cohorts, then generational replacement would have a sweeping impact on the aggregate macro-partisan balance. Therefore, the political impact of generational replacement depends on the magnitude of cohort differentials in partisan preferences. To measure this, I resort to the previous multivariate logit model, except this time I substituted age groups with my new 'coming of age cohorts'. I ran the following model:

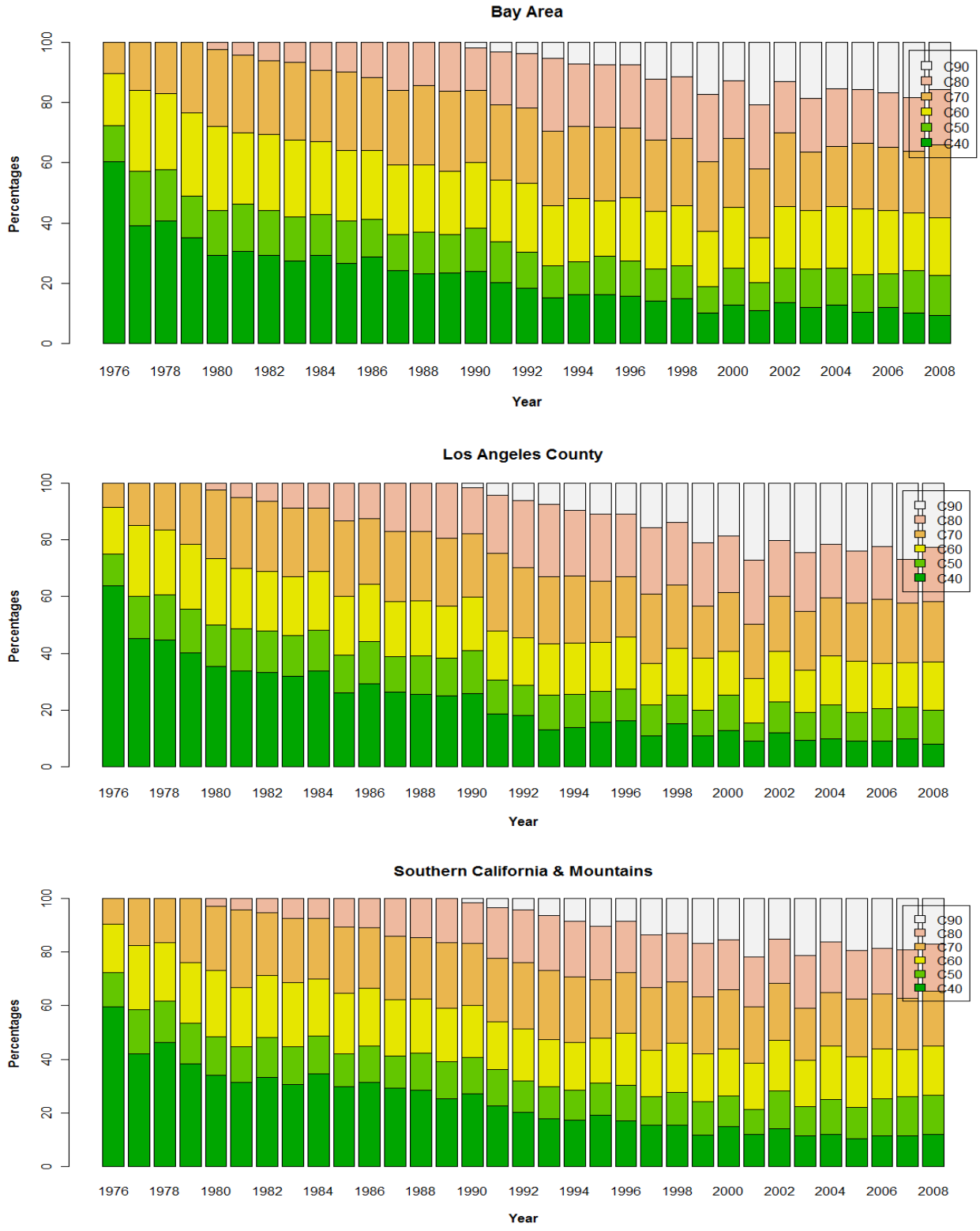
$$\Upsilon=\alpha_0+ \alpha_1\text{Male}+ \alpha_2\text{Religion}+ \alpha_3\text{Education}+ \alpha_4\text{Income}+ \alpha_5\text{Race}+ \alpha_6\text{Coming of Age Cohort}$$

Figures 4.13, 4.14 and 4.15 display the coefficients. Figure 4.13a, 4.14a and 4.15a are limited to the years between 1971 and 1989, while Figures 4.13b, 4.14b and 4.15b cover the entire study period between 1971 and 2008. The reason I have two sets of graphs is because the baseline category is different. For the first set of graphs, the baseline group consists of respondents who came of age before year 1950. The purple line represents the respondents who first came of age in the 1980s, that is why the line only starts in year 1980. Despite the regional variation, there is one consistent pattern -- the purple line lies above the other trends. The growth in

Republican strength was primarily driven by these young voters coming into the electorate who are different from ther older voters. The enthusiam for the Reagan administration quickly wore off in the Bay Area, while it persisted in the other counties.

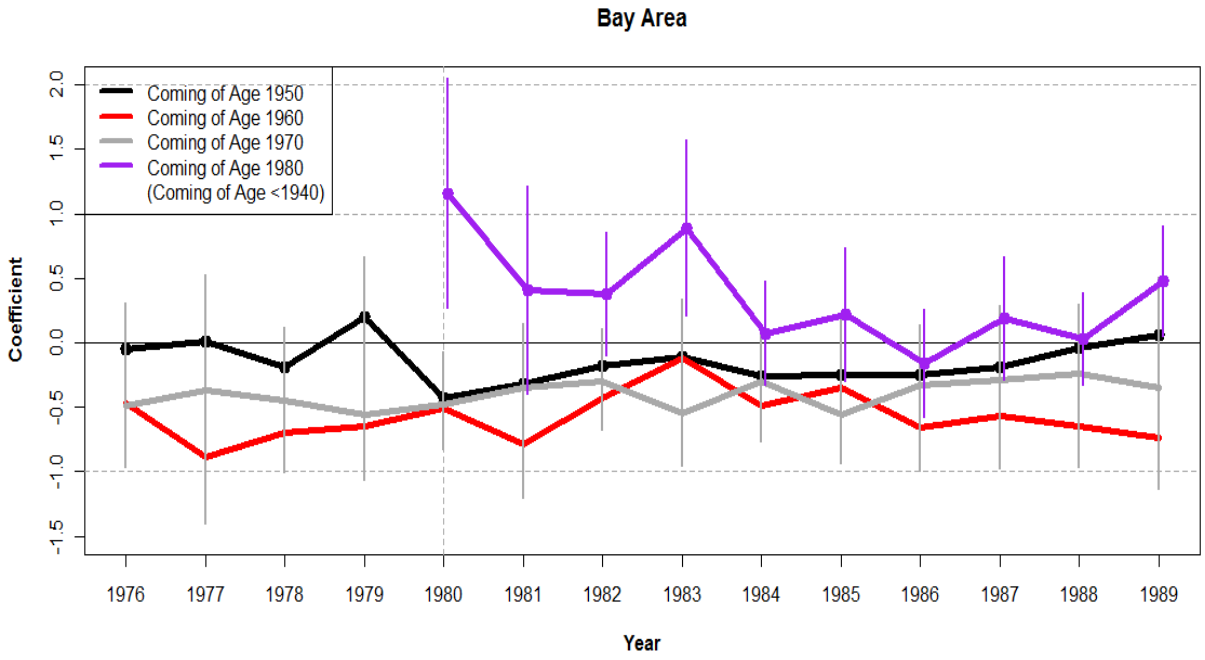
By year 1990, those who came of age in the 1940s would be at least a 59-year-old. As this group gradually shrinks in size, I have little choice but to substitute the baseline category. In the second set of graphs, I expanded the baseline category to include all respondents who came of age before year 1960. The yellow lines in Figures 4.13b, 4.14b and 4.15b represent the 1990s cohort (i.e. those who came of age between year 1990 and 2008). One common feature across the three Figures is that these yellow lines all exhibit a downward trend, suggesting that the younger cohort coming of age in the 1990s, during the Clinton era, is becoming less pro-Republican Party over time. Significant regional variation can also be observed among respondents in the 1990s cohort. Race, income, education and gender, as previously shown, are major predictors of partisan preferences. Even after controlling for these major predictors, there is still a sizable interaction effect between the region of residence and generational replacement effect. That is, other socio-demographic characteristics being held equal, a young voter coming of age in the Bay Area region is far less likely to register as a Republican than someone in the Southern or inland counties.

