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Grace Dabean Lee April 10, 2024

Unlocking the AAPI Vote: A Study on Language Ballots and Voter Turnout in California

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Abstract

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Why do Asian voters have lower turnout despite a demonstrated interest in participation? Because of their high rates of immigration, Asian Americans are especially impacted by language barriers, evident by a large proportion of Asian voters with limited English proficiency. This paper studies the correlation between Asian language ballots provided by Section 203 of the Voting Rights Act and corresponding Asian voter turnout at the county level in California for presidential and midterm elections from 2012 to 2022. While other studies have covered this topic area, this paper is unique in its subdivision by national origin group. The hypotheses test for six individual Asian ethnic groups in California: Chinese, Japanese, Korean, Filipino, Vietnamese and Indian. With varying statistical significance, the paper finds a negative correlation between the provision of the language ballot and the corresponding Asian national origin group's voter turnout. The Hindi ballot had the greatest negative correlation to Indian voter turnout, explained by the especially wide language diversity spoken by Indian Americans. The combined regression also showed a negative correlation of statistical significance between the provision of an Asian language ballot and Asian voter turnout. Some limitations that explain for the overall trend are counties or precincts with hidden coverage, where they may be substantively covered but not indicated in the data due to missing reports from the registrar's office. Limited English proficient voters, even when provided with the ballot, may still be not predisposed to vote because of socioeconomic factors that cannot be observed in this study.

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Introduction

As the fastest growing racial group in the United States, Asian Americans and Pacific Islanders (AAPI) make up around 7% of the US adult population and 5.6% of eligible voters (Ruiz et al. 2023, Schaeffer 2023). They grew from 10.5 million in 2000 to 18.9 million in 2019 and according to the Carnegie Endowment for International Peace, are projected to "be the United States' largest immigrant group, with their numbers estimated to surpass 46 million" by 2060 (Budiman and Ruiz 2021a, Vaishnav and Labh 2023). More than 85% of this demographic is made up of six ethnic origins: Chinese (24%), Indian (21%), Filipino (19%), Vietnamese (10%), Korean (9%) and Japanese (7%) (Budiman and Ruiz 2021b). According to the Migration Policy Institute, migration from Asia rose sharply beginning in the 1970s after the termination of exclusionary and discriminatory immigration policy targeting those of Asian origin (Hanna and Batalova 2021). 73% of Asian Americans today have US citizenship, in comparison to 81% of Hispanics and 98% of non-Hispanic whites (Monte and Shin 2022, Moslimani 2023, Bloomberg Government 2022). Financially, Asian Americans fare better than the rest of the US with a median annual household income of $85,000 in comparison to $62,000, but there is a significant range by national origin spanning from $44,000 to $119,000 (Budiman and Ruiz 2021b).

Despite their recent and spectacular growth and visibility in the US in education, the work force and popular culture, Asian Americans are systemically underrepresented in legislatures and policymaking. While making up 5.6% of the national electorate, less than 1% of all elected officials identify as AAPI (Dugyala 2021). This underrepresentation not only slows down progress in the AAPI community due to a lack of support in key policy areas and understanding of cultural differences but can also be actively harmful. During the COVID-19 pandemic, Asian Americans, especially vulnerable populations such as women and the elderly,

faced verbal and/or violent acts of hate due to racism and xenophobia. From March of 2020 to 2021, activist organizations reported more than 6,500 hate crimes, with many more going unreported (Stop AAPI Hate 2021). It took Congress over a year after the beginning of the outbreak to act with the COVID-19 Hate Crimes Act (Sprunt 2021).

This severe underrepresentation and its consequences ultimately point to the need for Asian Americans to turn out and vote for candidates and policies in their own interests. In the 2020 presidential election, Asian American voter turnout reached record levels and saw the highest increase across all racial groups since 2016 thanks to unprecedented levels of focus on Asian voter rights advocacy, increased interest in politics due to anger against hate crimes from COVID-19 and the chance to vote for an Asian vice president. However, the AAPI turnout at 60% of the Citizen Voting Age Population (CVAP) still fell behind the overall turnout rate of 67% (Ramakrishnan 2021). This continued depression in AAPI voter turnout in comparison to other groups, despite all the signs of there being enthusiastic interest to participate by Asian Americans, alludes to the fact that there may be other factors, or barriers, at play.

The story of the AAPI electorate is deeply colored by immigration. The Pew Research Center states that "a majority of Asian American eligible voters are naturalized citizens, not US born citizens," signifying the dominance of immigrants making up the AAPI community (Budiman et al. 2024). Because so much of the electorate are older immigrants, language remains a significant obstacle, as one in four Asian American adults have limited English proficiency (LEP), making it difficult to access voting materials and fully engage in the political process (Ruiz et al. 2013).

Language access resources can be defined by preferred language ballots that LEP voters can request. An example of language as a barrier is the quantity and reason for registration and

ballot rejections for voters who identify as AAPI. However, there are several "hidden" ways that language can prevent LEP or non-fluent voters from accessing the voting process. This study focuses on California because of its prominent Asian American population and provision of Asian language ballots. California has the highest number of Asian residents of any state in the US at 6 million people, or about 15% of the state's population (Budiman and Ruiz 2021b). They make up a sizable chunk of the electorate at 17%, in comparison to Latinos, who make up 35% of the population but 21% of the electorate (Baldassare et al. 2020). Because of Asian Americans proving themselves as a voting bloc of influence in California due to their size, there are also a sizable proportion of Asian LEP voters, leading to several Asian language ballots being provided in multiple counties throughout California.

This paper examines the questions: How do language ballot provision under Section 203 of the Voting Rights Act impact AAPI voter turnout in California elections from 2012-2022? I perform multiple linear regression by Asian national origin groups to determine the correlation between the provision of the group's language ballot and their associated turnout, organized at the county and year level. The study examines the six most populous Asian American groups: Chinese, Japanese, Korean, Filipino, Vietnamese and Indian; across six elections: 2012, 2014, 2016, 2018, 2020 and 2022. I run a variety of models for each regression, considering variables such as county and year fixed effects, weight of the registrant count and total turnout in that county of non-Asian voters.

We find that ballot provision has a null effect on most of the national origin groups. In the combined regression, we find that it has a negative correlation with statistical significance. I explain with a few reasons as to why these results may differ from the expected, such as the nature of LEP citizens and their voter behavior as well as data limitations.

As the Asian American population and prominence in the United States continues to grow, studying their voting patterns and unlocking the AAPI vote is crucial for political parties and campaigns seeking to effectively engage this community. They are one of the fastest growing and diverse groups in the nation, and understanding their political participation is essential for a more comprehensive grasp on American democracy. This paper aims to add to the existing literature on the relatively less-researched topic of AAPI voting behavior from the comparative lens of one resource.

Literature Review

Voter Behavior Defined Through Identity

Though demographic is not a determination of one's voting probability, it is the exercise of the vote that will lead to political equality, and it is in the exercise of the vote that minority political power falls short (Fraga 2018). In *Who Votes Now? Demographics, Issues, Inequality, and Turnout in the United States* (2013), Jan Leighley and Jonathan Nagler evaluate national survey data from 1972 to 2008 and find, once again, a racial, class and age bias in who votes: minorities, the poor, and the young are less likely to turn out.

