

UCLA

UCLA Electronic Theses and Dissertations

Title

The Role of Race/Ethnicity in the Spatial Construction of Neighborhoods and Housing Choice

Permalink

<https://escholarship.org/uc/item/0v05w6vz>

Author

Lee, Christina Aujean

Publication Date

2018

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

The Role of Race/Ethnicity in the Spatial Construction of Neighborhoods and Housing Choice

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Urban Planning

by

Christina Aujean Lee

2018

© Copyright by
Christina Aujean Lee
2018

ABSTRACT OF THE DISSERTATION

The Role of Race/Ethnicity in the Spatial Construction of Neighborhoods and Housing Choice

by

Christina Aujean Lee

Doctor of Philosophy in Urban Planning

University of California, Los Angeles, 2018

Professor Paul M. Ong, Chair

This dissertation examines how race/ethnicity impact the spatial construction of neighborhood and housing choice. I organize the dissertation into three essays that answer related methodological and empirical questions about segregation and racial concentration. The first essay presents a surname methodology to examine Asian ethnic group differences in individual-level data records. The second essay uses a surname method and models homeowner defaults and foreclosures to assess housing outcomes of middle-class coethnic neighborhoods. The third essay describes Latino and Asian homeowners who live in these neighborhoods and their experiences in the homebuying process and how it relates to socioeconomic mobility.

These papers inform theories on American immigrant incorporation and their families' outcomes. Housing literature describes racial segregation from a deficit perspective, highlighting the negative consequences of non-White neighborhoods. However, my research presents the housing benefits associated with middle-class immigrant and minority concentration. I find homeowners in Latino and Asian middle-class neighborhoods had lower predicted rates of

default and foreclosure relative to low-income immigrant or minority neighborhoods. These neighborhoods also offer an alternative pathway for socioeconomic mobility. Latinos and Asians in coethnic neighborhoods described a preference for and greater access to using familial housing support, and found greater social mobility in non-White areas. In contrast, their counterparts in White neighborhoods had a preference for proximity to White neighbors and improved public amenities relative to their childhood neighborhood.

My dissertation demonstrates how race shapes neighborhood choice and preference for or access to coethnic resources. Racial concentration does not always equate to declining housing and socioeconomic opportunities. The findings have implications for planners who are adjusting to changing demographics and different groups' associated needs that may differ from the dominant group. The dissertation also provides nuances in methodology and framework to examine racial/ethnic group differences by income. This nuance is important because immigrants are bifurcated by income as a result of immigration policies that favor professionals and low-income workers—these differences are pronounced along and within ethnic groups.

The dissertation of Christina Aujean Lee is approved.

Michael C. Lens

Deirdre Pfeiffer

Leobardo F. Estrada

Paul M. Ong, Committee Chair

University of California, Los Angeles

2018

TABLE OF CONTENTS

Chapter 1: Introduction	1
Chapter 2: Extending the Kim Method: Using the Prominent Ethnic Surname Methodology to Examine Asian American Ethnic Groups	8
References	29
Chapter 3: Heterogeneity in Income: Effects of Racial Concentration on Foreclosures in Los Angeles	38
Appendix	71
References	72
Chapter 4: Paths to American Incorporation: Ethnospatial Advantage of Middle-Class Latino and Asian Homeowners in Los Angeles	88
Appendix	127
References	134
Chapter 5: Conclusion	143
References	146

ACKNOWLEDGMENTS

The dissertation is formatted to include three essays that are related. Chapter Two is an earlier version of an article: Lee, C. Aujean & Paul M. Ong. (2018). Extending the Kim Methodology: Using the Prominent Ethnic Surname Methodology to Examine Asian American Ethnic Groups. *Asian American Policy Review*, 28, 17-32. I wrote the article and conducted the empirical analysis, and Paul Ong provided feedback on the study design and methodology. Chapter Three is an earlier version of an article that is under review in *Housing Policy Debate*. Chapter Four is in preparation to be submitted to a journal.

I received a community of support for my dissertation and doctoral program. First, thank you to the homeowners that I spoke with, who shared their stories about buying a home and familial experiences. I also thank the UCLA Center for Neighborhood Knowledge for providing data used in my quantitative analysis. A number of grants supported my qualitative research, including the National Science Foundation Graduate Research Fellowship, the Professor Harry H. L. Kitano Fellowship from the UCLA Asian American Studies Center, the UCLA Institute of American Cultures, the Franklin D. Gilliam, Jr. Social Justice Award of the UCLA Luskin School of Public Affairs, and the Planners of Color Interest Group travel award of the Association of Collegiate Schools of Planning (ACSP).

My dissertation would not have been possible without my committee members: Paul Ong, Michael Lens, Deirdre Pfeiffer, and Leobardo Estrada. Thank you for strengthening my scholarship through constructive feedback and being models of community-based scholarship. I also thank Lois Takahashi, who served on my exam committee and supported my ACSP involvement. Dwayne Baker, Shakil Kashem, and Silvia Gonzalez provided additional feedback

on my dissertation papers—I have gained so much in our friendship from our weekly check-ins. Kenny Cheng and Carolina Perez also provided research assistance.

There are other academic family members who helped me at my time at UCLA. The Center for Neighborhood Knowledge served as my home, providing me with resources, software, academic rigor, and humor. I particularly thank Chhandara Pech, Alycia Cheng, Karna Wong, Edber Macedo, and Rosalie Ray. Going into the office was never a chore with the old and new CNK teams. I have been fortunate to have many academic mentors and support, including Andrew Greenlee, David K. Yoo, Melany De La Cruz-Viesca, C.J. Gabbe, OiYan Poon, Christina Chin, Joanna Perez, Nina Flores, Meg Thornton, and Betty Leung.

By moving around in life, I have friends who keep me grounded across the country. Thanks in no particular order to Ann Chau, Jamie Chen, Jing Zhang, Lauren Hom, Rachel Wells, Sang Lee, Matt Yoder, Christine and Denny Huang, Kat Khommarath, Tim Lambert, Yen Ling Shek, and Karri Mayhan. Last but not least, thank you to my family and VBC for finding value in my work and encouraging me to pursue it.

VITA

EDUCATION

Master's of Urban Planning, University of Illinois at Urbana-Champaign 2014
B.A., Psychology, Asian American Studies, University of California, Los Angeles 2009

PUBLICATIONS

Refereed Journal Articles

- Lee, C. Aujean. (2017). "Between the Haves and Have-Nots': Using an Interdisciplinary Approach to Inform Federal Data Collection Efforts of Indigenous Populations." *The International Indigenous Policy Journal*, 8(4). doi: 10.18584/iipj.2017.8.4.5.
- Lee, C. Aujean, Karna Wong, and Deirdre Pfeiffer. (2017). "On the Front Lines of Immigrant Homeownership: Asian American Nonprofits during the Great Recession." *Nonprofit and Voluntary Sector Quarterly*, 46(6), 1209-1230. doi: 10.1177/0899764017713726.
- Lee, C. Aujean. (2015). "Loss in Translation: Housing Agency Segmentation in the Twin Cities." *AAPI Nexus Journal: Policy, Practice, & Community*, 13(1-2), 206-229. doi: 10.17953/1545-0317.13.1.206.

Manuscripts in Submission

- Lee, C. Aujean. "Heterogeneity in Income: Effects of Racial Concentration on Foreclosures in Los Angeles." *Housing Policy Debate (minor revisions and resubmit)*.
- Greenlee, Andrew, April Jackson, Ivis Garcia, C. Aujean Lee, and Benjamin Chrisinger. "Where are we going? Where have we been?: The Climate for Diversity within Urban Planning Educational Programs." *Journal of Planning Education and Research. (revise and resubmit)*.
- Jackson, April, Ivis Garcia, Andrew J. Greenlee, C. Aujean Lee, and Benjamin Chrisinger. "All Talk No Walk: Student Perceptions on Integration of Diversity and Practice in Planning Programs." *Planning Theory and Practice (under review)*.
- Lee, C. Aujean and R. Varisa Patraporn. "Let's Get Along: Strengthening Academic-Nonprofit Partnerships in Research." *AAPI Nexus Journal: Policy, Practice, & Community (revise and resubmit)*.

Other Selected Publications

- Lee, C. Aujean and Paul Ong. (2018). "Extending the Kim Methodology: Using the Prominent Ethnic Surname Methodology to Examine Asian American Ethnic Groups." *Asian American Policy Review*, 28, 17-32.

Ong, Paul, Chhandara Pech, Jenny Chea, and C. Aujean Lee. (2016). "Race, Ethnicity, and Income Segregation in Los Angeles." Working Paper 8, UCLA Ziman Center for Real Estate.

Lee, C. Aujean, Lisa Hasegawa, Melany De La Cruz-Viesca, and Paul M. Ong. (2015). "Asian American and Pacific Islander Wealth Inequality and Developing Paths to Financial Security." *AAPI Nexus Journal: Policy, Practice, & Community*, 13(1-2), vii-xiv. doi: 10.17953/1545-0317.13.1.vii.

Ong, Paul, Silvia Jimenez, Chhandara Pech, C. Aujean Lee, and Rosalie Ray. (2014). *The Widening Gap Revisited: Economic Inequality in Los Angeles*. Los Angeles: UCLA Luskin School of Public Affairs, Center for the Study of Inequality.