Figure 4.12 Distribution of Coming of Age Cohorts by Regions, 1976- 2008.



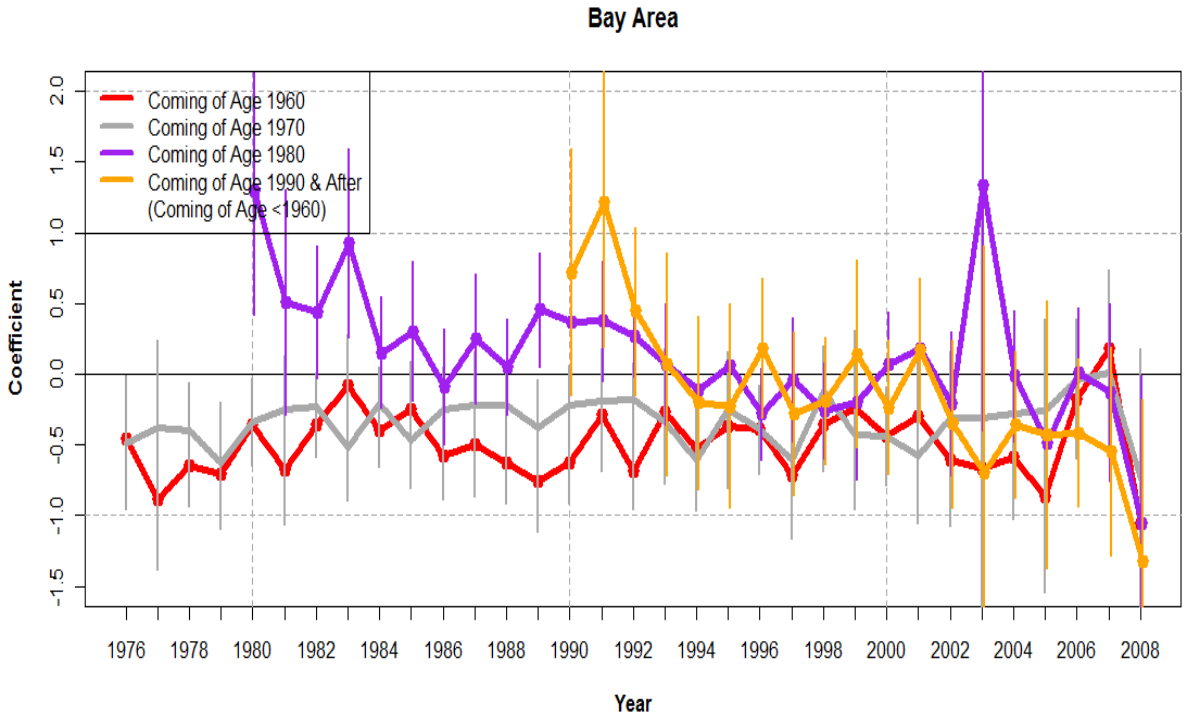
Data: Field Poll Cumulative File

Figure 4.13a Logit Regression Coefficients for Coming of Age Cohorts in Bay Area, 1976-1989



Data: Field Poll Cumulative File

Figure 4.13b Logit Regression Coefficients for Coming of Age Cohorts in Bay Area, 1976-2008



Data: Field Poll Cumulative File

Figure 4.14a Logit Regression Coefficients for Coming of Age Cohorts in Los Angeles County, 1976-1989