Minority voters, including Asian Americans, exhibit different voting patterns than observed in White non-Hispanic voters. Race becomes a salient factor of political motivation for voters of color and Asian Americans are also more likely to turn out to vote when a co-ethnic candidate is on the ballot (Chan et al. 2022, Fraga 2015). For both Latino and Asian voters, a perceived threat to their identity demographic inspires voters to turnout for the benefit, or protection, of the group (Jang 2009). Grander socioeconomic factors, such as systemic racism—an example of which is long-standing discriminatory voter ID laws that disproportionately impact racial and ethnic minority voters—may be at the source of the altered voter behavior (Pryor et al. 2019). Minority voters are subject to "a cycle of undermobilization," caught in a self-fulfilling prophecy (Barreto 2018). A campaign chooses to focus on a group, they feel important and feel obligated or interested to show up at the polls, then campaigns during the next election will focus on them again because of their previous show of strength. The key point is that voter turnout for non-White Americans overall has been and continues to be substantially lower than that for Whites (Fraga 2018). Minorities story of struggle in the US results in varied social and cultural notions that bleed into their civic behavior.

Though it is a quickly growing field, literature on AAPI voter data is already difficult to come by with a few prominent scholars having authored much of the dominant literature. Asian Americans are fundamentally different from other minorities in the US, predominantly African Americans and Latinos. Asian Americans, unlike African Americans, are predominantly made up of recent immigrants to the US with LEP, making up more than 20% of the total LEP population in the US (Halder et al. 2023). Unlike African Americans who have presided in the country for more than 250 years and are native to the history, culture, and makeup of America in every sense, Asian Americans are more commonly viewed as foreigners and different. They are also different from Latinos, with whom they share the title of "immigrant." Though both ethnic minorities bear the hardships of mass migration to the US and struggle with language barriers in the political process, Asian Americans are a trickier demographic to tap into because of the diverse ethnic representation within the title "Asian American." While Latino Americans also hail from a variety of diverse ethnicities, nearly three out of four speak Spanish as their dominant language, made possible by the fact that Spanish is spoken widely amongst different nations in Latin America, transcending state lines (Mora and Lopez 2023). This far outpaces Mandarin, the most widely spoken Asian language in the US, because languages in Asia more varied and as a group, Asian Americans speak hundreds of different languages. Because of their current size and relatively short history in the US, literature on AAPI in the civic process is lacking.

Because of the litany of subgroups in the category of AAPI, this demographic boasts a wide variety of voting behavior. It can depend on ethnic identity, with Japanese Americans being the most likely to civically participate than their peers while Korean Americans were the least likely (Lien 2004). Vietnamese Americans were most likely to vote, even though they are not the recipients of campaigning from political parties and are less resourced than Chinese or Korean

Americans (Masuoka et al. 2019). Counties with a more diverse AAPI population, defined by a higher proportion of interracial marriages and a diverse mix of minorities that fall into the umbrella that is "Asian American," was found to produce higher voter turnout (Diaz 2012). Young people, though granted birthright citizenship because many are second generation Asian Americans, were not more likely to vote than their immigrant parents (Masuoka et al. 2019). This could perhaps be explained by the cultural implications of the model minority myth, which harmfully stereotypes Asian Americans as a group that is uninvolved in politics. Interestingly, noting that Chinese and Vietnamese Americans have faced more stringent exclusion from American society, students of this descent were more likely to participate in nontraditional methods of civic engagement (Wray-Lake et al. 2017). Because of the diversity of ethnic groups and cultures within the AAPI community, it becomes even more crucial to understand the interconnectedness between the demographics to most effectively reach the electorate.

Literature continues to highlight language as an impactful factor in determining AAPI voting behavior. Asian Americans speak more than 15 different languages spread across the two coasts, with nearly a third of all Asian Americans residing in California alone (Budiman and Ruiz 2021b). By the mid-21st century, Asian Americans are expected to make up more than 45 million of the US population and projected to surpass Latinos as the largest immigrant group in the country (Budiman and Ruiz 2021a). Because of the overwhelming immigrant influence, 43% of foreign-born Asian Americans reported LEP, including non-citizens, making language a clear barrier to every part of the political process (Budiman and Ruiz 2021b). Asian would-be voters understandably feel disconnected from the political atmosphere and choose not to vote not because they do not care, but because they do not have access to campaign information that they can comprehend, so they are unable to determine their preferred candidate (Nguyen 2022).

Former Asian Americans Advancing Justice-Atlanta (AAAJ-A) Executive Director Phi Nguyen discussed her experience with voters, recollecting that because of the lack of political materials in voters' preferred languages, some did not know the difference between candidates Donald Trump and Hilary Clinton during the 2016 general election. Campaign tactics that attempt to minimize the language barrier typically are the most effective, especially phone banking individual voters in their preferred language, which is typically carried out by AAPI grassroots organizations (Bedolla and Michelson 2009). Because of their diversity in language and cultures, AAPI voters require focused campaign tactics.

Key Legislation at the Federal and State Level

Because language is such a key obstacle at every step of the voting process, the implementation of progressive legislation such as the Voting Rights Act (VRA) can increase AAPI voter turnout (Fraga and Merseth 2016). This 2016 paper finds that increased resources and progressive policies should increase voter turnout for disenfranchised voters. Enacted in 1965 by President Lyndon B. Johnson during the height of the Civil Rights Movement, the VRA targets discrimination at the polling place and elections process based on race. The Congressional Research Service deems it "perhaps the country's most important voting rights law, with a history that dates back to the Civil War" (Congressional Research Service 2015). It outlaws explicit and implicit methods of racial voter disenfranchisement with historical precedent, such as literacy tests. The VRA was challenged through *Shelby County, Alabama v. Holder* (2013) where the US Supreme Court struck down Section 4 of the VRA, leaving Section 5 also inoperable. The plaintiffs successfully argued that the VRA and Congress were infringing on states' rights, meaning that highlighted areas with a history of voting discrimination would no

longer require a clearance with the Attorney General or US District Court of Columbia to make changes to their election codes (Congressional Research Service 2015). Although a landmark bill, the VRA is constantly tested through new constitutional challenges that threaten to undermine voting equity.

Language ballots, official ballots translated into the voter's preferred language other than English, are a primary focus. Section 203 of the VRA is the "keystone" of language access for LEP Americans (U.S. Department of Justice 2023b). It was added as an amendment to the VRA in 1975 with an aim to expand the political process to citizens of language minorities have been discriminated against by "various practices and procedures" (U.S. Department of Justice 2023b). In 2006, Congress voted to reauthorize Section 203 until 2032. Section 203 of the VRA denotes that when a jurisdiction—mostly at the county level but sometimes at the township or municipality level—has a LEP population of more than 10,000 people or 5% of the total CVAP, the jurisdiction is covered by Section 203 and must provide a language ballot, along with other assistive voter material in the preferred language (U.S. Department of Justice 2023a). The determinations are made every five years, with the most recent determinations made in 2021, and the primary data source is the American Community Survey, conducted by the Census Bureau (Redistricting & Voting Rights Data Office 2022). The organization defines LEP voters as those "who are unable to speak or understand English adequately enough to participate in the electoral process" (Redistricting & Voting Rights Data Office 2022). This LEP population must be members of a single language minority group and have depressed literacy rates where "the rate of total voting age citizens who are LEP and have less than a fifth-grade education is higher than the national rate" (U.S. Department of Justice 2023b, Redistricting & Voting Rights Data Office 2022).