SELECTED FELLOWSHIPS, GRANTS, AND AWARDS

2013-2018 National Science Foundation Graduate Research Fellowship
2017-2018 Franklin D. Gilliam, Jr. Social Justice Award, UCLA Luskin School of Public Affairs
2017-2018 Harvey S. Perloff Scholarship, UCLA Luskin School of Public Affairs (Nominated, highest department award for continuing student)
2018 The Institute on Inequality and Democracy Grant, UCLA Luskin School of Public Affairs
2016-2017 Don T. Nakanishi Award for Outstanding Engaged Scholarship Award, UCLA Asian American Studies Center (Nominated)
2016 UCLA Institute of American Cultures Research Grant
2015-2016 UCLA Graduate Research Mentorship Fellowship
2015 UCLA Graduate Summer Research Mentorship program
2015 UCLA Korean Alumni Association Scholarship

TEACHING AND ADVISING

University of California, Los Angeles

Instructor

Planning with Minority Communities	Summer 2017
Community-Based Research in Planning (Undergraduate Capstone)	Winter 2017

Teaching Assistant/Fellow

Scholarly and Creative Communication in Asian American Studies	Winter 2018
Introduction to Geographic Information Systems	Winter 2016
Urban Planning Master's Comprehensive Planning Project	Spring 2015
Asian American Studies Capstone Community-Based Research	Winter 2015

CHAPTER 1: INTRODUCTION

This dissertation examines how race/ethnicity impact the spatial construction of neighborhood and housing choice. I organize the dissertation into three essays that answer related methodological and empirical questions about racial segregation and concentration using multiple methods and triangulating data sources. The first essay presents a surname methodology to examine Asian ethnic group differences in individual-level data records. The second essay uses a surname method and models homeowner defaults and foreclosures to assess housing outcomes of middle-class coethnic neighborhoods. The third essay describes the experiences of Latino and Asian homeowners who live in these neighborhoods to understand their homebuying process.

My research focuses on Latino and Asian Americans because it engages with theories on American immigrant incorporation and their children. Much of housing literature describes segregation patterns as a dichotomy between these two frameworks. However, these theories do not explain the growth of middle- and upper-class ethnoracial neighborhoods. The dissertation demonstrates that there is an alternative pathway for immigrant families to move into the middle-class for socioeconomic mobility beyond White suburbs. The following summarizes the three subsequent chapters, including the research questions, methods, and major findings.

Chapter 2: Methodological Issues with Understanding Racial/Ethnic Identity

Racial/ethnic identity helps understand group characteristics and opinions, yet many data do not have information on ethnicity. Using individual voter registration records in Los Angeles County, the study assesses the Prominent Ethnic Surname Method (PESM) and tests the representativeness of these surnames of an ethnic group. I examined whether “Chen,” “Nguyen,” “Kim,” and “Patel” are representative of Chinese, Koreans, Vietnamese, and Indians,

respectively. PESM has been used for Koreans, and has yet to be extended to other ethnic groups.

Using County voter records, I first narrowed down the sample to foreign-born registered voters with an identified place of birth. Then, I focused on individuals who indicated that they were born in China, India, Korea, and Vietnam. I identified the most prominent surnames per country. To assess PESM effectiveness, I created three comparison groups per target country of origin: A) all foreign-born registered voters with each surname, regardless of the place of birth; B) foreign-born registered voters with the surname and from the target country; and C) foreign-born registered voters from the respective country with any surname. If the surname is representative, no statistically significant differences would be expected between groups A and C. For each group, I tested the uniqueness, prevalence, false positive rate, and false negative rate for demographic, ideological, behavior, and neighborhood context variables.

The study found that Kim and Nguyen are the most well-representative in Los Angeles County because they are unique and prevalent among their group in this geography. These findings may not apply to other geographies with different ethnic group composition. Yet, PESM allows researchers the flexibility to adjust the prominent surname based on the target geography. PESM also worked more effectively for demographic variables, a consideration for future applications of PESM.

PESM is useful for policymakers and survey developers with minimal resources. For example, survey administrators can target individuals with a specific surname to understand ethnic group trends if the name proves to be representative of the group with fewer imputing errors. Other surname methods not only require more resources and time to develop a dictionary, but they also introduce false positive and false negative errors depending on the geographic

target and threshold used. PESM can additionally enhance existing surname dictionaries for racial imputation.

Chapter 3: Quantitative Analyses of Economic Consequences of Coethnic Middle-Class Neighborhoods

Building on the previous chapter, Chapter 3 uses a surname method to analyze individual housing records in Los Angeles County. This paper tests if neighborhood racial concentration by class affects default or foreclosure outcomes for homebuyers. Neighborhoods with large proportions of non-Whites are oftentimes linked to negative homeownership outcomes, including higher subprime or predatory lending rates and foreclosure rates. Since the Great Recession, minority neighborhoods have also been slow to recover in home prices. However, middle- and upper-income ethnic neighborhoods have grown over the past 20 years due to a concentration of immigrants, federal policies favoring professionals, ethnic-specific resources, and affluence. Existing literature has proven that middle-class ethnic neighborhoods benefit residents with educational resources, reprieve from White discrimination, professional connections, and job opportunities. This is the first study to examine homeowner outcomes for residents in coethnic middle-class neighborhoods.

I used DataQuick records of homeowners who purchased homes between 2000 and 2006, and traced homeowner outcomes, or if they defaulted or foreclosed in 2008 and 2009. To develop the neighborhood typology, I first implemented local Moran's I to identify tracts with statistically significant racial concentration in the county. Among these tracts, I then used American Community Survey data to identify tract median household income, median home value, and nativity. Neighborhoods that were above the median of the Los Angeles County were categorized as coethnic middle-income neighborhoods. Tracts that were below the county

median were categorized as low-income and separated by nativity—areas with high native-born residents were “communities of constraint,” and areas with high foreign-born residents were called “enclaves.” According to this classification, about 37% of Los Angeles Latino tracts and 53% of Asian tracts in 2007 were middle-class. A number of homebuyer characteristics were also gathered from DataQuick, including number of loans borrowed, type of mortgage interest, sale price, and year of purchase.

After, I calculated bivariate analyses, logistic regressions, and predicted probabilities to compare default/foreclosure outcomes by neighborhood typology. This study found that homeowners in coethnic middle-class neighborhoods had lower default/foreclosure rates and predicted probabilities than resides in other neighborhoods. Asian middle-income neighborhoods had the lowest predicted probabilities of default or foreclosure, followed by Latino middle-income and White middle-class neighborhoods. These patterns were statistically significant and persisted after controlling for other household and neighborhood characteristics.

The findings demonstrate that coethnic middle-class neighborhoods have beneficial material outcomes related to housing. Racial concentration does not always equate to declining housing values when disaggregating class effects. It is thus imperative for housing studies to examine racial and class effects on homeowner outcomes. Finally, the study contributes to an asset rather than deficit perspective of minority and immigrant concentration, particularly when these neighborhood patterns arise out of choice rather than forced segregation policies.

Chapter 4: Qualitative Study of Homeowner Lived Outcomes and Neighborhood Choice Processes

This qualitative paper supplements the previous chapter by exploring individual decision-making processes and perceptions of their neighborhood choice. Spatial assimilation and place

stratification also assume that immigrant and minority homeowners will move to Whiter neighborhoods when they can afford to do so for socioeconomic mobility. What factors contribute to homeowners moving instead to coethnic middle-income neighborhoods? This study uses 36 interviews with Latino and Asian homeowners in middle-class Latino, Asian, and White neighborhoods to examine the lived experiences, motivation, and choices involved in the homebuying process. In particular, the study examined the factors that homeowners used to pick White or coethnic neighborhoods, and how these factors contributed to socioeconomic mobility. I also identified resources to help with homebuying because property values play a significant role in wealth accumulation.

I recruited potential participants using multiple steps. First, I used two clusters of three adjacent cities with similar middle- or high-socioeconomic status: 1) Lakewood, Downey, and Cerritos, and 2) Pasadena, Baldwin Park, and San Gabriel. The three adjacent cities had predominantly White, Latino, and Asian residents, respectively. These cities were identified as coethnic middle-class neighborhoods in the previous chapter.

Interviewees were recruited from April 2016 to May 2017. I used several recruitment strategies to identify potential participants: random, snowball, and convenience sampling. For random sampling, I sent a solicitation letter to homeowners in the target areas using DataQuick records. I focused on single-family homebuyers in zip codes with spatial concentration in the target cities who purchased homes between 2000 and 2016 and have surnames that are likely to belong to individuals of Latino or Asian background. Additional interviewees were recruited in Nextdoor, snowball sampling, and convenient sampling.

Homeowners were asked about their experiences of purchasing a home. Each interviewee was also asked to rank ten homebuying factors related to previous studies on housing choice and

the research questions, including home price, design, proximity to family or friends, school quality, safety, and neighborhood composition. Homeowners overall prioritized home price, neighborhood safety, and commute/job factors across the neighborhoods. Entertainment options, coethnic businesses, and neighborhood racial/ethnic composition were least important. There were some distinctions between coethnic and predominantly White neighborhoods. Residents in coethnic neighborhoods ranked proximity to family/friends as more important in their homebuying process than those in White neighborhoods. School quality was also more important for homeowners in coethnic areas than their counterparts in White neighborhoods.

I found that these discrepancies arose out of their perceptions of neighborhood racial composition and family assistance. While homeowners ranked racial composition as relatively unimportant in their decision-making process, homeowners still revealed strong opinions. Participants in White neighborhoods saw proximity to White residents as increasing their social mobility and assumed that White areas have better amenities. On the other hand, homeowners in coethnic neighborhoods saw proximity to Whites as lowering their social status. The findings also included varied levels of family dependence, based on homeowners' understanding of family expectations and assistance. Residents in coethnic areas readily used familial networks more than those in White areas, in part because family assistance was welcomed and expected as part of cultural assumptions.

I propose *ethnospatial advantage* as a theory to explain how coethnic neighborhoods form beyond coethnic preference and are a means for immigrant/minority homeowners to achieve socioeconomic mobility by concentrating race- and class-based resources. My findings illuminate how race and culture shape their expectations of family support and how neighborhood choice contributed to their socioeconomic status. The study also outlines

parameters of ethnospatial advantage as another pathway for immigrants and their children to search for neighborhoods that reflect their class and racial identities without problematizing coethnic residential preference for non-Whites.