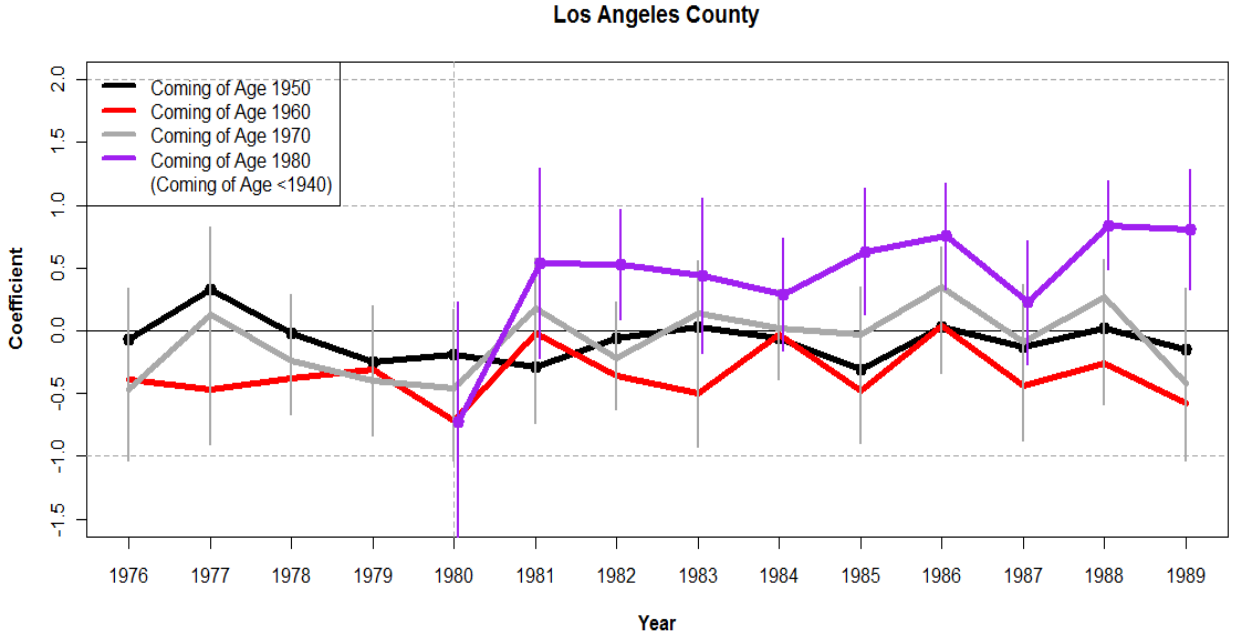
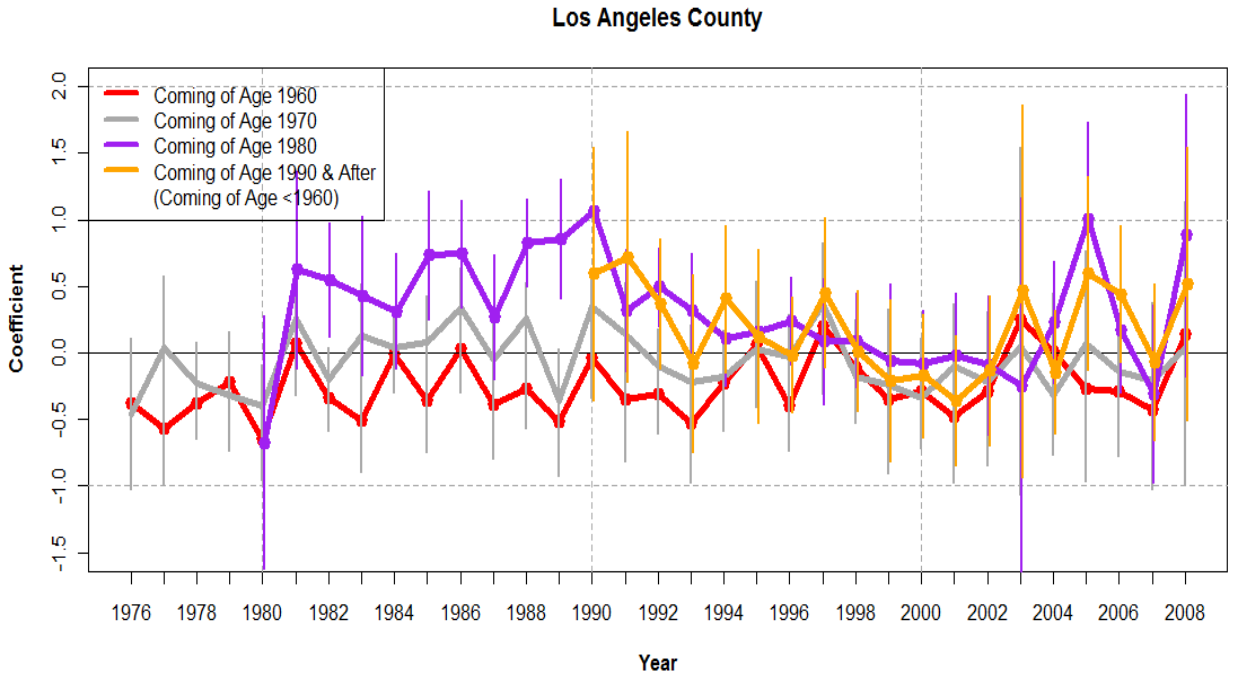


Figure 4.14b Logit Regression Coefficients for Coming of Age Cohorts in Los Angeles County, 1976-2008



Data: Field Poll Cumulative File

Figure 4.15a Logit Regression Coefficients for Coming of Age Cohorts in the Remaining Counties, 1976-1989

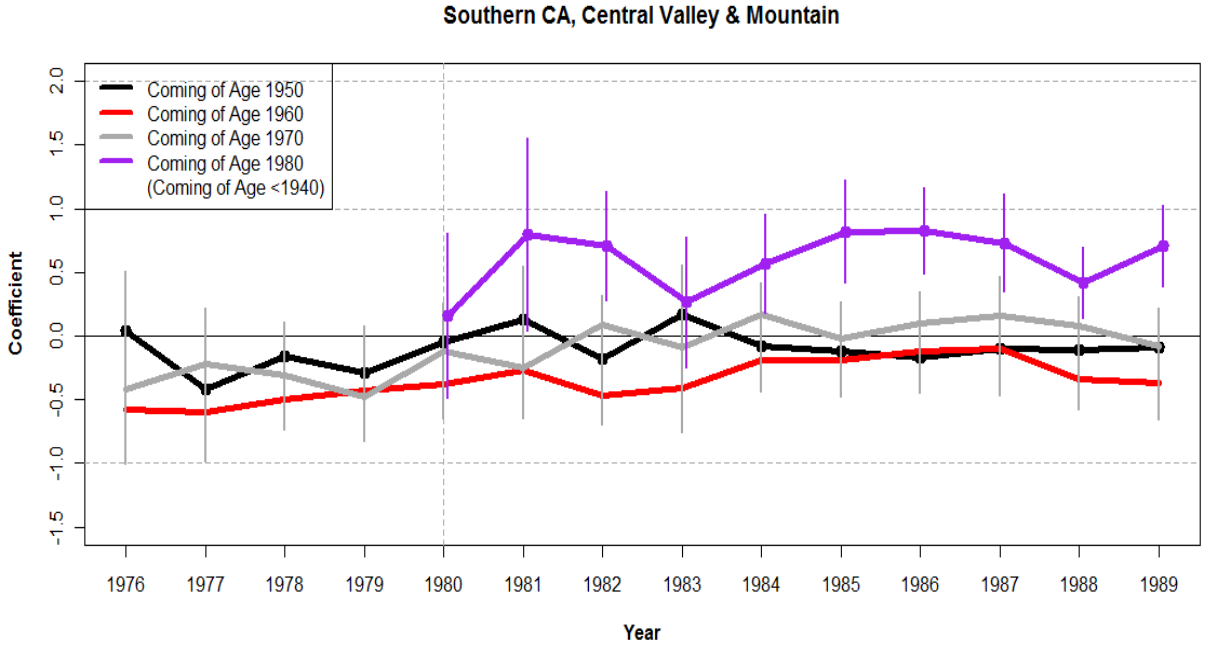
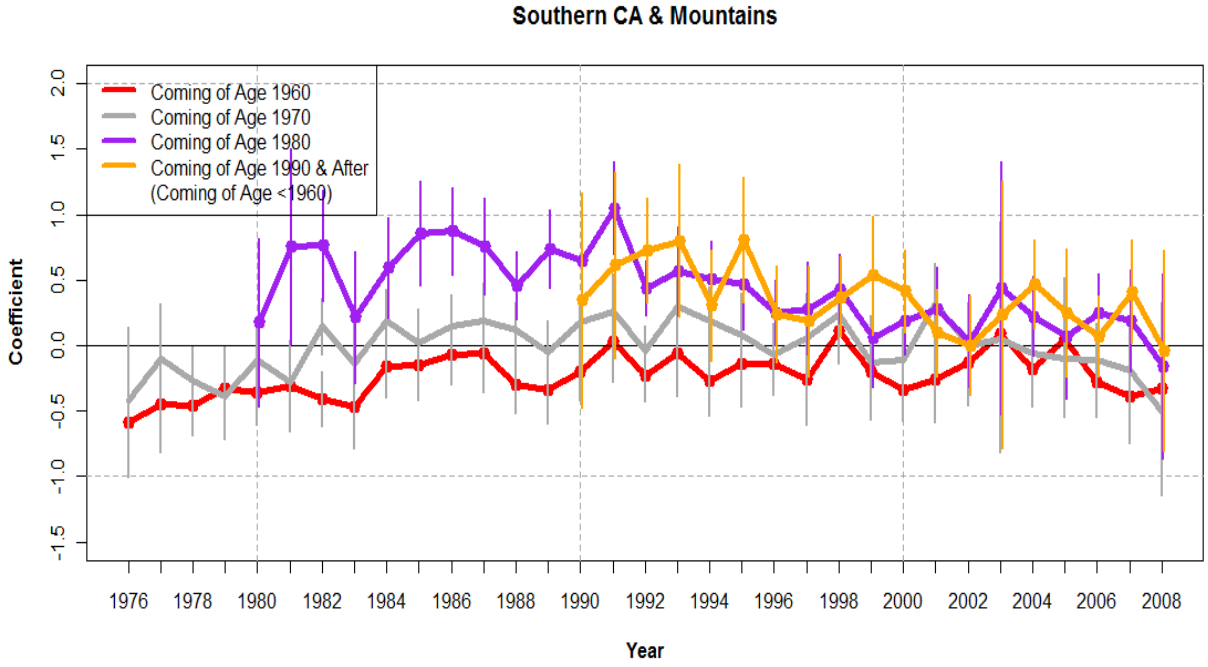