Currently, coverage is only provided in Asian, Spanish, Alaskan Native and Native American languages, leaving out Arabic and Haitian Creole languages. The Census Bureau stated that they use racial and ethnic data as a proxy for which groups speak the languages that need coverage (Wang 2022b). People who speak Arabic are classified by their race, where standards define people with origins in the Middle East as white (Wang 2022b). Haitian Creole is categorized as an Indo-European language, so its speakers are not within the protected language minority group (Wang 2022b). Section 203 also fails to distinguish amongst the variety of languages spoken in one country and instead groups them all into one language; for example, India hails over 700 languages but because Section 203 groups together voters by their country of origin, those who identify as Asian Indian counts toward coverage for a singular Asian Indian language, where most counties identify as Hindi. Language ballots are a key focus of this paper because they are a primary language resource essential in the political process for LEP voters.

After the passage of Section 203 in the VRA, California adopted their own language provisions that furthered access to LEP voters in 1994 (California Elections Code 1994). Instead of the 5% in a jurisdiction as stated in Section 203, California's Election Code 14201 lowered the threshold to 3% of an LEP population in a jurisdiction, in this case at the precinct level, to qualify for coverage. The determinations are made by January 1st of each year there is a gubernatorial election in the state (California Secretary of State 2021). The most recent determinations were made on December 31, 2021, effective for elections starting in 2022 (California Secretary of State 2021). Not only does California expand access by lowering the threshold required to receive language materials, but it also provides a larger variety of languages that can be covered. Code 14201 removes the VRA Section 203's focus on only

Asian, Hispanic, Alaskan Native and Native American languages, and instead any language can be covered if it meets the coverage formula set in the code.

The California Voting Rights Act (CVRA) was passed in 2001 by Governor Gray Davis to expand voting rights under the federal Voting Rights Act. Codified as California Elections Code §§ 14026-14032, the CVRA addresses the issue of vote dilution and discrimination against communities of voters through institutional barriers. Specifically, it was designed to tackle the inconsistency between the rising population of Latino and Asian voters in the state but stagnant minority representation in local government (Powell 2018, California Latino Legislative Caucus 2015). The legislation was supported by civil rights and voter advocacy organizations such as the American Civil Liberties Union. In 2016, the legislature passed an amendment to Section 10010, enacting a 45-day "safe harbor" period to protect plaintiffs from further lawsuits during the period immediately after they receive a letter declaring the original case. California's District Courts have defended the CVRA as constitutional through *Sanchez v. City of Modesto* (2006), striking down arguments that the act was discriminatory because it favored minority voters.

Studies of Interest

Though the positive impacts of language ballots on minority LEP voters may seem inherent or obvious, research shows mixed results of increases in voter turnout. For Latino voters, a study showed that monolingual English ballots increased voter turnout more than bilingual Spanish material in all 3 locations of New Jersey, North Carolina, and Virginia; "Across our three experiments, the increase in turnout caused by the English mailings is 35%–70% larger than the increase caused by the bilingual mailings" (Mann, Michelson, and Davis 2020). The study argues this may be due to the demographic/region the ballots were used used

and how it may be received by the voters as pandering, seeing English as more official, feeling that they're being condescended or shamed in assumption of need of bilingual material. The Mann, Michelson and Davis paper differs from this study because it assumes a causal relationship between the bilingual ballot and turnout due to its format as a field experiment.

One 2005 study that focuses on Asian American voters showed that the estimated increase in turnout in counties with bilingual ballots ranged from 1.8% to 3.5%, but never near statistical significance" (Jones-Correa 2005). The variety of factors that are involved in measuring voter turnout complicates the ability to study the true effect of a single ballot.

Fraga and Merseth find that progressive legislation, specifically the VRA, significantly increased coverage for Latino and Asian voters, the two groups with the most significant language barriers. Because "voting is often characterized as a 'costly' activity at the individual level," alleviating these costs on the burden of the government should increase turnout (Fraga and Merseth 2016). The paper found that the language provisions in the VRA increased coverage so that one in three voting eligible Asian Americans lived in such covered area. "We continue to see a substantial, though attenuated, 15 percentage point increase in Asian American turnout" (Fraga and Merseth 2016). Residing in a covered jurisdiction increases resources and removes barriers to registration and voting, thus increasing turnout. The study also points to a discrepancy in voting behavior under the provisions between Latinos and Asian Americans, finding "no effect" for Latinos, but "significantly higher turnout among Asian American registrants from covered language groups" (Fraga and Merseth 2016). This finding could differ from the Mann, Michelson and Davis paper in that the causal negative relationship found by Mann, Michelson and Davis may not apply to Asian American voters. Recent literature on the effect of language ballots on AAPI voters is extremely limited. Additional purposes of this paper are to shed light

on the specific language resources and policies that can most effectively unlock access to the Asian American vote.

Theoretical Argument

It is a foundation of American political science that most people are predisposed to vote. Richard A. Brody found in 1978 through a survey that an overwhelming majority of Americans, around 90% of them, considered voting a duty and would vote even if they predicted their candidate to lose (Brody 1978). Then why don't all elections get 90% turnout? That's because aside from personal interest, voters also need resources and information to remove obstacles to voting.

Resource Theory

Resources can incentivize or remove obstacles to voting, encouraging higher turnout. Research shows that voter turnout depends heavily on obstacles to voters, such as registration laws, polling place hours and poll taxes (Wolfinger and Rosenstone 1980). Increasing poll hours and removing poll taxes are both ways that minority voter turnout can be encouraged. Traditionally, minority voters tend to be from lower socioeconomic status than white voters, with the barriers of standard daytime working hours preventing them from being able to vote in person until after their workday is over and inability or unwillingness to pay additional poll taxes (Filer et al. 1991).

Henry E. Brady's resource model of political participation "demonstrates that motivations such as interest in politics are not enough to explain political participation. The resources of time, money, and skills are also powerful predictors of political participation in America" (Brady et al. 1995). The more resources that voters receive, especially underserved voters, the more of a difference it makes in opening the channels to voting for them. Fiscal

expenditures from campaigns and government agencies to gives them the benefits to show up at the polls.

Information Theory

Research also shows that voters are more likely to turn out when they have more information about the elections process and the candidates. In 1987, Thomas Palfrey and Keith T. Poole found a positive correlation between the amount of information a person had and their probability of voting in the 1980 presidential election (Palfrey and Poole 1987).