CHAPTER 2: EXTENDING THE KIM METHOD: USING THE PROMINENT ETHNIC SURNAME METHODOLOGY TO EXAMINE ASIAN AMERICAN ETHNIC GROUPS

C. Aujean Lee & Paul M. Ong

Introduction

Ethnic identity plays an important role in shaping group characteristics, outcomes, and opinions. Portes and Zhou (1993) described how ethnicity impacts one's ability to access material resources and opportunities over a lifetime. For example, ethnic group stratification affects residential segregation patterns (Alba et al. 1999; Iceland and Nelson 2008); political views (Wong et al. 2011); health outcomes (Alegria et al. 2007; Chae et al. 2008); educational disparities (Chang et al. 2007); and economic opportunities (Kim, Hurh, and Fernandez 1989; Zambrana and Dorrington 1998). It is critical for researchers to understand the nuances of how to measure and examine ethnic population trends to identify what groups experience social inequalities, which affects public resources. At times, minorities and immigrants require more assistance from their local government because they may need in-language materials, translators, and greater outreach efforts (Frasure-Yokley 2015; Frey and Farley 1996; Holloway, Wright, and Ellis 2012).

In particular, data collected by the Census Bureau have also been important for allocating public funds, or more than \$675 billion (Fuchs 2017). An accurate Census count is critical for particularly immigrants and minorities because these data are used for health care, education, transportation, housing assistance, and other social and economic programs. For example, the California Department of Finance estimated that the 2010 Census failed to include 1.5 million residents (Mehta 2010). Asian American and Pacific Islander groups have historically been

undercounted because of factors including language barriers, immigration status, residence in a hard-to-count tract, and/or housing tenure (Leadership Conference Education Fund 2017).

Yet, the Census Bureau has already faced a number of challenges in preparing for the 2020 Census. The nonpartisan U.S. Government Accountability Office (2017) has ranked the 2020 Census as a federal program that has a high risk of failure due to several issues, including: increasing implementation costs, the introduction of new online and telephone responses, issues with testing, the cancellation of field tests last year, and risks to information security.

Concurrently, Congress has severely limited funds to pay for the Census, forcing the Census Bureau to cut costs (Shapiro 2017). There have also been issues with leadership and management of the Census Bureau. John Thompson, the director of the 2000 Census, had unexpectedly resigned in June 2017 (Sharpio 2017). He is likely to be succeeded by Thomas Brunell, who has provided expert testimony to support gerrymandering (Bahrampour 2017).

In addition to these political challenges, there are also methodological challenges in identifying ethnic groups in government data. First, a number of public data sets include racial categories, but not ethnic groups, such as the Survey of Income and Program Participation and Home Mortgage Disclosure Act. The second challenge for researchers is then to distinguish ethnic group information among racial groups, particularly among Asian Americans and Pacific Islanders.¹ Third, some government data suppress data on smaller ethnic groups based on population thresholds or to protect individual privacy.

Asian Americans demonstrate the importance of differentiating between ethnic groups. Asian Americans include more than 40 ethnic groups with important distinctions in immigration patterns, socioeconomic status, health outcomes, and civic engagement, which require data

¹ While the Census includes detailed ethnic group categories such as Thai, Pakistani, or Samoan, it does not report individual records in publicly available data.

disaggregation (Asian Americans Advancing Justice 2011). In response to these disparities, California Governor Jerry Brown signed Assembly Bill 1726 in June 2016, which requires the Department of Public Health to collect data on detailed Asian American and Pacific Island groups, such as Bangladeshi, Hmong, Fijian, and Tongans (AB. 1726 2016).

Consequently, researchers have used micro-individual data and Big Data to examine ethnicity. While these data are becoming more readily available in voter records, house transaction data, or health records, these data oftentimes do not include self-reported race/ethnicity. Researchers are then using surnames to impute or estimate ethnic group identification. These techniques include using a surname dictionary, thresholds in probability, or adjusting for local geographic racial/ethnic composition. This technique has been widely applied to public health (Adjaye-Gbewonyo et al. 2014; Elliott et al. 2009; Grundmeier et al. 2015; Taylor et al. 2011) and political science studies on voting (Abrahamse, Morrison, and Bolton 1994).

We test and evaluate a surname method that uses the most predominant surname to estimate ethnic group characteristics—or what we call the Prominent Ethnic Surname Methodology (PESM). We use Los Angeles County voter registration data and place of birth to assess PESM. Our study tests the representativeness of the most prominent surname on naturalized foreign-born voters from the same country of origin.

PESM has been used for Koreans, and we extend it to Chinese, Indians, and Vietnamese using the most prevalent surnames in Los Angeles County—Chen, Patel, and Nguyen—because these are the largest Asian groups in the United States.² These surnames may not be the most prominent in other geographies, but we provide a template for how others can apply PESM.

² While Filipinos are the third largest group, we excluded them because there are more than 12,000 surnames tied to Filipinos, with many surnames overlapping with other racial groups such as Latinos or Pacific Islanders (Lauderdale and Kestenbaum 2000).

Other studies have examined surname sampling techniques for Chinese (Quen et al. 2006; Shah et al. 2010), Indians (Shah et al. 2010; Singh-Carlson et al. 2016), and Vietnamese (Swallen et al. 1998; Taylor et al. 2011). These studies assumed individuals with the prominent surnames are similar in characteristics with the ethnic group. However, this is the first study to test if registered voters with the prominent surname for each group are similar to registered voters from the same place of birth.

This study also extends previous research by testing several group characteristics. While other studies focus on demographics, we test the method for other variables important for social science researchers—political party, behavior, and neighborhood ethnic context. By understanding the prevalence and uniqueness of a surname, researchers can determine whether PESM is effective. The following describes other surname methods and PESM. After, we detail our findings and analysis of PESM. We conclude with implications for researchers in multiple disciplines.

Surname Methodologies

There are several techniques that examine ethnic identity using surnames. The following three methods vary in effectiveness and demonstrate the importance of considering the benefits and consequences of each based on data quality and available resources. The first approach utilizes a dichotomous surname dictionary that provides a list of surnames to impute an ethnic identity. The second strategy builds on the first approach and limits surnames to those that meet high probabilities to determine which surnames represent a specific ethnic group. The third method is the focus of this study, and utilizes PESM to understand ethnic group patterns. We focus on PESM because of its practical expediency and value for researchers with limited resources.

Dichotomous Surname Dictionary

Previous studies have developed or used an established surname dictionary that matches a surname with a racial/ethnic group. These dictionaries may or may not include the probability that a surname is of a specified racial/ethnic group. For example, the 1990 Census Spanish surname list includes surnames that are presumed to belong to individuals who are Latino without probabilities (Word and Perkins Jr. 1996). Studies that have created dictionaries used health administrative data (Eicheldinger and Bonito 2008) or business directories (Shin and Yu 1984; Taylor et al. 2011). These studies rely on self-reported racial/ethnic identity and need large sample sizes.

Depending on how these dictionaries are applied, they can introduce type I errors (e.g., classifying a non-Latino person incorrectly as Latino) or type II errors (e.g., not classifying a Latino person as Latino). For example, the Census Bureau surname list leads to higher false positives when used to identify racial groups because the list was designed to pre-identify racial groups (Abrahamse, Morrison, and Bolton 1994). These surname dictionaries are not as effective for some segments of the population. For example, Eschbach, Kuo, and Goodwin (2006) noted that foreign-born Latinos were more accurately identified than native-born Latinos in California death records. Wong, Palaniappan, and Lauderdale (2010) used medical records and the 1990 Census Spanish surname list, and they discovered the surname list worked better for men and older individuals (65 years of age or older).

Thresholds in Probability

With these errors, a second method develops probabilities that a surname represents a racial/ethnic group. This approach uses probabilities in two ways. The first weighs groups by the local geographic racial/ethnic composition to develop probabilities that an individual belongs to

a racial/ethnic group based on the surname. For example, Elliott et al. (2009) created the Bayesian Improved Surname Geocoding (BISG) method, which calculates the probability of a race/ethnicity using the Census Bureau surname probabilities and an individual's address to ascertain the race/ethnicity. BISG calculates the updated probability of a person's race/ethnicity i with surname j given the census block residence k for the 6 major racial groups—Hispanic, White, Black, Asian or Pacific Islander, American Indian/Alaska Native, or Multiracial—using the following equation:

$$q(i|j, k) = \frac{u(i, j, k)}{u(1, j, k) + u(2, j, k) + u(3, j, k) + u(4, j, k) + u(5, j, k) + u(6, j, k)}$$

where $q(i|j, k)$ is the updated probability. BISG can be tedious and resource-intensive, as the user would need to calculate these probabilities for all target surnames per ethnic group.

The second technique prioritizes surnames that meet or exceed a predetermined probability level to ensure the accuracy of the racial/ethnic group match using a surname dictionary. For example, Grofman and Garcia (2014) categorized any individual as Latino if they have a surname that has at least a 50% likelihood of being Latino according to the 2010 Census Bureau list of common U.S. surnames. There is no consistent threshold used. For example, while Lauderdale and Kestenbaum (2000) also used 50% to develop their Asian surname list, Ong, Pech, and Pfeiffer (2014) used 70% threshold to impute racial/ethnic groups as a stricter criterion.

The first and second methods require more resources and time to develop a dictionary and test the representativeness of the larger group. Dictionaries also introduce type I and type II errors depending on the dictionary or threshold used. Researchers who use a dichotomous surname dictionary do not know the accompanying false positive or false negative rates of each surname. If the dictionary includes probabilities, each surname has different probabilities that

introduce error. For example, according to the 2010 Census Bureau surname dictionary, “Kim” has a 95% probability of belonging to an Asian or Pacific Islander.³ Alternatively, “Park” has a 73% probability of belonging to an Asian or Pacific Islander. Thus, by including both surnames based on a threshold, Park introduces more error than Kim. If using BISG, surnames would have different error probabilities based on the local geographic context.