Figure 4.15b Logit Regression Coefficients for Coming of Age Cohorts in the Remaining Counties, 1976-2008



Data: Field Poll Cumulative File

Section 4.3 Contextual Effect or Self Selection?

I examine two different data sources, the individual-level Field Poll cumulative data and the county-level voter registration file. Both sources point to the presence of spatially-varying generational replacement effect. This finding leads one to wonder: What can account for such spatial variation?

There are several hypotheses. The first set of potential explanations involves unobserved heterogeneity. One can argue that the spatial variation represents unmeasured variation in latent characteristics. The Field Poll surveys contain a limited set of individual characteristics. As discussed previously, studies on political socialization show that children can acquire political ideology from their parents and peers. Perhaps those who come of age in the Bay Area are different from those who grow up in the Central Valley because they are socialized in a more ideologically liberal family or school. Chapter 3 illustrates how the regional economy varies. Residents who are employed in different types of industry may also develop different political preferences. Another hypothesis is that the spatial variation is an outcome of self-selection---those who choose to remain in the Central Valley may have inherently different political preferences than those who choose to live in the Bay Area.

Alternatively, one can hypothesize that the spatial variation is driven by the presence of contextual effects. There is a large volume of work that shows political behavior and beliefs are sensitive to one's immediate political and social environment (Oliver 2001, 2010; Leighley 2001; Huckfeldt 1979, 1980,1983, 1986). Perhaps living in an urban and ethnically diverse environment makes residents more culturally tolerant and prone to support the immigration policy platform advocated by the Democratic Party. Similarly, growing up in a conservative environment may increase one's exposure to conservative political messages. Furthermore, one can also argue that living in a conservative area may be more likely to subject a person to political contact and mobilization from the Republican Party, where early exposure and contact with the political party can affect one's political orientation.

All these hypotheses are feasible. Analysts of electoral politics can probably come up with additional theories. However, the cross-sectional data I have cannot allow me to adequately test these alternative theories. In what is best known as the 'reflection problem' or 'identification problem', Manski (1993, 2003) attests that when a researcher observes the distribution of behavior in a population, it is almost impossible to infer whether the average behavior in a certain group influences the behavior of the individuals that comprise the group. It is called a reflection problem because the challenge of making causal inference with observational data is akin to interpreting the almost simultaneous movements of a person and his reflection in a mirror. Does the mirror image cause the person's movements or reflect them? Without having prior knowledge of the composition of reference group or the selection process into the group, it is impossible to separate self-selection effect from contextual influence. In my case, it is hard to discern whether inland voters are voting Republican because they are ideologically conservative to begin with, or because they learn to become ideologically conservative through living inland with other conservative voters.

It is important not to dismiss the findings in this Chapter simply because the data cannot tackle this age-old identification problem in social science. While it is intellectually tempting to fully

explain what drives the regional variation, the bottom line is that the mere *presence* of a spatially varying generational replacement effect is *sufficient* to reshape the spatial composition of voters across electoral districts. The spatial variation exists *regardless* of whether I control for other demographic factors. As illustrated in Figure 4.8, the voter registration files reveal a big contrast in the likelihood of registering with the Republican Party depending on where one comes of age. The regional effect remains after I account for other crucial social cleavages including race, gender, education, income and religious preference using the Field Poll data. The political implication is that as long as the younger cohorts are differentiated by partisan preferences across geographic regions, *regardless* of the reasons behind this effect, geographic polarization will be perpetuated.

Section 4.4 Summary

The findings in this Chapter show that social cleavages have largely been stable. Party sorting, which largely began in 1980, strengthens the connection between individual socio-demographic characteristics and partisan preferences. Income, race, educational attainment, gender and region of residence are important predictors of partisan preferences. On top of that, the political period in which one 'comes of age' has a significant impact on one's partisan orientation.

In addition, the Field Poll data, as well as the voter registration records, reveal another crucial element that has not been discussed elsewhere in the literature--- spatially varying generational replacement. A young voter coming of age in the Bay Area is far more likely to be registered as a Democrat than someone growing up inland. This regional difference remains even after I account for other individual-level socio-demographic characteristics. Chapter 5 will combine the findings in Chapters 3 and 4 and explain how spatial compositional effect, generational replacement and changing electoral behavior account for the growing geographic and elite polarization.

Chapter 5
Perpetuating Electoral Disconnect

Fiorina (2005, 2009) raises an important empirical puzzle: how can elites become more ideologically polarized when the electorate who elect them is not? In Chapter 1, I began with two hypothetical scenarios that can lead to geographic polarization over time. In the first scenario, voters alter their voting behaviors. In the second scenario, voters exhibit the same voting behavior but change their residential location. What is intriguing is that these two unrelated mechanisms can theoretically result in an identical outcome. Chapter 2 documents the temporal and spatial emergence of geographic polarization in California. It happened primarily after 1980 where intra-regional partisan preferences become more homogenous and inter-regional disparity increases. The empirical puzzle is which of the two mechanisms primarily contributed to the growing geographic polarization?

The short answer is *both*. Both electoral behavioral change and spatial composition change are needed to account for the growing geographic polarization over time. In Chapter 3, data from individual surveys (Current Population Study) and aggregate statistics (DOF demographic statistics, IRS county-to-county migration and voter registration files) all show there is high volume of residential mobility in the state. As the pattern of migration correlates with individual socio-demographic characteristics, the spatial disparity in the composition of voters increases. Chapter 4 offers evidence of electoral behavioral changes at the individual level. Using the Field Poll cumulative file, I show that electoral cleavages are largely stable. There is no evidence of massive wholesale conversion or realignment in the electorate. The evidence lends support to the party sorting theory where the connection between some major electoral cleavages, such as gender, educational attainment, religious preference, strengthens after 1980. In addition, I show that changes in the macro-partisanship in the state are brought upon by the entrance of younger cohorts who respond differently to the political parties depending on their region of residence.