The underlying psychology behind information theory, apart from the fact that it aids voters to know when and where to show up at the polls, is that it gives them the confidence that they are making the best decision for themselves. In John G. Matsusaka's 1995 model, "people who end up with too little information to determine which candidate to vote for are more likely to abstain—rather than cast an ignorant vote, they do not vote at all" (Matsusaka 1995). Major political candidates at the top of the ballot, such as the president and vice president positions, receive more votes than the more obscure positions at the bottom of the ballot. The trend continues as in 2016, more than 30% of voters nationwide did not complete their ballot at all and even for candidates competing in the same election, those listed at the top of the list are likely to receive 5% more than their counterparts who are listed merely rows lower (Axelrod and Murphy 2016). "The key link is that a person's expected benefit from casting a decisive vote is increasing in her certainty that she is supporting the best candidate. As a result, the person is more likely to vote as she becomes ore sure about which way to vote. Confidence in a voting decision is increased by raw information about the candidates and knowledge about the model of the world.

Thus, as the price of information falls and knowledge rises, a person's probability of voting goes up" (Matsusaka 1995).

Hypotheses

Hypothesis 1: The presence of a Mandarin language ballot is correlated with an increase in Chinese voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 2: The presence of a Japanese language ballot is correlated with an increase in Japanese voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 3: The presence of a Korean language ballot is correlated with an increase in Korean voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 4: The presence of a Tagalog language ballot is correlated with an increase in Filipino voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 5: The presence of a Vietnamese language ballot is correlated with an increase in Vietnamese voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 6: The presence of a Hindi language ballot is correlated with an increase in Indian voter turnout in that county in comparison to counties that do not receive coverage.

Hypothesis 7: The presence of an Asian language ballot is correlated with an increase in Asian voter turnout in that county in comparison to counties that do not receive coverage.

Data

The study requires two types of data: voter turnout for Asian ethnicities and language ballot provision for Asian languages during elections of interest.

Voter Turnout Data

I downloaded data from the California Statewide Database. This data is provided from the State of California through California county registrar of voters and county clerk offices that give information at the precinct level for both primary and general elections. Though there were other sources of data, I chose the California Statewide Database because it is compiled directly from state government registration files and is the source for the language ballot data used later.

From the "VOTE" section on the website, the data is in the form of a CSV file and provides the registration statistics for all registered voters in that precinct who voted, combining absentee and Election Day voters. From the "Registration" section, the data is in the form of a CSV file and provides the registration statistic for all citizens in that precinct who are registered. I downloaded data files for voters from the 2022, 2020, 2018, 2016, 2014 and 2012 general elections because it encompasses the six most recent elections and three iterations of Section 203 determinations.

Each data file, two for each election, gives voters' racial, ethnic and party identities by precinct. Amongst a variety of party and racial identification, 24 columns are of interest for this study. There are six Asian ethnicities recorded in the dataset and these are also the six most populous Asian ethnicities represented in Asian Americans: Chinese, Japanese, Korean, Filipino, Vietnamese and Indian. For each ethnicity, there are four party identifications: Democrat, Republican, Other and Declined to Answer.

The Statewide Database uses surname matching to identify Asian voters by national origin. They utilize the surname dictionary outlined in "Asian American ethnic identification by surname" by Diane S. Lauderdale and Bert Kestenbaum, published in 2000. There is a one-to-one ethnic identity match by surname using this dictionary, meaning that residents are placed in exactly one Asian ethnic minority if they fit the surname. The Statewide Database only provides voter and registrant information for the six most populous Asian ethnicities, who make up nearly 85% of the Asian American population in the US when combined (Budiman and Ruiz 2021b).

To prepare the data, I used R. I downloaded the VOTE data for one election year into R, then created a total vote count in each precinct for each of six ethnicities of interest, titled "ChiVote" for the total count of Chinese voters in that precinct, "JPNVote" for the total count of Japanese voters in that precinct, "KorVote" for the total count of Korean voters in that precinct, "FilVote" for the total count of Filipino voters in that precinct, "VietVote" for the total count of Vietnamese voters in that precinct and "IndVote" for the total count of Indian voters in that precinct. I also created an "ESAVoteTotal" that combined the total vote count of the six Asian ethnicities and a "HispVote" for the total count of Hispanic voters as a comparison. I then downloaded the Registration data for the same election year into R, and repeated the process above, except with total registrants. I created six columns that represented the total count of registrants for each Asian ethnicity at the precinct level titled "ChiReg", "JPNReg", "KorReg", "FilReg", "VietReg", "IndReg" and also a "ESARegTotal" that sums the previous six columns for the total count of registrants from each precinct who have an Asian national origin. I merged both datasets up to the county level, then merged them together by county FIPS code. Finally, I created voter turnout rates by dividing the voter count and registrant counts for each respective ethnicity/racial grouping. The numerator is the count of voters who voted ("ChiVote") and the

denominator is the count of voters who were registered ("ChiReg") to create the percentage of voter turnout in that group ("ChiVoterPct"). Typically, voter turnout is calculated as the percentage of voters who turn out to vote from a larger CVAP group. Because of varying sources on CVAP numbers for Asian American populations and the fact that California's automatic voter registration system captures most eligible citizens, I use the registrant number to calculate the voter turnout.

Language Ballot Data

I downloaded data from the US Census Bureau. The file is titled "Section203_Comparisons_2021" and provides a side-by-side comparison of the counties in every state that gained a minority language ballot every time the Section 203 determinations were made in December of 2002, 2011, 2016 and 2021. This means that under the federal VRA, these counties met the 5% LEP voter population requirement and therefore a language ballot is provided for that language minority throughout the county. The 2011 determination provided coverage for elections in 2012, 2014 and 2016, the 2016 determination provided coverage for elections in 2018 and 2020, and the 2021 determination provided coverage for the 2022 election (and will also provide coverage for elections in 2024 and 2026). The data for Section 203 is provided by the American Community Survey conducted by the US Census Bureau.

From the PDF file, I created an Excel file that focuses on just the counties in California that gained an Asian language ballot. This file had four columns: county FIPS code, county name, election year and Asian language covered by Section 203. This Excel file only contained counties that had coverage for any Asian language—counties that did not meet the requirement

and therefore did not receive coverage were excluded. Below is an organization of the Section 203 Determinations file.

Figure 1: Section 203 Asian Language Provisions

County	Languages	Election Years
Alameda	Chinese, Filipino, Vietnamese	2022, 2020, 2018, 2016, 2014, 2012
Contra Costa	Chinese	2022, 2020, 2018
Los Angeles	Cambodian (omitted), Chinese, Filipino, Korean, Vietnamese	2022, 2020, 2018
Los Angeles	Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian language (omitted)	2016, 2014, 2012
Orange	Chinese, Korean, Vietnamese	2022, 2020, 2018, 2016, 2014, 2012
Sacramento	Chinese, Vietnamese	2022
Sacramento	Chinese	2020, 2018 2016, 2014, 2012
San Diego	Chinese, Filipino, Vietnamese	2022, 2020, 2018, 2016, 2014, 2012

San Francisco	Chinese	2022, 2020, 2018, 2016, 2014, 2012
San Mateo	Chinese, Filipino	2022
San Mateo	Chinese	2020, 2018, 2016, 2014, 2012
Santa Clara	Chinese, Filipino, Vietnamese	2022, 2020, 2018, 2016, 2014, 2012

From this master Excel file that contained the covered counties for each election year, I created election-specific Excel files for all counties in California that denoted, in binary form, whether the county covered languages from each of the six Asian national origins identified in the Statewide Database files. If the county covered the Chinese language ballot, for instance, then it was coded as 1 for that variable. I matched a FIPS code to each of these counties, then merged this dataset with the Statewide Database for each election year. After I had the combined dataset for each election year containing the voter turnout rates for Asian ethnicities by county and whether the county was covered by Section 203 in each language, I combined the years to create a large dataset for all elections from 2012-2022.