Prominent Ethnic Surname Methodology (PESM)

PESM focuses on the most frequent last name for an ethnic group as a subsample to represent the overall ethnic group. Shin and Yu (1984) developed the “Kim” method, which presumes that individuals with the last name “Kim” are representative of other Koreans because of its prevalence among Korean surnames. Shin and Yu (1984) first found that Kim can be used to estimate the total Korean population in a given area. More recently, Kim et al. (2014) extended this method to the other four most prevalent Korean surnames—Lee, Park, Choi, and Chung—to test how representative they are of Koreans in Korea and in the U.S. for demographic characteristics and health outcomes, including marital status, religion, homeownership, and self-rated physical and mental health. They found that the other four Korean surnames were also highly representative in Korea and U.S., demonstrating additional benefits of using prominent surnames in research.

PESM is beneficial for several reasons. First, it reduces the cost of surveys. If a prominent surname adequately represents an ethnic group, survey administrators can target individuals of a surname to understand the broader group with lower administrative costs and fewer imputing errors. Researchers can also use one surname to understand ethnic groups in large administrative records. By focusing on one surname subgroup, researchers can spend fewer

³ The other prominent surnames had the following probabilities of being Asian or Pacific Islander—Chen with 96%, Patel with 95%, and Nguyen with 97% (United States Census Bureau 2016).

resources in time and cost to extract ethnic group information and reduce the problem of false positives from other less representative surnames.

Second, this method enhances studies that use the Census Bureau surname dictionary, the most common dictionary for racial imputation. Using 2000 or 2010 Decennial Census self-reported individual data, the Bureau counts the surnames for each major racial group and calculates the proportion that a surname is linked to a person who is White, Black, Asian/Pacific Islander, American Indian/Alaska Native, or Hispanic origin (Word et al. 2008).⁴ Consequently, researchers can impute race using the Census surname list first, and then use PESM for that racial group to understand ethnic group characteristics. This two-step process can decrease false positive errors. For example, the Census dictionary can be used to first identify individuals who are most likely of Asian descent. Then, researchers can identify the most prominent surname for individuals from a specific country to identify group characteristics. Then, non-Asians from an Asian country would be excluded in the analysis.

Third, PESM allows flexibility in geographic adjustments. Surname dictionaries use a specific geography to estimate surname probabilities, which can introduce errors when applied if the target geography differs in racial/ethnic composition. For example, the Census Bureau is based on the national Decennial Census racial probabilities. However, national demographics differ from most local geographic contexts. Thus, the surname dictionary probabilities will produce more errors the greater the differences there are between the local geography and the U.S. racial/ethnic composition.

The surname, “Hahn,” provides an illustrative example. According to the 2010 Census surname dictionary, Hahn is 92% likely to be a person who is White and is 5% likely to belong to a person who is Asian or Pacific Islander. Hahn is also a common Korean surname. If a

⁴ The Census dictionary only includes surnames with a least 100 counts (N = 151,671 names).

surname dictionary is developed for Koreatown Los Angeles, the probability of Hahn being White will drop and the probability that Hahn is an Asian person will increase. PESM addresses these errors because it does not have any predetermined surname probabilities and allows the user to determine the geographic target. As long as micro-level data include surnames, researchers can assess the uniqueness and prevalence of the most common surnames for any geography to determine if the surname represents the ethnic group.

There are some limitations to note for using PESM. First, it has not extensively been applied to other ethnic groups, particularly those with a greater number of surnames. Shah et al. (2010) found that South Asian last names were more varied than Chinese surnames, which made using South Asian surnames less accurate than Chinese surnames. For ethnic groups with more numerous surnames, PESM will not be as effective because one surname will not be as representative of the population. Also, some ethnic groups have overlapping surnames. For instance, Spanish surnames are common with Filipinos, some Pacific Islander populations, and numerous Latino groups because of a history of colonization. It will then be challenging to distinguish which prevalent surname can be used to understand group characteristics. The following provides a template for how others can use PESM for different target geographies and ethnic groups that have more representative and unique surnames.

Methodology

Data Source and Variables

We used Los Angeles County voter registration data, which have individuals who registered as of October 2014. Data were purchased from the Los Angeles County Registrar/Clerk. It includes a number of variables, including full name, place of birth, gender, birth date, political party, voter turnout in the most recent election, and registration date.

Among those registered to vote, about 20% were born outside of the U.S. Of foreign-born registered voters, 45% had an identified place of birth. We focused on these voters with a known country to identify the most prominent surname for our target countries: Chen for China, Patel for India, Kim for Korea, and Nguyen for Vietnam. These last names are consistently the top surnames for Asian or Pacific Islanders in the 2010 Census surname dictionary (United States Census Bureau 2016) and 2000 Census surname dictionary (Falkenstein 2002).⁵ Then, we created three comparison groups per target country of origin: A) all foreign-born registered voters with each surname, regardless of the place of birth; B) foreign-born registered voters with the surname and from the target country; and C) foreign-born registered voters from the respective country with any surname. Table 1 lists the total populations by target country and surname for each group that are used for the remainder of the study.

Table 1. Frequency by Surname, Country, and Comparison Group

Surname	Target Country	All with Surname Regardless of Country	Surname for Target Country	All Voters from Target Country Regardless of Surname
		A	B	C
Kim	Korea	7,030	6,743	34,623
Chen	China	2,731	2,545	49,435
Patel	India	519	418	7,270
Nguyen	Vietnam	3,075	2,931	18,977

Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

Voter registration data do not have self-reported race/ethnicity. Thus, we used place of birth as a proxy for ethnic group because the overwhelming majority of people from these

⁵ According to Falkenstein’s (2002) analysis of the complete Decennial 2000 file, Nguyen comprised about 15%, Kim comprised about 10%, Patel 7%, and Chen 5% of all Asian and Pacific Islander surnames.

countries identify as the target ethnic group.⁶ Here, we categorized if an individual arrived from China (includes Hong Kong and Taiwan), Korea, India, or Vietnam as being Chinese, Korean, Indian, or Vietnamese, respectively. These groups include individuals who were born to American citizen parents or naturalized as U.S. citizens. (Hereon after country of origin and ethnic group are used interchangeably for simplification.)

For the three comparison groups (see Table 1), we focused on characteristics related to demographics, political party, behavior, and neighborhood ethnic context:

- DEMOGRAPHICS:
 - Gender
 - Age
- POLITICAL PARTY
 - Party affiliation: Democratic, Republican, Declined to State (includes no party preference), and minor parties
- BEHAVIOR
 - Years registered to vote
 - Voted in last election
- NEIGHBORHOOD ETHNIC CONTEXT (SPATIAL ASSIMILATION)
 - Percentage that a comparison group resides in highly concentrated ethnic zip codes to test spatial assimilation.⁷

To understand neighborhood ethnic context, we rely on the theory of spatial assimilation (Massey and Denton 1985). They hypothesized that racial/ethnic groups will transition from enclaves to more diverse neighborhoods once they obtain the economic means to gain access to improved public resources. We first used 2014 ACS 5-year estimates to identify which zip codes in Los Angeles County had the top 5-percentile concentration of Chinese, Indian, Korean, and

⁶ In an analysis of 2011-2015 American Community Survey (ACS) in Los Angeles County, we examined the ethnic identity of citizens who were born in China, India, Korea, and Vietnam. About 92% of people born in Korea self-identified as Korean, 89% of people born in China and India identified as Chinese and Indian, and 79% of people born in Vietnam identified as Vietnamese. Ong, Pech, and Pfeiffer [2014] also used this technique.

⁷ The Los Angeles County Registrar data only provides zip codes associated with each registered voter.

Vietnamese residents.⁸ We then calculated the percentage of each comparison group in these high-ethnic zip codes. A higher proportion of residence in high-ethnic zip codes signifies less spatial assimilation. We repeated these calculations for the other target surnames and countries of origin.

Analytical Plan

We used several steps to understand how representative a surname was for each target ethnic group. First, we determined how unique a surname was by calculating the frequency of a surname for the target country relative to registered voters of the same surname from other countries. We then calculated the prevalence of a surname by determining the frequency of a surname among registered voters from the same country. These estimates demonstrated how representative a prominent surname was for an ethnic group.

After, we used bivariate analyses for each variable and the three comparison groups by surname and country. For age and years registered to vote, we calculated the mean. For gender, political party affiliation, voter turnout in the last election, and residence in a high-ethnic zip code, we calculated the frequencies. We also performed statistical tests to measure differences between comparison groups. We used t-tests for mean age and mean registered years and chi-square tests for the other variables: gender, political party, voter turnout, and neighborhood ethnic context to compare the frequencies between the comparison groups.

We used the t-tests and chi-square tests to examine differences between groups A and C for several reasons. Group A includes foreign-born registered voters with the prominent

⁸ For example, the top 5 percentile of zip codes with Chinese residents had about 24% Chinese. We categorized the 13 zip codes with more than 25% Chinese as having a high proportion of Chinese, or “high-ethnic” Chinese zip codes. Additionally, the 11 high-ethnic Korean zip codes had more than 12% Koreans; the 13 high-ethnic Indian zip codes had at least 3% Indians, and the 12 high-ethnic Vietnamese zip codes were comprised of at least 4% Vietnamese. For comparison, the average zip code in Los Angeles had 4% Chinese, 0.1% Indian, 3% Korean, and 0.1% Vietnamese.

surname. Group C encompasses all foreign-born registered voters from the target country. Thus, if a surname is representative of an ethnic group, group A should be similar to group C. Group B should produce values that are between group A and C because it only includes individuals from the target country and surname. If the prominent surname is prevalent and unique, group B results should have fewer differences from group A.