The voter registration files available through the Statewide Database can best illustrate the dynamics in which these mechanisms combined have led to the emergence of geographic polarization. For every even numbered year, I obtained the block or precinct level registration files for the November General Election and aggregated them to the county-level (refer to Appendix I for more discussion of the data). Each registration file contains a set of variables that tracks the registration cycle of the voters. Let me use the 1992 voter registration file for example. Voters who first registered during the 1992 congressional election cycle would be classified as 'first cycle registrants'. Technically, this category includes voters who registered some time *after* the closing date of the 1990 November election, but *before* the closing date of the 1992 November election. This group comprises of the following types of voters:

a) Migrants who moved and (re-)registered;
b) Voters who registered to vote for the first time;
c) Voters who did not move but re-registered in order to change their official party affiliation.

For the first type, recent movers can either be previously registered in the same county, or in another county or in another state. For the second type, it can include voters who just become eligible to vote (they can be voters who turn 18-year-old, or voters who just naturalize to become a U.S. citizen). It can also include older citizens who have never registered before. The third type is rare. Altogether, the first cycle registrants, on average, make up 20% of the total number of registered voters. Within each election cycle, roughly 7% to 10% of all registered voters are between ages 18 to 25. (Unfortunately, the dataset does not further distinguish how many of these voters are first time registrants). A conservative estimate is that at least half of these first cycle registrants are recent movers.

On the one hand, the first cycle registrants comprise recent movers and first time voters in the county. On the other hand, the eighth cycle registrants represent those who have lived in the same county (in fact, the same residence) for the past fourteen years. These recent movers are given a chance to reconsider their party registration when they re-register to vote. Some of them may be 'Reagan Democrats,' who have been voting for the Republican Party but remained registered as Democrats. Moving allows these types of voters to clarify their political affiliation.[16] By comparing the partisan preferences of the newer registrants with the older registrants, I will show that newer registered voters are more partisanly sorted across regions.

To continue with my 1992 example, voters who registered *during* the 1990 election cycle would belong to the 'second cycle'. Similarly, voters who registered *during* the 1988 election cycle would fall under the 'third cycle'. Those who registered at least sixteen years ago (i.e. more than eight cycles ago) are grouped under the residual category, namely the 'ninth cycle'. The registrants who registered during the 1992 cycle would show up as 'first cycle registrants' in the 1992 voter registration file. But as time progresses, this cohort would become the 'second cycle registrants' in the 1994 voter registration file, 'third cycle registrants' in 1996 and 'seventh cycle registrants' by November 2004. Table 5.1 provides a simple crosswalk between registration cycle and election year.

[16] A separate paper with James Gimpel and Wendy Tam Cho will examine changes in party registration. We will study individual voters who switch their party registration when they relocate. We examine how the changes in neighborhood environment would affect one's likelihood to change party registration. For example, for a registered Republican who moves into a neighborhood with a high concentration of registered Democrats, whether he/she is more likely to re-register as a Democrat or as an independent.

Table 5.1. Crosswalk of Registration Cycles by Election Years, 1992-2008

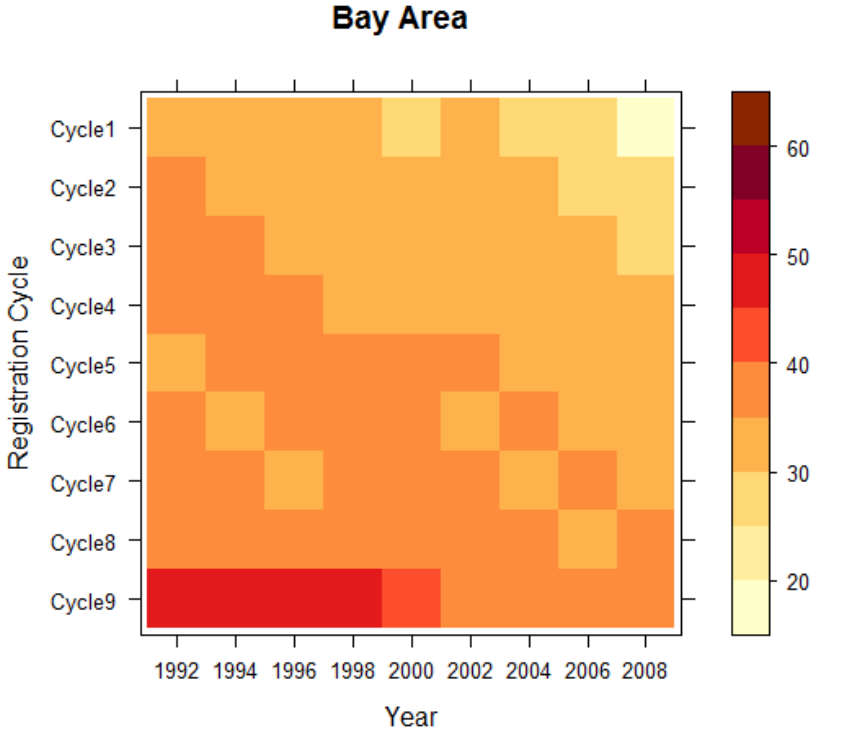
Registration Cycle	Election Year				
	1992	1996	2000	2004	2008
Pre-1978	9	9	9	9	9
1978	8	9	9	9	9
1980	7	9	9	9	9
1982	6	8	9	9	9
1984	5	7	9	9	9
1986	4	6	8	9	9
1988	3	5	7	9	9
1990	2	4	6	8	9
1992	**1**	3	5	7	9
1994		2	4	6	8
1996		**1**	3	5	7
1998			2	4	6
2000			**1**	3	5
2002				2	4
2004				**1**	3
2006					2
2008					**1**

The Statewide Database data begins in 1992. I obtained the registration files for all fifty eight counties and nine election cycles between 1992 and 2008. Figure 5.1 displays the three-way cross-tabulations among registration cycle, year and the percentage of voters who registered as Republicans for the four regions. The color in each cell represents the percentage of two-party registrants who registered as Republicans. The scale ranges from light yellow color to dark brown color, with the former color indicating high concentration of registered Democrats and latter color representing high concentration of registered Republicans. One major contrast stands out by eye-balling the four diagrams in Figure 5.1---the diagrams for Bay Area and Los Angeles County are predominantly yellow in color, whereas the diagrams for the other two regions are overwhelmingly orange or red in color. That is, for *any* registration cycle, registered voters in the Bay Area and Los Angeles County are more pro-Democratic Party than their counterparts in the other regions.

Through attrition where registered voters either move away or pass away, each registration cohort would shrink in size over time. As time progresses, the newer registrants will replace those who exited and reshape the composition of the electorate. It is intriguing to compare across registration cycles within each region. Let me begin with the Bay Area. By comparing the rows within each region, one can immediately notice that the first registration cohort is the most pro-Democratic group among all cohorts. Newer registrants, either recent arrivers or new voters entering the electorate in the area are more likely to register as Democrats than the long-time residents. By contrasting the columns within each region, one can observe that among all first cycle registrants, those who registered in 2008 (during the Obama's campaign) are the most likely to register as Democrats. A similar pattern can be observed in Los Angeles County.