Because the language ballot data is pulled from the US Census, it does not capture the exact languages that voters speak, but rather projects based on their national origin. For example, even though there are at least three distinct languages (Mandarin, Taiwanese, Cantonese) and a variety of dialects spoken in China and by people of Chinese descent, anyone who identifies as LEP and denotes their national origin as China will be counted under provision for the Chinese language ballot. Hence, we can view the language ballot provision as providing assistance to

people who are LEP from a certain national origin, not always a 100% match for the language that they speak. Additionally, starting in 2016, the US Census "Section203_Comparisons_201" file began to denote that Taiwanese was included in the Chinese coverage. Previously, Taiwanese was not mentioned in the distinction, but the Census Bureau had continued to include them. In my code, I denote Taiwanese and Chinese in the same group, consistent to the determinations made by the Census Bureau. Every Asian national origin group covered in Section 203 for California is also denoted in the Statewide Database except where Cambodian, typically speaking Khmer, was covered in Los Angeles County. For the purposes of this study, I will omit Cambodian from the because it is not possible to study their voter turnout due to the fact that the national origin group is not represented in the Statewide Database.

Research Design

This paper studies the correlation between the provision of institutional resources such as language ballots and Asian voter turnout. Section 203 of the Voting Rights Act stating that if a precinct has at least five percent of residents in a jurisdiction, in most cases at the county level, who are members of a single language minority and are limited English proficient, then the jurisdiction must provide a translated ballot in that minority language. This means that every five years as the Section 203 determinations are made, there are counties that lose and gain language ballots for different languages. I want to compare counties by election as they gain or lose access to language ballots and test for its correlation on the corresponding group's voter turnout.

To test this comparison of voter turnout for Asian national origin between covered and non-covered counties, I will be working with panel data for voter behavior and conducting a simple and multiple linear regression analysis. The dependent variable would be the Asian national origin group's voter turnout rate (numerical), and the independent variable would be the provision of the corresponding language ballot (binary). The null hypothesis is that the presence of the language ballot is not correlated with voter turnout for that national origin group in that county, meaning that the coefficient on providing the ballot is 0. The alternative hypothesis is that the presence of the language ballot is correlated with voter turnout for that national origin group in that county, meaning that the coefficient is not 0. The turnout rate for each group and the total turnout rates are both in the form of a percentage. The total turnout rate excludes the corresponding national origin group tested in the regression to avoid this group from being "double counted."

I conduct the model on each national origin group individually using a data frame that is grouped by year and county, then on all national origin groups combined using a data frame that

is grouped by year, county and national origin group for a total of seven linear regression models. There was no need to use the logarithmic for the dependent variable because it was already scaled at the percentage between 0 and 1.

The regression equations are as follows:

Model 1: TurnoutRate_group = Intercept + B_1 * Coverage_group + Error

Model 1 is the simple linear regression at its most basic form.

Model 2: TurnoutRate_group = Intercept + B_1 * Coverage_group + Registrant Weight + Error

In Model 2, I control for population differences by national origin between counties by weighting the number of registrants in each national origin group. This is because there are some counties with 0 registrants in a certain Asian national origin, resulting in the voter turnout percentage for that national origin in that county to be NA. Furthermore, if there are 0 voters from the national origin, it is unreasonable to weight for the correlation of the corresponding language ballot since the county would not be in consideration for coverage based on the Census Bureau.

Model 3: TurnoutRate_group = Intercept + B_1 * Coverage_group + Registrant Weight + County FE + Error

Fixed effects is an econometrics technique that controls for variables that are constant within a larger variable (Huntington-Klein 2021). This method is especially useful because it can control for both observed and unobserved variables to help capture confounding variables that may not be possible for me to explicitly control. I apply fixed effects at the county level to control for changes in ballot provision for each county over time. This means that if a county was to lose or gain a ballot over time, the fixed effect will be able to control for the unobserved

variables associated with this change in Section 203 provision. I use the FIPS code to delineate by county.

Model 4: TurnoutRate_group = Intercept + B_1 * Coverage_group + B_2 * Total Turnout + Registrant Weight + County FE + Error

In Model 4, I also control for total voter turnout in that county. This variable includes all races, except for the Asian national origin group that is being tested in the regression to prevent this group from being "double counted." Adding the total voter turnout independent variable is crucial because it can help capture factors that impact voter turnout in that county overall, such as socioeconomic status and education levels.

Model 5: TurnoutRate_group = Intercept + B_1 * Coverage_group + B_2 * Total Turnout + Registrant Weight + County FE + Year FE + Error

The election year fixed effect helps control for variations in between elections that may be otherwise explained, such as the fact that presidential elections naturally garner more attention and receive higher turnout, and both are tested in the same regression.

Model 6: TurnoutRate_group = Intercept + B_1 * Coverage_group + B_2 * Total Turnout + County FE + Year FE + Error

I will also conduct a regression without the weight of the registration pool to account for the compounding effect that disproportionately huge counties, such as Los Angeles County, may have in driving the coefficient in a certain direction.

Results

Using the methods provided in the research design, I created seven models of linear regression to test for the correlation between the provision of the Asian national origin group's ballot and their turnout.

Figure 2 shows the regression results of the correlation of the provision of the Mandarin language ballot to the Chinese voter turnout. The adjusted R-squared increases dramatically with the inclusion of the total turnout and is the highest in Model 5 with the year fixed effect, indicating that including these variables "improved the model more than would be expected by chance" (Potters 2023). Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. Though the coefficient shows that the provision of the Mandarin ballot had a negative correlation with Chinese voter turnout by -0.2%, the result is not statistically significant with $p > 0.1$. We fail to reject the null hypothesis and can determine that the Mandarin ballot has no correlation to Chinese voter turnout at any level of significance.

When we consider Model 6 where the weight of the county's registrant size is not taken into account, we see a positive correlation that is still statistically insignificant. We notice in fact that none of the coefficients for the provision of the Mandarin ballot were statistically significant, thought they were mostly positive. The total turnout variable was statistically significant which means that the total turnout variable explained the Chinese voter turnout rate more than is explainable by chance.