For political party affiliation, we also calculated the dissimilarity index (DI) to understand patterns of registered voters across multiple political parties. DI measures evenness or segregation between two groups. It is frequently used to quantify neighborhood segregation (see Iceland and Weinberg 2002; Massey and Denton 1988; Sakoda 1981), but has been also applied to occupational segregation to identify job distribution between males and females (Duncan and Duncan 1955; Jacobs 1989; King 1992). The formula for DI used was:

$$DI = \frac{1}{2} \sum_{i=1}^n | (A_i - B_i) | * 100$$

where A_i was the percentage of group A in political party i , B_i was the percentage of group B in political party i , and n was the number of political parties. The DI index varies from 0 to 100, where 0 indicates that the two groups are identically distributed, while 100 represents completely unequal group distribution (Iceland, Weinberg, and Steinmetz 2002).

Results

First, Table 2 displays the frequencies for the surname and country for each comparison group. It also includes the percentage that a prominent surname is unique to the specific country (e.g., the percentage of Kims that are from Korea and not other countries) and the prevalence or coverage of a surname among all registered voters from the target country (e.g., the percentage that Korean Kims comprise of all Korean registered voters).

Table 2. Uniqueness and Prevalence of Prominent Surnames in Target Country of Origin

Surname, Target Country	% of Surname not from Target Country	% of Surname from Target Country (Uniqueness of Surname)	% of Target Country with Surname (Prevalence of Surname)
	$(A-B) / A$	$1 - ((A-B) / A)$	B / C
Kim, Korea	4%	96%	19%
Chen, China	7%	93%	5%
Patel, India	19%	81%	6%
Nguyen, Vietnam	5%	95%	15%

Note: Frequencies are for foreign-born registered voters with a known country of origin.
Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

The surnames were varied in their uniqueness and prevalence. Overall, Kim, Nguyen, and Chen were unique for the target country—more than 90% of foreign-born registered voters with these surnames came from the respective country of origin. Kims had the highest frequency among prominent surnames and comprised almost 20 percent of all Korean voters—thus, this surname was predominantly unique to Koreans and had a high frequency among registered Los Angeles County voters. In comparison, Patel was not as unique to India—almost 20% of Patels came from another country of origin besides India.⁹ Chen was not as prevalent among Chinese—Chen comprises 5% of the nearly 50,000 Chinese registered voters. Nguyen represented the second highest proportion of voters from the respective country (Vietnam), or about 15%.

Tables 3 through 6 include the bivariate for each surname and country for the demographic, political party, behavior, and spatial assimilation variables. The first column (A) contains information on group A (registered foreign-born voters with the prominent surname);

⁹ A small percentage of Asian immigrants with these surnames may also not have originated from the designated country of their ethnicity due to secondary migration. For example, the parents of a person with the surname “Chen” may have migrated from China to another East Asian country, and the registered voter would then not be listed as born in China. Foreign-born Patels also indicates that they were born in the United Kingdom, Kenya, and Zambia, which follows patterns of British colonialism. Patels are from the Patidar caste in Gujarat and were appointment key administrative government duties during British colonial rule, and have migrated to former British colonies (Pocock, 1972).

column B has information for group B (registered foreign-born voters with the surname from the target country); and column C displays data for group C (registered foreign-born voters from the target country). If the prominent surname methodology is well representative of the ethnic group, then column C should be similar to column A. T-test and chi-square test p-value significance is between column A and column C.

Table 3 displays information for Kim (column A) and Korean registered voters (column C). When examining the mean or frequency for each variable, there were few differences between the three columns. However, there were some statistical differences in the results. For example, gender differences between registered Kims and Korean voters were statistically significant ($p < 0.05$), even though there was a quantitative difference of 1% in percent female (56% and 57%, respectively). There was also a 0.62 difference in the mean age of registered voters who had a Kim surname and voters who were from Korea (a mean age of 57 years old, $p < 0.01$). The DI value is 0.5 for political party—there was about a 1% difference between the 41% of all Kims who declined to state their political party and the 40% of all Koreans who declined to state their political party (p not significant [NS]). Finally, there was little difference between the percentage of Kims and percentage of Koreans who lived in high-ethnic zip codes—or about 22% for both groups (p NS). While there were some statistically significant differences between Kims and Korean voters, there was little practical difference for these variables. Consequently, we confirm Shin and Yu's (1984) original findings that Kim is well-representative of Koreans.

Table 3. Kim/Korea Bivariate Results

	All Kim (A)	Korean Kim (B)	All Korean (C)
DEMOGRAPHICS			
Female**	55.6%	55.6%	56.9%
Mean Age***	57.2	57.7	56.6
POLITICAL PARTY			
Democratic	35.1%	35.1%	35.4%
Republican	21.8%	21.8%	21.7%
Declined to State	40.9%	40.9%	40.5%
Minor Parties	2.2%	2.2%	2.4%
BEHAVIOR			
Mean Registered Years	10.8	10.9	11.0
Voted in Last Election†	45.6%	45.4%	46.6%
SPATIAL ASSIMILATION			
% in Top 11 Zip Codes	22.0%	22.3%	21.6%
N	7,030	6,743	34,623

Note: ** = $p < 0.5$; *** = $p < 0.01$. T-tests and chi-square tests are two-tailed. Top 11 zip codes were determined by taking the top 5% of percent total Korean population by zip code in Los Angeles County. T-test and chi-square test significance values are between group A and C.

† N for All Kim (A) = 6,107; N for Korean Kim (B) = 5,860; N for All Korean (C) = 29,966

Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

Chens were relatively well-representative of Chinese, but with greater practical differences than Kim and Koreans (see Table 3). Chens (column A) were more similar to Chinese Chen (B) than registered voters from China (column C). For example, there was a 0.24 difference in mean age between all Chens and Chens from China while there was a 0.93 difference in mean age between all Chens and all Chinese registered voters ($p < 0.01$). Yet, there were small real-world differences between registered Chen and Chinese voters—the mean registered years was about 11 years for both groups ($p < 0.05$). Approximately 47% of registered Chen and Chinese Chen voters lived in high-ethnic zip codes, higher rates than registered Chinese voters (43%). Thus, Chens tended to be less spatially assimilated than all Chinese registered voters ($p < 0.01$). The largest percentage difference was in political party, where Chen voters declined to state political party (65%) more than Chinese voters (60%). Between these two groups, they had a DI value of 5 for political party affiliation.

Table 4. Chen/Chinese Bivariate Results

	All Chen (A)	Chinese Chen (B)	All Chinese (C)
DEMOGRAPHICS			
Female	53.9%	53.8%	56.0%
Mean Age***	52.5	52.7	53.4
POLITICAL PARTY***			
Democratic	20.0%	19.4%	22.4%
Republican	12.3%	12.2%	15.0%
Declined to State	64.6%	65.4%	59.7%
Minor Parties	3.4%	3.1%	2.9%
BEHAVIOR			
Mean Registered Years**	10.8	10.8	11.2
Voted in Last Election†	48.4%	48.4%	49.5%
SPATIAL ASSIMILATION			
% in Top 13 Zip Codes***	46.9%	46.8%	43.1%
N	2,731	2,545	49,435

Note: ** = $p < 0.5$; *** = $p < 0.01$. T-tests and chi-square tests are two-tailed. Top 13 zip codes were determined by taking the top 5% of percent total Chinese population by zip code in Los Angeles County. T-test and chi-square test significance values are between group A and C.

† N for All Chen (A) = 2,469; N for Chinese Chen (B) = 2,303; N for All Chinese (C) = 44,148

Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

Nguyens (column A) were relatively well-representative of Vietnamese (column C, see Table 5). About 54% of all Nguyen and all Vietnamese voters were female (p NS). Also, Nguyen voters (column A) had similar characteristics as Nguyen voters from Vietnam (column B) and all Vietnamese registered voters (column C) for mean registered years, spatial context, and political party. For instance, the average Nguyen, Vietnamese Nguyen, and Vietnamese voter were registered for about 12 years. Nguyens were more spatially assimilated than Vietnamese voters—while 27% of Nguyens and 28% of Vietnamese Nguyens lived in high-ethnic zip codes, about 38% of Vietnamese voters lived in high-ethnic zip codes ($p < 0.01$). The next largest percentage difference between Nguyens and Vietnamese for political party was between Republican voters—about 28% and 22%, respectively ($p < 0.01$). For other variables, Nguyen and Vietnamese registered voters had similar statistics. The calculated DI value for political parties between Nguyen and Vietnamese voters was 6.

Table 5. Nguyen/Vietnam Bivariate Results

	All Nguyen (A)	Vietnamese Nguyen (B)	All Vietnamese (C)
DEMOGRAPHICS			
Female	53.5%	53.2%	54.1%
Mean Age***	50.8	51.2	50.8
POLITICAL PARTY***			
Democratic	30.5%	30.1%	33.5%
Republican	28.1%	28.5%	22.1%
Declined to State	36.2%	36.2%	39.4%
Minor Parties	5.2%	5.2%	5.0%
BEHAVIOR			
Mean Registered Years***	11.5	11.6	12.4
Voted in Last Election†	51.3%	51.6%	52.1%
SPATIAL ASSIMILATION			
% in Top 12 Zip Codes***	27.2%	27.5%	37.9%
N	3,075	2,931	18,977

Note: ** = $p < 0.5$; *** = $p < 0.01$. T-tests and chi-square tests are two-tailed. Top 12 zip codes were determined by taking the top 5% of percent total Vietnamese population by zip code in Los Angeles County. T-test and chi-square test significance values are between group A and C.