Newer registrants especially those who reside in Southern California counties are substantially more likely to register as Republicans than long-term residents in the same region. Through replacement, these newer voters tip the overall partisan balance in favor of the Republican Party. Although the contrast between the newest and oldest cohort is relatively less pronounced in the remaining inland counties, registrants in recent years appear to be slightly more pro-Republican Party than voters who registered in the early 1990s.

Figure 5.1 Percentage Registered Republicans by Registration Cycles and Regions, 1992-2008



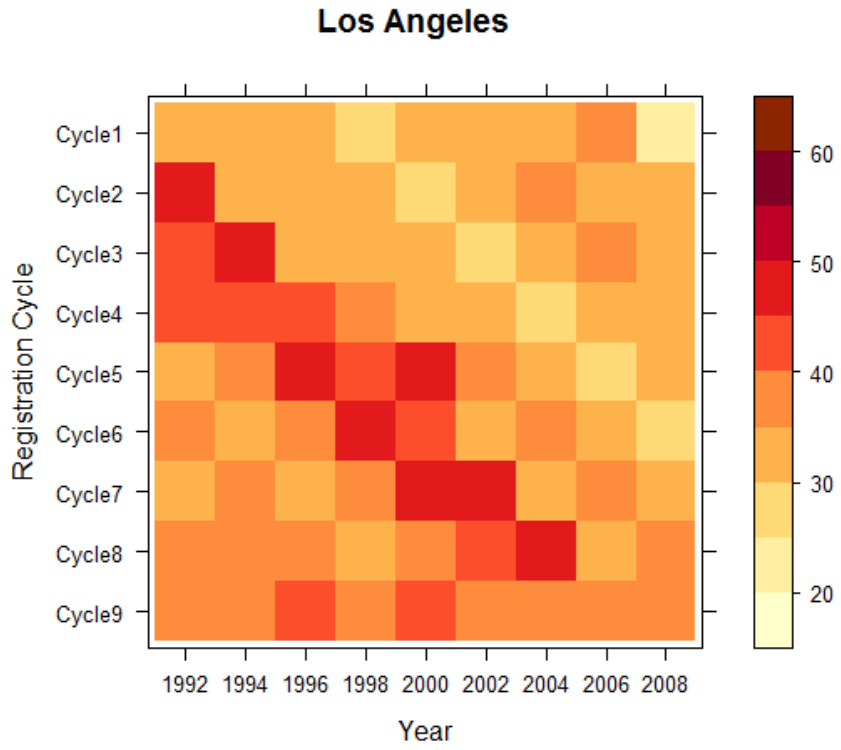
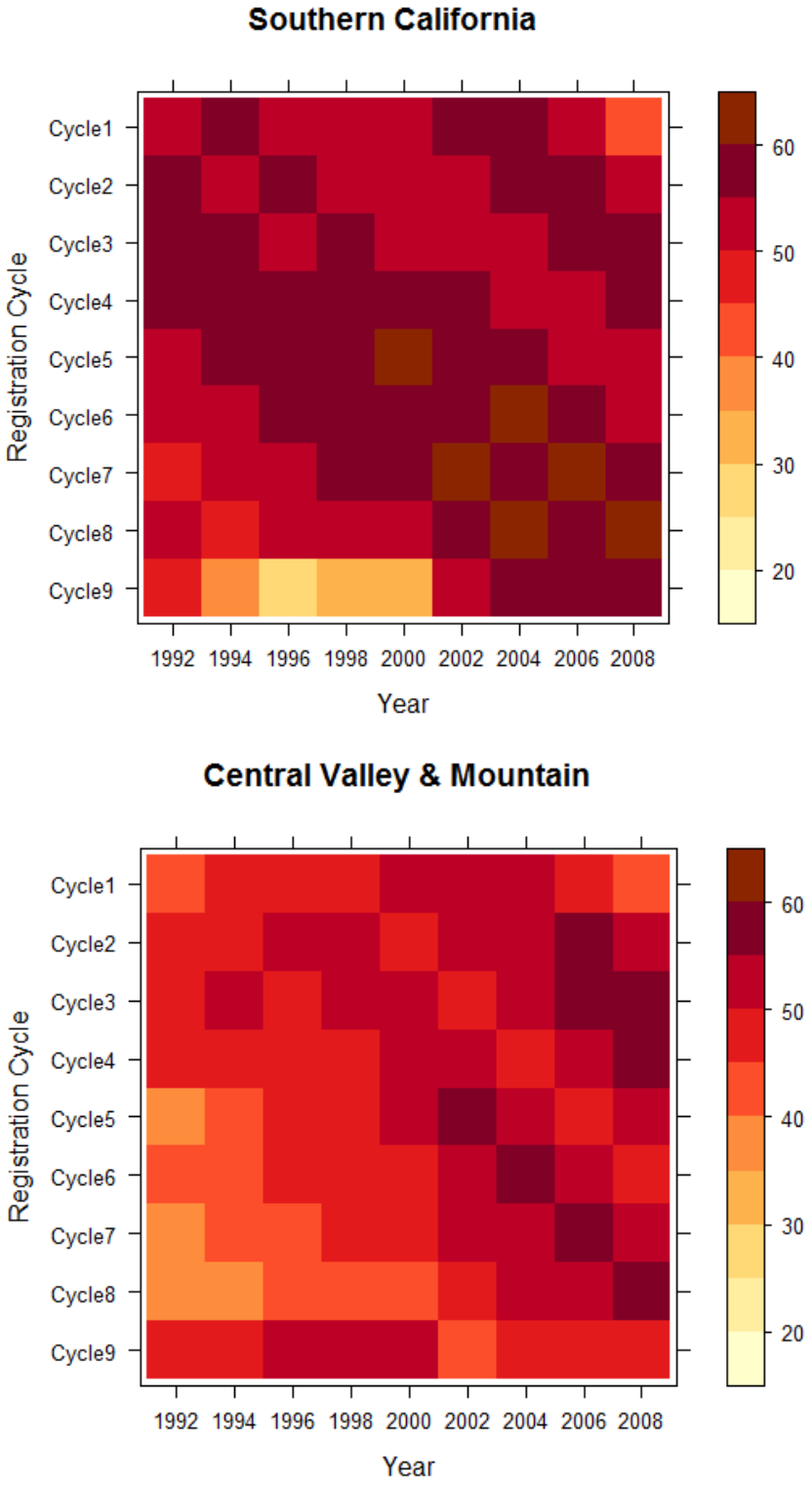


Figure 5.1 Percentage Registered Republicans by Registration Cycles and Regions, 1992-2008