Figure 2: Chinese Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.609***	0.589***	0.572***	-0.125***	-0.116**	-0.166+

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	(0.009)	(0.025)	(0.094)	(0.022)	(0.035)	(0.091)
Mandarin Ballot	0.010	0.009	0.027	0.027	-0.002	0.019
	(0.024)	(0.026)	(0.090)	(0.019)	(0.011)	(0.050)
Total Turnout				1.060***	1.025***	1.112***
				(0.013)	(0.045)	(0.099)
Num.Obs.	348	348	348	348	348	348
R2	0.000	0.000	0.200	0.965	0.989	0.879
R2 Adj.	-0.002	-0.003	0.039	0.957	0.987	0.852
AIC	-293.6	689.2	725.8	-358.0	-763.0	-902.5
BIC	-282.0	700.8	957.0	-123.0	-508.7	-648.3
Log.Lik.	149.797	-341.618	-302.922	240.004	447.487	517.256
F	0.171	0.129	1.243	133.284	407.989	32.136
RMSE	0.16	0.16	0.13	0.06	0.06	0.05
Weighted	-	X	X	X	X	-
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 3 shows the regression results of the correlation of the provision of the Japanese language ballot to the Japanese voter turnout. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient shows that the provision of the Japanese ballot had a negative correlation with Japanese voter turnout by -0.7% and the result is

statistically significant with $0.05 < p < 0.1$. Even more interesting is that in Model 4, without the year fixed effect, the model is extremely statistically significant at $p < 0.01$ and shows an even larger negative correlation at -2.9%. Here, we reject the null hypothesis and state that Japanese ballots do have a correlation to Japanese voter turnout and that the correlation is negative at the 10% significance level. In a consistent trend, all of the correlation values are negative, regardless of their significance.

Figure 3: Japanese Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.726***	0.730***	0.745***	0.180***	0.190***	0.258*
	(0.009)	(0.007)	(0.031)	(0.007)	(0.024)	(0.121)
Japanese Ballot	-0.105	-0.108***	-0.063**	-0.029***	-0.007*	-0.012
	(0.096)	(0.017)	(0.023)	(0.003)	(0.003)	(0.081)
Total Turnout				0.865***	0.833***	0.776***
				(0.007)	(0.033)	(0.160)
Num.Obs.	348	348	348	348	348	348
R2	0.003	0.101	0.183	0.983	0.991	0.718
R2 Adj.	0.001	0.098	0.019	0.980	0.989	0.654
AIC	-257.7	305.4	386.0	-962.9	-1167.8	-571.0
BIC	-246.1	317.0	617.1	-727.9	-913.6	-316.7
Log.Lik.	131.853	-149.699	-132.999	542.425	649.916	351.495
F	1.180	38.679	1.115	284.898	482.460	11.256
RMSE	0.17	0.17	0.13	0.09	0.09	0.09

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Weighted	-	X	X	X	X	-
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 4 shows the regression results of the correlation of the provision of the Korean language ballot to the Korean voter turnout. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient shows that the provision of the Korean ballot had a negative correlation with Korean voter turnout by -0.6% and the result is not statistically significant with p > 0.1. Similar to the Chinese voter turnout regression, the Korean ballot did not significantly correlate with Korean voter turnout. Here, we fail to reject the null hypothesis and state that Korean ballots do not have a correlation to Korean voter turnout. We also notice that the number of observations is lower than in the previous two regressions at 343 observations in comparison to 348, indicating that there were five counties without any Korean registrants from all election years that were excluded from the regression. A survey of the data confirms this.

Figure 4: Korean Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.613***	0.576***	0.548***	-0.139***	-0.071+	-0.058
	(0.011)	(0.014)	(0.040)	(0.015)	(0.042)	(0.132)
Korean Ballot	-0.110+	-0.083***	0.009	-0.008	-0.006	-0.004

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	(0.057)	(0.018)	(0.045)	(0.012)	(0.006)	(0.057)
Total Turnout				1.048***	0.874***	0.896***
				(0.017)	(0.057)	(0.175)
Num.Obs.	343	343	343	343	343	343
R2	0.011	0.062	0.139	0.940	0.984	0.790
R2 Adj.	0.008	0.059	-0.033	0.928	0.981	0.743
AIC	-149.8	753.5	835.8	-76.8	-527.0	-558.0
BIC	-138.3	765.1	1062.2	153.5	-277.6	-308.5
Log.Lik.	77.895	-373.769	-358.894	98.402	328.509	343.992
F	3.764	22.352				
RMSE	0.19	0.20	0.16	0.09	0.09	0.09
Weighted	-	X	X	X	X	-
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 5 shows the regression results of the correlation of the provision of the Tagalog language ballot to the Filipino voter turnout. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient shows that the provision of the Tagalog ballot had a negative correlation with Filipino voter turnout by -1% and the result is statistically significant at $p < 0.1$. We reject the null hypothesis and state that Tagalog ballots do

have a correlation to Filipino voter turnout and that it has a negative correlation at the 10% significance level.

Figure 5: Filipino Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.631***	0.602***	0.729***	-0.176***	-0.067**	-0.151
	(0.009)	(0.012)	(0.076)	(0.009)	(0.021)	(0.103)
Tagalog Ballot	-0.055	-0.043*	-0.134*	0.001	-0.010*	-0.014
	(0.034)	(0.017)	(0.066)	(0.006)	(0.004)	(0.054)
Total Turnout				1.173***	1.023***	1.143***
				(0.006)	(0.028)	(0.113)
Num.Obs.	348	348	348	348	348	348
R2	0.008	0.017	0.099	0.992	0.996	0.849
R2 Adj.	0.005	0.014	-0.081	0.991	0.996	0.815
AIC	-284.0	427.5	511.0	-1150.2	-1398.1	-814.1
BIC	-272.4	439.0	742.1	-915.2	-1143.9	-559.8
Log.Lik.	144.999	-210.728	-195.506	636.107	765.053	473.038
F	2.667	6.039	0.550	640.342	1221.938	24.935
RMSE	0.16	0.16	0.15	0.07	0.07	0.06
Weighted	-	X	X	X	X	-
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 6 shows the regression results of the correlation of the provision of the Vietnamese language ballot to the Vietnamese voter turnout. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient shows that the provision of the Vietnamese ballot had a negative correlation with Vietnamese voter turnout by -1.5% and the result is not statistically significant at p > 0.1. We fail to reject the null hypothesis and state that Vietnamese ballots do not have a correlation to Vietnamese voter turnout at any significance level. Similar to the regression on Korean voters, there were fewer observations in the dataset given that there were some counties with 0 Vietnamese registrants.

Figure 6: Vietnamese Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.551***	0.556***	0.656***	-0.178***	-0.180***	-0.222
	(0.011)	(0.021)	(0.082)	(0.027)	(0.048)	(0.177)
Vietnamese Ballot	-0.006	0.015	-0.129+	0.001	-0.015	0.014
	(0.037)	(0.023)	(0.073)	(0.021)	(0.012)	(0.087)
Total Turnout				1.073***	1.043***	1.122***
				(0.019)	(0.065)	(0.202)
Num.Obs.	330	330	330	330	330	330
R2	0.000	0.001	0.141	0.933	0.977	0.732

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
R2 Adj.	-0.003	-0.002	-0.035	0.918	0.972	0.670
AIC	-143.5	820.4	880.5	42.9	-302.4	-455.9
BIC	-132.1	831.8	1100.9	267.0	-59.3	-212.8
Log.Lik.	74.755	-407.188	-382.267	37.557	215.213	291.957
F	0.023	0.427	0.802	66.001	183.150	11.757
RMSE	0.19	0.19	0.17	0.10	0.11	0.10
Weighted	-	X	X	X	X	-
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 7 shows the regression results of the correlation of the provision of the Hindi language ballot to the Indian voter turnout. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient shows that the provision of the Hindi ballot had a negative correlation with Indian voter turnout by -2.7% and the result is extremely statistically significant at $p < 0.01$. We reject the null hypothesis and state that Hindi ballots do have a correlation to Indian voter turnout and that it has a negative correlation at the 1% significance level.