† N for All Nguyen (A) = 2,745; N for Vietnamese Nguyen (B) = 2,619; N for All Vietnamese (C) = 17,018

Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

Patel registered voters were well-representative of Indian registered voters for gender and mean registered years. However, there was greater variation for percentage of registered Patel and Indian voters who voted in the previous election (or 44% and 57%, respectively, $p < 0.01$). Patels were less spatially assimilated than foreign-born Indians; about 27% of Patels lived in high-ethnic zip codes while 20% of Indians lived in high-ethnic zip codes ($p < 0.01$). Indian Patels did not have similar bivariate means as Indian voters, which emphasizes the diversity among Indian surnames. For example, the mean age of Patels was about 48.5 while the mean age of Indian Patels was 49.1 and the mean age of Indian voters was about 47.1. For political party, Patels and Indians had the highest DI value among the four groups (or 9.5). However, since the dissimilarity index is from a scale of 0 to 100, the political party affiliation is relatively similar in distribution.

Table 6. Patel/India Bivariate Results

	All Patel (A)	Indian Patel (B)	All Indian (C)
DEMOGRAPHICS			
Female	50.3%	50.0%	48.5%
Mean Age**	48.5	49.1	47.1
POLITICAL PARTY***			
Democratic	33.0%	32.1%	41.2%
Republican	13.9%	12.7%	8.1%
Declined to State	51.6%	54.1%	47.7%
Minor Parties	1.5%	1.2%	2.9%
BEHAVIOR			
Mean Registered Years	6.6	5.9	6.4
Voted in Last Election†***	44.4%	41.1%	57.0%
SPATIAL ASSIMILATION			
% in Top 13 Zip Codes***	26.8%	27.8%	20.3%
N	519	418	7,270

Note: ** = $p < 0.5$; *** = $p < 0.01$. T-tests and chi-square tests are two-tailed. Top 13 zip codes were determined by taking the top 5% of percent total Indian population by zip code in Los Angeles County.

† N for All Patel (A) = 417; N for Indian Patel (B) = 341; N for All Indian (C) = 5,712

Source: 2014 Los Angeles County Registrar/Clerk. Calculated by authors.

Discussion of Findings

Our study has several important findings. First, there were distinctions in whether a surname was well-representative of the ethnic group based on the uniqueness and prevalence of the surname. Our study also confirms that Kim was well-representative of Koreans when researchers have limited resources to identify ethnic group trends and without self-identified race/ethnicity data. Chen and Nguyen were representative for most variables. In developing surname lists from Social Security Administration records, Lauderdale and Kestenbaum (2000) found that there were fewer than 400 names among Koreans and Vietnamese, while there were more than 3,500 surnames for Japanese and 12,000 for Filipinos. If a target group has too many surnames, the most prominent surname will not be representative of the target ethnic group. Finally, Patel was the least representative of the respective ethnic group relative to the other three surnames.

Second, we found that PESM was useful for our demographic variables (gender and age) and voting behavior (mean registered years and voter turnout). There was greater variation in

political party and spatial assimilation, depending on the ethnic group. Third, while the t-tests and chi-square tests produced statistically significant differences, there were few practical differences for most of the variables depending on the comparison group. For example, the practical difference between comparison groups was relatively small for Chen relative to Patels.¹⁰

It is important to note limitations to surname methods. First, we focused on voters who are foreign-born from a known country of origin. There may be distinctions between first, 1.5, and second-generation individuals from the same ethnic group for some socioeconomic characteristics. For example, Charles (2006) found that native-born Asians were more spatially assimilated and lived in whiter neighborhoods than foreign-born Asians. Thus, the analysis may not be generalizable to individuals of different generation status. Second, other studies have documented the limitation of using the surname method for women because of outmarriage with changing surnames (Kim et al. 2014; Taylor et al. 2011).¹¹

Third, the study used Los Angeles County as a case study. The findings may not be the same in other regions. These surnames may not be the most prominent and/or ethnic group composition will vary in other places, which would affect PESM effectiveness. For example, if a

¹⁰ These differences may also result from South Asians having a greater diversity among surnames than Chinese. For example, Shah et al. (2010) identified 9,950 South Asian surnames and 1,133 Chinese surnames. Singh (1992) found that there were more than 450 tribal groups in India, which contributes to the diversity among Indians in the United States. Patels are also different from other Indian immigrants because they are predominantly of Gujarat and Hindu background. A large number of Patels have become entrepreneurs and business owners, and they tend to be conservative in social and religious issues relative to other Indian groups (Jain 1989; Pocock 1972; Sheth 2001). In contrast, Chen is one of the top five most common surnames in China (Liu et al. 2012), particularly in the southeastern provinces (Schiavenna 2013). Chen is a common surname because descendants of the state of Chen adopted the state name as their last name around 476BC; an ethnic minority also changed their surname from Houmochen to Chen around 500AD (*People's Daily*, 2006).

¹¹ We used the 2011-2015 American Community Survey Public Use Micro Sample (PUMS) data to estimate the rates for females who married a non-Asian spouse and were born in China, India, Korea, and Vietnam. Among naturalized citizens and married women from these countries in Los Angeles County, we found that about 13% born in China, 9% born in India, 19% born in Korea, and 10% of women born in Vietnam married a non-Asian spouse. The PUMS analysis shows a comparable sample to the Los Angeles County voter registration data.

city has a lot of residents from Western India, there may also be a significant number of individuals with the surname Patel. PESM may be more useful in this city than in geographies with more diverse Indian populations.

Policy Implications

In a time of challenges to government data and the growth of big data, surnames are important to examine beyond a methodological tool. PESM can help policymakers who have minimal resources to examine other applications of this method. This study used voting registration data, and PESM can identify which groups may need more targeted outreach. For instance, if “Kim” registered voters are less likely to consecutively vote, policymakers may then choose to increase resources for Korean residents in their local jurisdiction.

Additionally, PESM is relevant for addressing discrimination. There is still evidence of discrimination across the U.S. for potential Asian renters whose race is identified through name—they were more likely denied an appointment with a landlord than those whose name sounded more White (Turner et al. 2013). With PESM, local policymakers can do their own tests of potential renters and homebuyers who send in applications with different surnames. Alternatively, residents of different surnames can be surveyed to learn more about their housing search experience and potential barriers they face.

People may also discriminate in hiring based on a person's presumed ethnic identity. Thanasombat et al. (2005) found that employers discriminated against supposed South Asian and Arab Americans based on resumes with presumed South Asian or Arab surnames. More recently, Widner and Chicoine (2011) found that individuals with Arab-sounding surnames had to send two resumes to hear back from an employer for every one resume sent by a White male. Local policymakers can consider sending resumes to companies with the prominent surname to test if

some groups experience more challenges, which can then be used to develop anti-discrimination workshops or resources for local employers.

PESM can also strengthen existing records that do not require self-reported race/ethnicity. For example, prison and incarceration data can include individual race/ethnicity, but are not consistently collected or are missing race/ethnicity. Thus, studies such as Bales and Piquero (2012) used surnames to identify more Latinos who were sentenced to incarceration. If local policymakers have data with a large number of missing self-reported race/ethnicity, they can use PESM to strengthen their demographic analysis of individuals in other sectors. Thus, surnames can be used to not only identify individuals, but also understand people's behaviors and areas of disparities that policymakers and researchers can address to make our cities and neighborhoods more inclusive.

References

- Abrahamse, Allan F., Peter A. Morrison, and Nancy Minter Bolton. "Surname analysis for estimating local concentration of Hispanics and Asians." *Population Research and Policy Review* 13, no. 4 (1994): 383-398. doi: 10.1007/BF01084115.
- Adjaye-Gbewonyo, Dzifa, Robert A. Bednarczyk, Robert L. Davis, and Saad B. Omer. "Using the Bayesian Improved Surname Geocoding Method (BISG) to create a working classification of race and ethnicity in a diverse managed care population: a validation study." *Health Services Research* 49, no. 1 (2014): 268-283. doi: 10.1111/1475-6773.12089.
- Alba, Richard D., John R. Logan, Brian J. Stults, Gilbert Marzan, and Wenquan Zhang. "Immigrant groups in the suburbs: A reexamination of suburbanization and spatial

assimilation." *American Sociological Review* (1999): 446-460.

<http://www.jstor.org/stable/2657495>.

Alegria, Margarita, Norah Mulvaney-Day, Maria Torres, Antonio Polo, Zhun Cao, and Glorisa Canino. "Prevalence of psychiatric disorders across Latino subgroups in the United States." *American Journal of Public Health* 97, no. 1 (2007): 68-75. doi: 10.2105/AJPH.2006.087205.

Asian Americans Advancing Justice. *A community of contrasts: Asian Americans in the United States: 2011*. Los Angeles: Asian Americans Advancing Justice-Los Angeles, 2011.

Bahrampour, Tara. "Apparent White House pick to lead census sparks concern about partisanship." *The Washington Post*, 7 Dec. 2017, www.washingtonpost.com/local/social-issues/apparent-white-house-pick-to-lead-census-sparks-concern-about-partisanship/2017/12/07/662b789a-d6e1-11e7-a986-d0a9770d9a3e_story.html?utm_term=.4326816521c9.

Bales, William D. and Alex R. Piquero. "Racial/ethnic differentials in sentencing to incarceration." *Justice Quarterly* 29, no. 5 (2012): 742-773. doi: 10.1080/07418825.2012.659674.

Chae, David H., David T. Takeuchi, Elizabeth M. Barbeau, Gary G. Bennett, Jane Lindsey, and Nancy Krieger. "Unfair treatment, racial/ethnic discrimination, ethnic identification, and smoking among Asian Americans in the National Latino and Asian American Study." *American Journal of Public Health* 98, no. 3 (2008): 485-492. doi: 10.2105/AJPH.2006.102012.