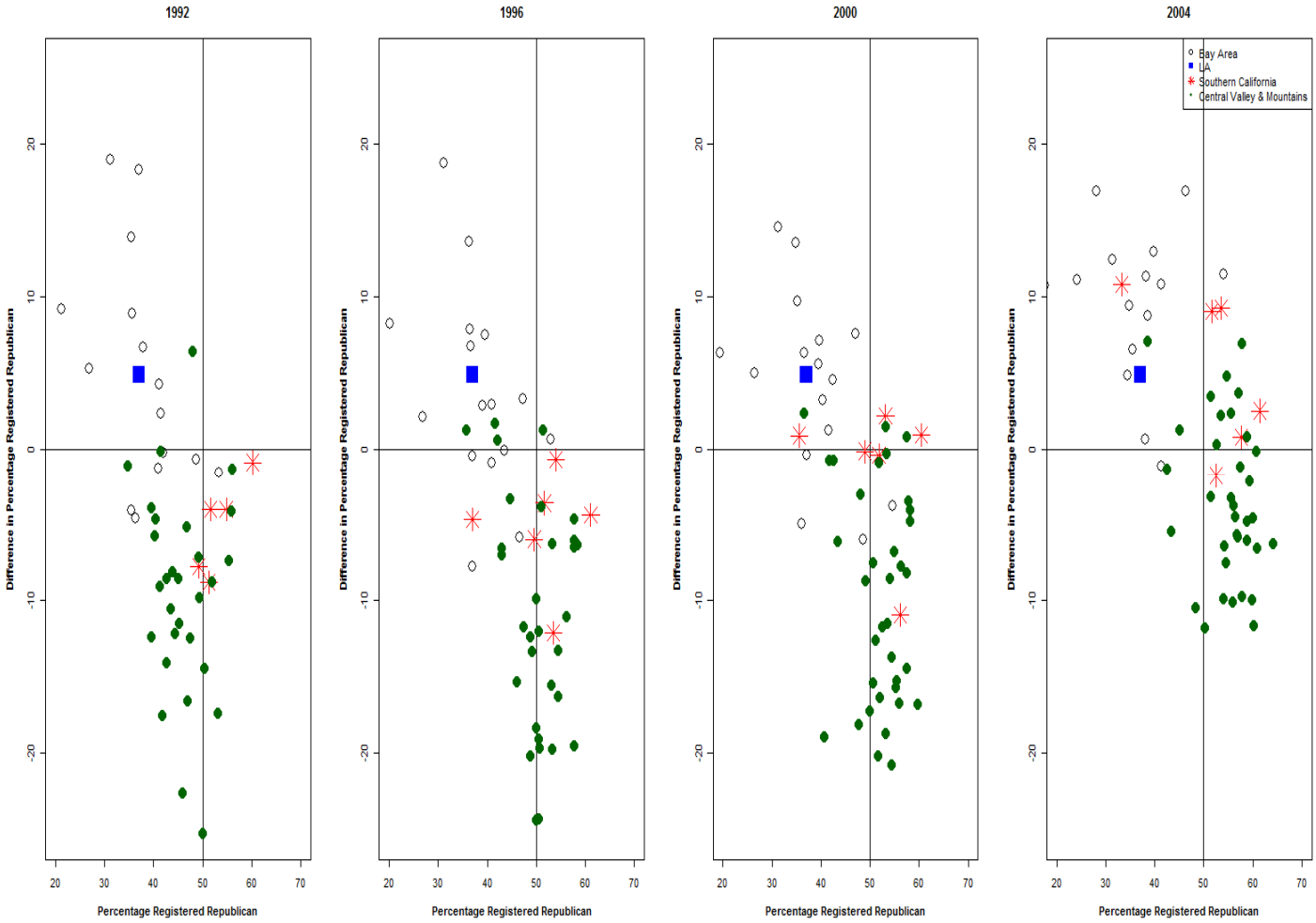


Data: Statewide Database Voter Registration Files

For each election cycle, I computed the difference in the partisan preference between the first cycle registrants and eighth cycle registrants. Specifically, I subtracted the percentage of Republicans among the eighth cycle registrants from that of the first cycle registrants. The differences reflect the extent to which the first cycle registrants differ from the long-time residents in the county. If the differences are positive, it implies that, compared to the older residents, the new entrants into the county's electorate are *less* likely to be Republican. On the contrary, if the differences are negative, it signifies that the new comers are *more* likely to be Republican. Figure 5.2 plots the differences for all the fifty-eight counties (on y-axis) against the overall percentage of registered Republican among all voters (on x-axis). The green-color dots represent counties in the Central Valley and Mountain region; whereas, the red-color stars represent counties in Southern California. The black-color circles and blue-color square are for the Bay Area counties and Los Angeles County, respectively.

Figure 5.2 holds the key insight to the polarization puzzle. Each diagram in the Figure is divided into four quadrants. Note that the Bay Area counties mostly fall in the upper quadrants, indicating that the new registrants are substantially *less* likely to be Republican than the long time residents. This stands as a sharp contrast to the Central Valley counties, which cluster in the lower quadrants. As discussed in Chapter 3, the availability of cheap housing has attracted substantial migration into the Central Valley. These newer arrivers are noticeably more conservative than the long term residents. By comparing the positions of the green dots across the four graphs along the x-axis, one can immediately spot how these points have shifted from the lower left quadrant to the lower right quadrant. Nevertheless, the reader can also notice that the distribution of the overall partisan preferences across counties has become more skewed. In 1992, a majority of counties clustered around the median. By 2004, counties have become further spread out with fewer counties lay in the middle of the spectrum. Bay Area counties have become increasingly pro-Democratic and inland counties have been getting more pro-Republican. By continuously adding new residents, who are substantially *more* pro-Republican than the long time residents, the inland counties appear to be more conservative over time.

Figure 5.2 Differences in Percentage Registered Republican by Registration Cycles and Regions, 1992-2004



Data: Statewide Database Voter Registration Files

Do conservative voters feel politically alienated in the Bay Area? If yes, does that feeling of alienation propel one to migrate to more political conservative area? Do migrants pay attention to the partisan composition of the neighborhood when they relocate? Do they consciously settle in area with higher concentration of co-partisans?

While it seems possible that some movers are attentive to their political environment, it is hard to believe political concerns dominate the majority of the moves. Chapter 2 shows that while counties within each region have become more similar in aggregate partisan preferences, regions have become more differentiated. Yet it is important not to over-exaggerate the extent of homogeneity within a county. As Cain (2009) aptly observes, at the Census block or tract level, one can still observe a diverse mix of partisans. Good school districts, access to amenities and ease of transportation attract Democrats, Republicans and independents alike. Even in a heavily pro-Democratic Bay Area, one can easily identify pockets of neighborhood that lean towards the Republican Party.

Migration occurs temporally prior to elite polarization. However, geographic polarization only begins after 1980. The timing corresponds to the onset of party sorting, where certain social cleavages become more correlated with partisan preferences. One major consequence of party sorting, I argue, is the spatially-varying generational replacement effect. The region of residence seems to have stronger influence on younger cohorts coming of age after 1980 than the older cohorts. The insight from Schelling's (1969) theory is that as long as a tiny fraction of people prefer to live with co-ethnics, their residential movements can lead to total racial segregation. When it comes to residential mobility, it does not even matter whether people consciously choose to live with other co-partisans or not. As long as out-migrants and in-migrants of a region are differentiated in their socio-demographic characteristics, and younger cohorts coming in are more partisanly sorted than older cohorts, these two processes can reshape the spatial composition across geographic regions.