This regression is interesting because of its divergence from previous results that found a negative correlation at low significance levels. With the $p < 0.01$, this is the first regression done at the national origin group level that shows extreme statistical significance. This may be further explained by the fact that the language ballot for the Indian national origin group is provided in

Hindi and India boasts the most language diversity amongst the six nations studied in the data. Therefore, this could be a sign that though the Hindi ballot is provided based on the number of Indian LEP voters, these LEP voters actually do not speak Hindi and another Indian language, therefore benefitting from the ballot at all and resulting in no or negative correlation.

Figure 7: Indian Voter Turnout Regression

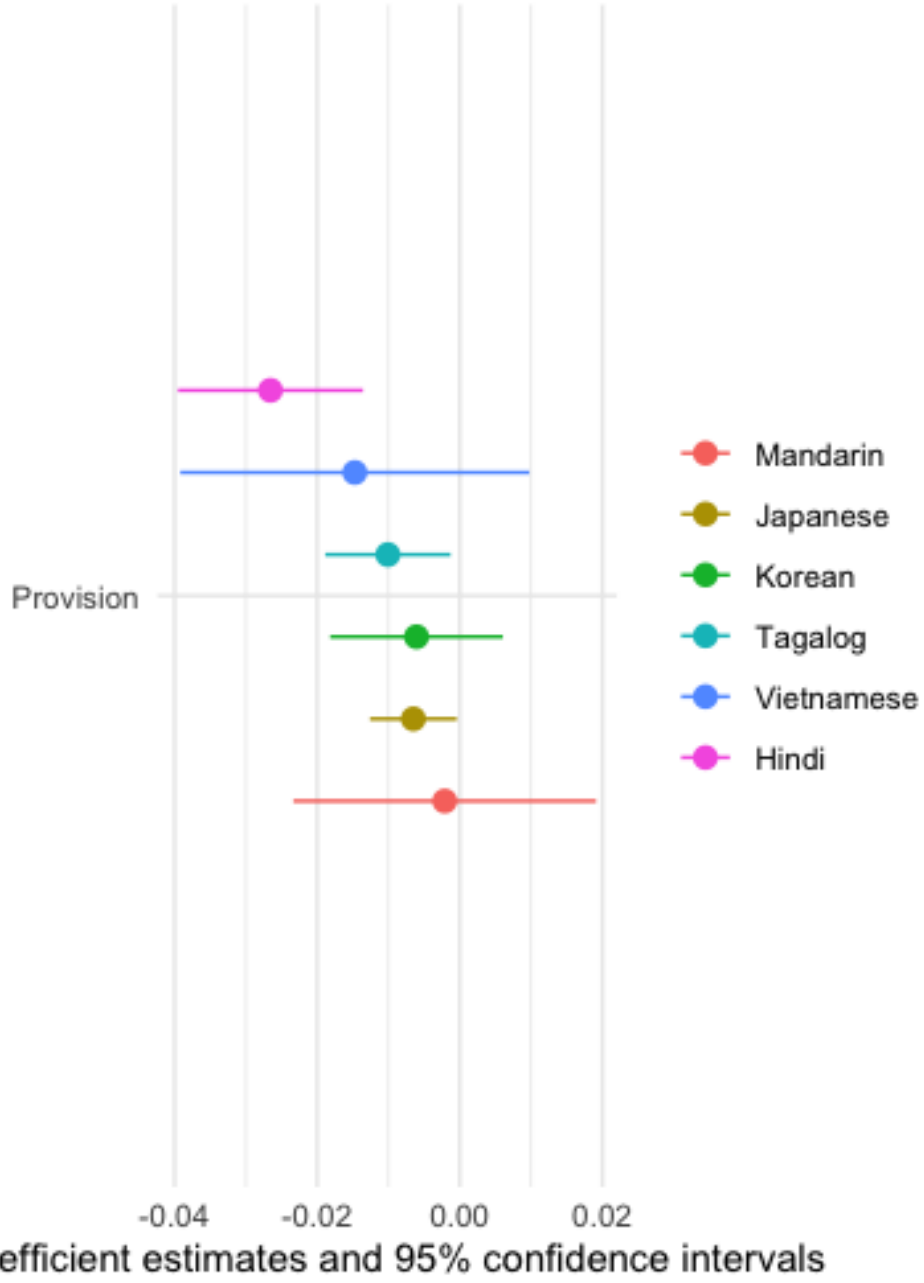
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.605***	0.618***	0.615***	-0.208***	0.051	0.059
	(0.009)	(0.009)	(0.027)	(0.009)	(0.042)	(0.090)
Hindi Ballot	-0.104	-0.112**	-0.064	-0.019*	-0.027***	-0.023
	(0.100)	(0.036)	(0.048)	(0.007)	(0.007)	(0.060)
Total Turnout				1.253***	0.875***	0.854***
				(0.012)	(0.057)	(0.118)
Num.Obs.	348	348	348	348	348	348
R2	0.003	0.028	0.106	0.979	0.987	0.856
R2 Adj.	0.000	0.025	-0.073	0.974	0.984	0.823
AIC	-234.0	497.5	582.1	-716.6	-870.1	-780.9
BIC	-222.5	509.1	813.3	-481.6	-615.9	-526.7
Log.Lik.	120.021	-245.769	-231.071	419.310	501.069	456.464
F	1.087	9.852	0.594	224.594	328.136	26.248
RMSE	0.17	0.17	0.16	0.07	0.07	0.07
Weighted	-	X	X	X	X	-

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Figure 8 shows the coefficient comparison for the Model 5 regression across all 6 national origin groups. When looking at the coefficients side by side, we see that there is a wide standard error for each national origin group. When disregarding statistical significance, the Mandarin ballot showed the weakest correlation with Chinese voter turnout with a negative coefficient of -0.002 and the Hindi ballot showed the strongest correlation with the Indian voter turnout with a negative coefficient of -.027. The Vietnamese correlation had the widest margin of standard error. Overall, the figure shows that all national origin groups show a negative correlation for Model 5 (all variables included). We confirm the general trend of a negative correlation with varying statistical significance and size for all national origin groups, addressing Hypothesis 1 through 6.

Figure 8: Model 5 Comparison



Finally, Figure 9 shows the compiled regression. The data is formatted differently than in the previous nationality specific regressions. This data considers each observation as election-county-group, whereas previous regressions used election-county per observation. Because the R-squared is the highest for Model 5, I choose to focus on this for the discussion. The coefficient

shows that the provision of the ballot had a negative correlation with Asian voter turnout by -3.8% and the result is extremely statistically significant at $p < 0.01$. We reject the null hypothesis and state that Asian ballots do have a correlation to Asian voter turnout and that it has a negative correlation at the 1% significance level.