- Chang, Mitchell J., Julie J. Park, Monica H. Lin, Oiyen A. Poon, and Don T. Nakanishi. *Beyond myths: The growth and diversity of Asian American college freshmen, 1971-2005*. Los Angeles: UCLA Higher Education Research Institute, 2007.
- Charles, Camille Zubrinsky. *Won't you be my neighbor: Race, class, and residence in Los Angeles*. Russell Sage Foundation, 2006.
- Data Collection Act of 2016 – Chapter 607, AB. 1726. (2016). Available via California Legislative Information.
https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB1726.
- Duncan, Otis Dudley, and Beverly Duncan. "Residential distribution and occupational stratification." *American Journal of Sociology* 60, no. 5 (1955): 493-503. doi: 10.1086/221609.
- Eicheldinger, Celia, and Arthur Bonito. "More accurate racial and ethnic codes for Medicare administrative data." *Health Care Financing Review* 29, no. 3 (2008): 27.
- Elliott, Marc N., Peter A. Morrison, Allen Fremont, Daniel F. McCaffrey, Philip Pantoja, and Nicole Lurie. "Using the Census Bureau's surname list to improve estimates of race/ethnicity and associated disparities." *Health Services and Outcomes Research Methodology* 9, no. 2 (2009): 69-83. doi: 10.1007/s10742-009-0047-1.
- Eschbach, Karl, Yong-Fang Kuo, and James S. Goodwin. "Ascertainment of Hispanic ethnicity on California death certificates: implications for the explanation of the Hispanic mortality advantage." *American Journal of Public Health* 96, no. 12 (2006): 2209-2215. doi: 10.2105/AJPH.2005.080721.

- Falkenstein, Matthew R. *The Asian and Pacific Islander surname list: As developed from Census 2000*. Washington, DC: Bureau of the Census, 2002.
- <https://ww2.amstat.org/sections/srms/Proceedings/y2002/Files/JSM2002-000501.pdf>.
- Frasure-Yokley, Lorrie. *Racial and ethnic politics in American suburbs*. Cambridge University Press, 2015.
- Frey, William H., and Reynolds Farley. "Latino, Asian, and black segregation in US metropolitan areas: are multiethnic metros different." *Demography* 33, no. 1 (1996): 35-50. doi: 10.2307/2061712.
- Fuchs, Chris. "As Census Approaches, Some Advocates Worried Asian Americans Could Be Undercounted." *NBC News*, 29 Nov. 2017, www.nbcnews.com/news/asian-america/census-approaches-some-advocates-worried-asian-americans-could-be-undercounted-n824541.
- Grofman, Bernard, and Jennifer R. Garcia. "Using Spanish Surname to Estimate Hispanic Voting Population in Voting Rights Litigation: A Model of Context Effects Using Bayes' Theorem." *Election Law Journal* 13, no. 3 (2014): 375-393. doi:10.1089/elj.2013.0190.
- Grundmeier, Robert W., Lihai Song, Mark J. Ramos, Alexander G. Fiks, Marc N. Elliott, Allen Fremont, Wilson Pace, Richard C. Wasserman, and Russell Localio. "Imputing missing race/ethnicity in pediatric electronic health records: reducing bias with use of US census location and surname data." *Health services research* 50, no. 4 (2015): 946-960. doi: 10.1111/1475-6773.12295.
- Holloway, Steven R., Richard Wright, and Mark Ellis. "The racially fragmented city? Neighborhood racial segregation and diversity jointly considered." *The Professional Geographer* 64, no. 1 (2012): 63-82. doi: 10.1080/00330124.2011.585080.

- Iceland, John, and Kyle Anne Nelson. "Hispanic segregation in metropolitan America: Exploring the multiple forms of spatial assimilation." *American Sociological Review* 73, no. 5 (2008): 741-765. doi: 10.1177/000312240807300503.
- Iceland, John, Daniel H. Weinberg, and Erika Steinmetz. *Racial and ethnic residential segregation in the United States 1980-2000*. Washington, DC: Bureau of Census, 2002. <https://www.census.gov/prod/2002pubs/censr-3.pdf>.
- Jacobs, Jerry A. "Long-term trends in occupational segregation by sex." *American Journal of Sociology* 95, no. 1 (1989): 160-173. doi: 10.1086/229217.
- Jain, Usha R. *The Gujaratis of San Francisco*. Vol. 48. AMS Press, 1989.
- Kim, Jibum, Diane S. Lauderdale, Hee-Choon Shin, and Yongmo Lee. "Surname sampling: reevaluating Kim sampling in Korea and the United States." *Field Methods* 26, no. 1 (2014): 87-104. doi: 10.1177/1525822X13493234.
- Kim, Kwang Chung, Won Moo Hurh, and Marilyn Fernandez. "Intra-group differences in business participation: Three Asian immigrant groups." *International Migration Review* (1989): 73-95. doi: 10.2307/2546183.
- King, Mary C. "Occupational segregation by race and sex, 1940-88." *Monthly Labor Review* 115, no. 4 (1992): 30-37.
- Lauderdale, Diane S., and Bert Kestenbaum. "Asian American ethnic identification by surname." *Population Research and Policy Review* 19, no. 3 (2000): 283-300. doi: 10.1023/A:1026582308352.
- Leadership Conference Education Fund. Factsheet: *Will You Count? Asian Americans and Native Hawaiians and Pacific Islanders (NHPs) in the 2020 Census. 2017, Factsheet: Will You Count? Asian Americans and Native Hawaiians and Pacific Islanders (NHPs)*

- in the 2020 Census*, <http://civilrightsdocs.info/pdf/census/2020/Fact-Sheet-AA-NHPI-HTC.pdf>.
- Liu, Yan, Liujun Chen, Yida Yuan, and Jiawei Chen. "A study of surnames in China through isonymy." *American Journal of Physical Anthropology* 148, no. 3 (2012): 341-350. doi: 10.1002/ajpa.22055.
- Massey, Douglas S., and Nancy A. Denton. "The dimensions of residential segregation." *Social Forces* 67, no. 2 (1988): 281-315. doi: 10.1093/sf/67.2.281.
- . "Spatial assimilation as a socioeconomic outcome." *American sociological review* (1985): 94-106.
- Mehta, Seema. "California Population Undercounted in Census, State Says." *The Washington Post*, 25 Dec. 2010, www.washingtonpost.com/wp-dyn/content/article/2010/12/25/AR2010122501876.html.
- Ong, Paul M., Chhandara Pech, and Deirdre Pfeiffer. *The foreclosure crisis in Los Angeles*. Los Angeles: UCLA School of Public Affairs, 2014. <http://www.lewis.ucla.edu/wp-content/uploads/sites/2/2014/02/California-Policy-Options-for-Instructor1.pdf>.
- People's Daily*. "Chinese surname history: Chen." *People's Daily Online*, 2006. http://en.people.cn/200601/23/eng20060123_237614.html.
- Pocock, David Francis. *Kanbi and Patidar: A study of the Patidar community of Gujarat*. Clarendon Press, 1972.
- Portes, Alejandro, and Min Zhou. "The new second generation: Segmented assimilation and its variants." *The Annals of the American Academy of Political and Social Science* 530, no. 1 (1993): 74-96. doi: 10.1177/0002716293530001006.

- Quan, Hude, Fulin Wang, Donald Schopflocher, Colleen Norris, P. Diane Galbraith, Peter Faris, Michelle M. Graham, Merril L. Knudtson, and William A. Ghali. "Development and validation of a surname list to define Chinese ethnicity." *Medical care* (2006): 328-333.
- Sakoda, James M. "A generalized index of dissimilarity." *Demography* 18, no. 2 (1981): 245-250. doi: 10.2307/2061096.
- Schiavenza, Matt. "The geographic distribution of China's last names, in maps." *The Atlantic*. (2013). Retrieved from <https://www.theatlantic.com/china/archive/2013/10/the-geographic-distribution-of-chinas-last-names-in-maps/280776/>.
- Shah, Baiju R., Maria Chiu, Shubarna Amin, Meera Ramani, Sharon Sadry, and Jack V. Tu. "Surname lists to identify South Asian and Chinese ethnicity from secondary data in Ontario, Canada: A validation study." *BMC Medical Research Methodology* 10, no. 1 (2010): 1-8. doi: 10.1186/1471-2288-10-42.
- Shapiro, Robert. "The 2020 Census may be wildly inaccurate—and it matters more than you think." *Brookings Institute*, 31 Aug. 2017, www.brookings.edu/blog/fixgov/2017/08/31/the-2020-census-may-be-wildly-inaccurate-and-it-matters-more-than-you-think.
- Sheth, Pravin N. *Indians in America: One stream, two waves, three generations*. Rawat Pubns, 2001.
- Shin, Eui-Hang, and Eui-Young Yu. "Use of surnames in ethnic research: the case of Kims in the Korean-American population." *Demography* 21, no. 3 (1984): 347-360. doi: 10.2307/2061164.
- Singh, Kumar Suresh. *People of India: An introduction*. Anthropological Survey of India, Calcutta, India. 1992.

Singh-Carlson, Savitri, Frances Wong, Gurpreet Oshan, and Harajit Lail. "Name Recognition to Identify Patients of South Asian Ethnicity within the Cancer Registry." *Asia-Pacific Journal of Oncology Nursing* 3, no. 1 (2016): 86-92. doi: 10.4103/2347-5625.170224.

Swallen, Karen C., Sally L. Glaser, Susan L. Stewart, Dee W. West, C. N. Jenkins, and Stephen J. McPhee. "Accuracy of racial classification of Vietnamese patients in a population-based cancer registry." *Ethnicity & Disease* 8, no. 2 (1998): 218-227.

Taylor, Victoria M., Tung T. Nguyen, H. Hoai Do, Lin Li, and Yutaka Yasui. "Lessons learned from the application of a Vietnamese surname list for survey research." *Journal of Immigrant and Minority Health* 13, no. 2 (2011): 345-351. doi: 10.1007/s10903-009-9296-x.