Chapter 3 illustrates how economic expansion, housing affordability and job opportunities motivate migration flows. Residential mobility responds primarily to economic fluctuations. The process does not seem to be influenced by the bigger political environment. It is not sensitive to the partisan balance in Congress, or the ideological polarization among the elected representatives, or the job approval rating of the sitting Presidents. Through analyzing historic migration data with various data sources, I show that the migration patterns are deeply entrenched. Economic downturns may temporarily depress residential mobility, the inter- and intra-regional migration trends observed seem unlikely to be reversed. Party sorting amplifies the connection between demographic composition of voters and their partisan preferences. All these mechanisms combined illustrate how the ideologically moderate and centrist electorate is spatially arranged in increasingly polarized regions. Given that all federal elections are geographically-based, the increasingly skewed spatial distribution of voters implies that electoral districts would become increasingly differentiated in terms of the demographic composition of voters, as well as their political preferences. As a result, we would expect elite polarization to grow, based on an ideologically moderate but spatially polarized electorate.

Although this dissertation focuses primarily on California, the findings nevertheless carry national implications. The out-migrants from California, who are predominantly white, native born citizens can reshape the electorate composition of other states. Moreover, it seems likely that similar within-state geographic sorting has been occurring in other places. The next empirical task is to expand the insights drawn from this project to study the geographic and elite polarization at the national level.

Appendix I
Datasets

Section 1. Individual Level Data

1) Field Poll Cumulative File 1956-2008[17]
The Field Poll Institute has been conducting public opinion polling in California since the late 1940s. It began depositing raw datasets at the UCData, a data archival center at the Survey Research Center of the University of California, Berkeley in 1956. The Cumulative File is developed with the goal of creating a continuous time series dataset to capture the changes in public opinion and voting preferences among Californians. Between 1956 to 2008, about 270 polls were conducted, with usually at least four polls during off-year and six polls in election years. The file contains over 300,000 observations. Since the individual polls were not conducted with the intention to create a time series, significant changes in question wording, response categories and sampling method have occurred. The cumulative file is a laborious attempt to create consistent recoding for the major demographic characteristics, partisan affiliations, evaluation of political figures/institutions and voting preferences in state and federal elections.

2) IPUM Consolidated Current Population Survey March Supplement (1963-2009)[18]
The Current Populated Survey (CPS) is a monthly survey of about 50,000 households conducted by the Census Bureau. The March Supplement includes a battery of questions used to capture the extent of residential mobility in America.

Section 2. County Level Data

1) County and City Data Book 1970-2000
The file is obtained through ICPSR (study number 02896). The data come primarily from the Bicentennial Census surveys. I extracted the major Census demographic characteristics for all the fifty-eight counties in California between 1970 and 2000.

2) Statewide Database 1992-2008[19]
The Statewide Database is a data deposit center for redistricting related data for California. It is currently housed under the Boalt Hall School of Law at University of California, Berkeley. Since 1992, the Statewide Database collected the official Statement of Vote (SOV) and Registration (REG) data from each County Registrars. The datasets prior to 2000 have been consolidated and are available at the 2000 Census block level. The datasets after 2000 are available at the precinct level (where precinct boundaries vary by elections). For each REG and SOV file, I have aggregated the counts at the county level and recoded the variables to make

[17] The dataset is available for public use at http://ucdata.berkeley.edu.
[18] The dataset can be found at: http://sda.cps.ipums.org/

[19] The datasets are available at http://swdb.berkeley.edu

the categories consistent over time. I then verified my dataset with the official SOV and REG figures published by the California Secretary of State to ensure accuracy.

3) California Secretary of State Official Statement of Registration, 1960-2008

Since the Statewide Database data only began in 1992, I obtained the registration data at the county-level prior to 1992 directly from the Statement of Registration published by the California Secretary of State. I obtained the printed copies through the Institute of Governmental Studies Library at the University of California, Berkeley. I scanned all the documents. Using an optical character recognition (OCR) software, I converted the printed copies into Excel spreadsheets. I then checked every number to ensure the accuracy of the converted figures. I also compared the official records between 1992 and 2008 with the Statewide Database files.

4) California Department of Finance (DOF) Demographic Research Unit Data[20]
The DOF Demographic Research Unit keeps updated records on migration and demographic projection data. In particular, I have used the following datasets:

1. Race/Ethnic population with age and sex detail. (1970-1989; 1990-1999; 2000-2007).
2. (Table E-2) California county population estimates and components of change by Year 2000-2008.
3. (Table E-3) California county race/ethnic population estimates and components of change by year, 2001-2007.
4. (Table E-4) Historical population estimates for California cities and counties, 1971-1980.
5. (Table E-4) Historical population estimates for California cities and counties, 1981-1990.
6. (Table E-4) Historical population estimates for California cities and counties, 1991-2000.
7. (Table E-4) Population estimates for cities, counties and the state, 2001-2009.
8. (Table E-6) County population estimates and components of change 1970-1990.
9. (Table E-6) County population estimates and components of change 1990-2000.
10. (Table E-6) County population estimates and components of change 2000-2008.
11. Revised race/ethnicity population estimates: components of change for California counties, 1970-1990.
12. Legal immigration to California by county, 1984-2007.

5) Bureau of Economic Analysis (BEA)[21]/CA Consumer Price Index[22], 1969-2007
I obtained the annual county level data for per capita personal income from Table CA1-3 "Personal income, population, per capita personal income." Using the annual consumer price index published by the California Department of Industrial Relations, I created a time series of CPI adjusted real income for each county (base year= 1982-1984).

6) Bureau of Labor Statistics Employment by Major Industry Sectors, 1970-2008

[20] The datasets are available at http://www.dof.ca.gov/research/
[21] The dataset is available at http://www.bea.gov/regional/reis/default.cfm?selTable=CA1-3&section=2
[22] The dataset is available at http://www.dir.ca.gov/dlsr/CAPriceIndex.htm

The data are available on a yearly basis. I downloaded the data files for all fifty eight counties from RAND[23]. The datasets have detailed employment numbers by major industry sectors.

7) Association of Religion Data (ARDA) Archives 1970-2000[24]

The Churches and Church Membership in the Unites States is a survey conducted by the ARDA at the beginning of each decade. The 1970, 1980, 1990 and 2000 datasets contain statistics by county for over 100 Judeo-Christian church bodies. I then classified these denominations into Evangelicals, Mainline Protestants, Jewish and Catholics based on the denomination list provided by the ARDA.

8) Internal Revenue Service (IRS) County-to-County Migration Files 1978-1992

I obtained the dataset from ICPSR (Study Number 02937). County migration flow data show county-to-county migration patterns. Through tracking addresses on individual income tax return filed by citizens and resident aliens with the IRS, the file records the year-to-year changes in the origin and destination of movers. The dataset only reports aggregated counts at the county-level but not individual characteristics of the tax-payers.

[23] The dataset are available at http://ca.rand.org/stats/economics/employmentNAICS.html

[24] The datasets are available at http://www.thearda.com/Archive/ChCounty.asp