Figure 9: Asian Voter Turnout Regression

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.623***	0.610***	0.613***	-0.100***	-0.007	-0.026
	(0.004)	(0.006)	(0.014)	(0.008)	(0.036)	(0.061)
Asian Ballot	-0.014	-0.030***	-0.023*	-0.034***	-0.038***	-0.030*
	(0.016)	(0.007)	(0.010)	(0.003)	(0.003)	(0.015)
Total Turnout				1.097***	0.928***	0.982***
				(0.009)	(0.050)	(0.080)
Num.Obs.	2065	2065	2065	2065	2065	2065
R2	0.000	0.008	0.123	0.893	0.910	0.599
R2 Adj.	0.000	0.007	0.097	0.890	0.907	0.586
AIC	-1179.5	4011.8	3871.0	-475.7	-818.5	-2937.5
BIC	-1162.6	4028.7	4208.9	-132.1	-446.7	-2565.7
Log.Lik.	592.728	-2002.892	-1875.479	298.872	475.259	1534.754
F	0.729	15.616	4.839	284.228	315.883	46.597
RMSE	0.18	0.18	0.17	0.12	0.12	0.12
Weighted	-	X	X	X	X	-

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
County FE	-	-	X	X	X	X
Year FE	-	-	-	-	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Discussion and Conclusion

For the Chinese, Korean and Vietnamese regression models, we failed to reject the null hypothesis and therefore failed to prove a correlation between the provision of the group's language ballot and their turnout. In the combined regression, along with the Japanese, Filipino and Indian voter groups, we see that there is a negative correlation of statistical significance between the provided Asian language ballot and the national origin group. This diverges from the hypotheses built upon established literature and theory.

Hidden Coverage

Aside from Section 203 of the VRA, jurisdictions in California have an alternative way of gaining language ballots: through the California Elections Code 14201. Designed as a more progressive measure than the VRA, Code 14201 expands upon Section 203 and provides translated facsimile ballots to precincts in the state with an LEP population of three percent in the jurisdiction, for any language—lowering the population threshold required and removing the minority language barrier that Section 203 imposed.

However, data for precincts covered under Code 14201 could not be included in this study. First, in 2022, the data used by the state to determine the number of LEP at the precinct level was inaccurate that they reversed the determinations made for Code 14201 that year. The Office of the Secretary of State stated that "The special tabulation language data set we received from the United States Census Bureau - data that the Secretary of State uses to make our determinations - was suppressed by the Census Bureau. As a result, some language data seen previously in 2017 was no longer available" (Reyes 2022). As a result, they reinstated the determinations made in 2017 and 2020. Second, Code 14201 requires the provision of a

translated facsimile ballot that is provided in a conspicuous location at the polling place, not an actual ballot that the voter can fill out and vote on as is required by Section 203 of the VRA. This means that voters receive a sample ballot with Code 14201 and therefore the level of information between covered counties in Section 203 and covered precincts by Code 14201 are inconsistent. Lastly, even if the data were to be accurate, it would be difficult to incorporate the data with the Section 203 coverage because the Code 14201 coverage is at the precinct level, with constantly changing precinct boundaries, whereas Section 203 remains at the county level.

Besides precincts covered through Code 14201, there are counties in the state that voluntarily provide language support to minority voters. This is up to the discretion of the county's registrar office and there is no formal database or history that tracks which counties covered which languages during which elections, making it difficult to denote them as having been covered in the data used for this study. Furthermore, there is the question that counties that choose to cover minority languages, absorbing the time and cost of this maneuver without prompt, could have further intrinsic motivation to provide other materials to underrepresented voters that could affect their turnout but cannot be measured in this study.

Both of these coverage factors may attribute to higher Asian voter turnout in counties that are marked as not covered in the data. This could lead to a shortening in the gap between turnout in covered vs. non-covered counties, or even higher turnout in counties that have "hidden" coverage, explaining the negative correlation between the covered counties and ballots found in the regression.

LEP Voters and Automatic Registration

Because of the very language barriers that ballots are supposed to overcome, LEP voters are less likely to turnout to vote than their English speaking Asian American counterparts. They tend to have lower socioeconomic status and education rates. LEP voters also conduct less knowledge about the elections process and the candidates because of the language barrier. They can also be less integrated into the community, making it harder for elections material to reach them.

In order for a county to have coverage, it means there must be a significant LEP AAPI population. This means there are going to be more people who have traditionally lower turnout, bringing down the turnout rate for the national origin group overall.

This fundamental is exaggerated by the inefficiencies of the language ballot. LEP voters may not be able to take full advantage of the language ballot because the ballot is dependent on the primary language spoken by the national origin group and not the language that the LEP voter speaks. While this may not present as big of an issue to Japanese or Korean voters who speak one language, it can make a significant difference to LEP voters who have a national origin from China or India, where several, if not hundreds of different languages are spoken other than the one provided by the Mandarin or Hindi ballot. Figure 8 studying Indian voter turnout supports this theory because of the statistically significant negative correlation. Just because an LEP voter is from India does not mean that the Hindi ballot will help them in the voting process.

Furthermore, California has adopted statewide automatic voter registration and does not drop anyone from voter rolls. This means that all eligible CVAP are now automatically registered to vote even if they have no intention or knowledge, which may describe LEP voters.

Then, this means that the denominator in calculating the turnout rate—the number of registrants—is raised through this automatic enrollment but the numerator—the number of actual voters—may remain the same, resulting in decreases in voter turnout.

Language ballots and other resources are helpful to voters as indicated by qualitative data through interviews and surveys conducted with LEP voters and voter rights advocacy groups. However, the data failed to show a statistically significant correlation between different national origin groups and their associated language ballots.

Multiple pieces of the literature have identified language as a prominent barrier, such as voters having difficulty in reading candidate names or positions on the ballot, navigating the English website to register to vote or apply for an absentee ballot and understanding campaign materials. Because of the high percentage of Asian American voters who identify as LEP and the majority of the electorate consisting of naturalized immigrants, this demographic is especially sensitive to language resources, such as language ballots, phone banking in the preferred language and outreach by AAPI advocacy organizations.

California should work to expand minority language voter access by making ballots more efficient and inclusive. Language access impacts voter turnout for Asian Americans because of the makeup of the electorate that consists of naturalized immigrants and those with LEP who would benefit greatly from increased access to translated material. When voters can access information in their native language, they are more likely to understand the issues at stake and make informed decisions. Translated materials, including ballots, simplify the voting process and empower Asian voters to exercise their democratic rights with confidence. Without access to language resources, voters may feel excluded and discouraged from participating in the

democratic process because they simply do not know which candidate to vote for or even that an election is occurring.

This helps ensure that voters with LEP can understand the voting process and make informed choices to contribute to a democracy. These determinations are made every 5 years with data from the US Census Bureau. Though Section 203 aims to promote access to the voting process for individuals with LEP, the data presented in this paper show that the thresholds should become more expansive to allow for minority languages to become easier to access for voters.

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