Thanasombat, Siri, John Trasviña, Deborah Woo, and Paul Ong. "Screening Names Instead of Qualifications: Testing with Emailed Resumes Reveals Racial Preferences." *AAPI Nexus: Policy, Practice and Community* 3, no. 2 (2005): 105-115. doi: 10.17953/appc.3.2.662555ttv6344365.

Turner, Margery Austin, Rob Santos, Diane K. Levy, Doug Wissoker, Claudia Aranda, Rob Pitingolo, and the Urban Institute. *Housing discrimination against racial and ethnic minorities 2012*. Washington, DC: U.S. Department of Housing and Urban Development.

United States Census Bureau. "Frequently Occurring Surnames from the 2010 Census." *Author*. 2016. https://www.census.gov/topics/population/genealogy/data/2010_surnames.html.

U.S. Government Accountability Office. *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, GAO-17-317. Washington, DC, 2017. <http://www.gao.gov/assets/690/682765.pdf>.

- Widner, Daniel and Stephen Chicoine. "It's all in the name: Employment discrimination against Arab Americans." *Sociological Forum* 26, no. 4 (2011): 806-823. doi: 10.1111/j.1573-7861.2011.01285.x.
- Wong, Eric C., Latha P. Palaniappan, and Diane S. Lauderdale. "Using name lists to infer Asian racial/ethnic subgroups in the healthcare setting." *Medical Care* 48, no. 6 (2010): 540-546. doi: 10.1097/MLR.0b013e3181d559e9.
- Wong, Janelle, S. Karthick Ramakrishnan, Taeku Lee, and Jane Junn. *Asian American political participation: Emerging constituents and their political identities*. Russell Sage Foundation, 2011.
- Word, David L., Charles D. Coleman, Robert Nunziata, and Robert Kominski. *Demographic aspects of surnames from Census 2000*. Washington, DC: Census Bureau, 2008.
<https://www2.census.gov/topics/genealogy/2000surnames/surnames.pdf>.
- Word, David L. and R. Colby Perkins, Jr. Building a Spanish surname list for the 1990's—A new approach to an old problem (Working Paper No. 13), 1996.
<https://www.census.gov/population/documentation/twpno13.pdf>.
- Zambrana, Ruth E., and Claudia Dorrington. "Economic and social vulnerability of Latino children and families by subgroup: Implications for child welfare." *Child Welfare* 77, no. 1 (1998): 5-27.

CHAPTER 3: HETEROGENEITY IN INCOME:
EFFECTS OF RACIAL CONCENTRATION ON FORECLOSURES IN LOS ANGELES

Introduction

The United States continues to be defined by racial concentration, where most racial/ethnic groups live apart from each other. The average White person lives in a neighborhood with more than 75% Whites (Frey, 2014). Bader and Warkentien (2016) also found that many integrated neighborhoods were unstable and gradually transitioning into racially concentrated neighborhoods (see also Friedman, 2008). Metropolitan areas with a mix of racial/ethnic groups across the region also have racially concentrated spaces on smaller geographic levels in cities (Lichter, Parisi, & Taquino, 2015) or within a tract (Friedman, 2011).

Racial concentration or segregation is oftentimes linked to negative housing outcomes for homeowners. This association is important because homeownership is still the largest asset for minorities (Taylor et al., 2011). Racially segregated neighborhoods have been tied to lower rates of mortgage origination (Kuebler, 2012); increased subprime and predatory lending (Hyra et al., 2013; Rugh & Massey, 2010); and higher default and foreclosure rates (Chan et al., 2013; Hall, Crowder, & Spring, 2015a; Crump, 2013; Molina, 2012). Higher-income borrowers in Black and Latino neighborhoods were more likely to go into foreclosure relative to their counterparts in White neighborhoods in Prince George's County, Maryland (Anacker et al., 2012). Minority neighborhoods have also seen slow recovery of home values after the Great Recession (Mellnick et al., 2016; Raymond, Wang, & Immergluck, 2016).

Many studies focus on Black neighborhoods because of the history of institutional discrimination and resource deprivation associated with Black segregation. Asian and Latino ethnic enclaves for the most part do not share the same history in large part because of post-1965

immigration laws.¹² These neighborhoods may benefit residents with employment and educational opportunities, social support, and in-language services (Chiswick & Miller, 2005; Spencer & Chen, 2004; Zhou, 2007). Different histories and resources may explain why Black neighborhoods have become less prevalent while Latino and Asian neighborhoods have increased in number or remained stable (Clark et al., 2015; Frey, 2014; Glaeser & Vigdor, 2012; Tienda & Fuentes, 2014).

Among ethnic enclaves, the reason for group concentration differs based on class. Immigrants who have less capital may settle into poorer, coethnic enclave neighborhoods associated with structural and institutional disadvantage, similar to Black neighborhoods that were created by discrimination (Portes & Zhou, 1993). In contrast, wealthier immigrants may choose to live in racially-concentrated areas for socioeconomic benefits that are in-language and ethnic-specific—these middle- and high-income ethnic enclaves have recently been termed *resurgent neighborhoods* (Logan, Alba, & Zhang, 2002; Walton, 2012; Wen et al., 2009). Resurgent neighborhoods differ from enclaves because they may be comprised of individuals who are foreign- and/or native-born (Walton, 2015). These neighborhoods also have a substantial concentration of a non-white group, but the population does not need to comprise the majority of the neighborhood (Li, 1998; Walton, 2015). Based on the constraints, resources, and/or advantages available in ethnic enclaves, residents' default and foreclosure rates could differ. Resurgent areas may follow other middle- and high-income areas that overall had lower rates of foreclosures than lower-income neighborhoods (Aalbers, 2009).

¹² There are instances of housing discrimination that formed historic ghettos, such as San Francisco's Chinatown in the 19th century (Kroll-Smith & Brown-Jeffrey, 2013). Diaz (2005) also details discriminatory policies that have created or reinforced Chicano segregation before 1965. However, the U.S. passed several exclusionary laws that banned migrants from Latin America and Asia throughout its history. After 1965, the surge of Latino and Asian immigrants has helped to establish many contemporary Latino and Asian neighborhoods (Gibson & Jung, 2006; Logan & Stults, 2014).

I connect the growing studies on resurgent neighborhoods with default and foreclosure outcomes. While other studies have examined the health and educational benefits associated with resurgent neighborhoods (Lee & Zhou, 2015; Walton, 2012), this is the first study to test if resurgent neighborhood residents have improved housing outcomes in default or foreclosure. First, I trace the housing outcomes for 2007 homeowners based on their purchase date in Los Angeles County. Because housing records do not include race/ethnicity, I impute these variables using the 2000 Bureau of Census surname probability list. After, I assess the impacts of living in a racially concentrated neighborhood and the likelihood that a homeowner will default or foreclose in 2008 or 2009 using DataQuick and Los Angeles County Assessor data. Third, I test whether the effects of resurgent neighborhoods persist after accounting for individual homeowner and other neighborhood characteristics using multiple logistic regressions.

The study finds that homeowners in Asian and Latino resurgent neighborhoods had similar or lower rates of default or foreclosure as compared to Black or White high-income neighborhoods. However, Asian resurgent neighborhoods had the lowest rates and predicted probabilities for default/foreclosure. Similar to other studies, low-income neighborhoods also had higher rates of default/foreclosure (Grover et al., 2008; Immergluck & Smith, 2006; Laderman & Reid, 2008). After controlling for homeowner and neighborhood factors, borrowers in particularly high-income racially concentrated neighborhoods had lower predicted probabilities of default/foreclosure than homeowners in lower-income neighborhoods. There were also discrepancies in nativity for Asian neighborhoods—Asian enclaves with higher proportions of foreign-born residents had lower predicted probabilities of default/foreclosure than those in Asian communities of constraint with higher rates of native-born homebuyers.

Background

Segregation and Housing Outcomes from the Great Recession

The United States is still recovering from the Great Recession in part because of the disproportionate impacts that foreclosures have had on minority neighborhoods. Hall et al. (2015b) found that neighborhoods with high proportions of Latinos and/or Blacks had large shares of foreclosures across all U.S. regions. In their other study, Hall et al. (2015a) also found that foreclosure rates increased in neighborhoods with increasing out flight of White residents. Using Baltimore, Maryland as a case study, Rugh et al. (2015) also noted that homeowners in majority Black neighborhoods had higher monthly payments and lots more home equity than counterparts in White neighborhoods, with increased disparities among more affluent borrowers.

After the Recession, Black and low-income neighborhoods have experienced stagnant or slow recovery in home prices. Mellnick et al. (2016) found that Black zip codes were two times more likely than White zip codes to have homes worth less in 2015 than in 2004. Even in neighborhoods with low poverty rates, Raymond, Wang, and Immergluck (2016) found that Black neighborhoods in Atlanta have only modestly recovered or not at all. In contrast, predominantly White and middle- or –upper-income neighborhoods have recovered in home value, and were less volatile during the crisis and beyond (Raymond et al., 2016).

There is evidence that Latino neighborhoods followed similar patterns as Black neighborhoods after the Recession. Raymond et al. (2016) found that zip codes in Atlanta with more Latinos had depressed home value appreciation—however, Black neighborhoods still had the fewest gains in property values. Molina’s (2016) study of Los Angeles County and the Inland Empire, California demonstrated that foreclosed vacant properties in Black and Latino neighborhoods were also more likely to remain vacant for more months than properties in Asian neighborhoods (see also Li and Walter’s (2013) study of Broward County, Florida).

There are also differences among Latino neighborhoods based on class and ethnic group. Pfeiffer and Molina (2013) noted some distinctions among majority Latino neighborhoods in Southern California—foreclosed properties in Latino neighborhoods with more Black residents and lower income took longer to sell than properties in Latino neighborhoods with fewer Blacks and of higher income (Pfeiffer & Molina, 2013). Other studies have also found differences in housing outcomes based on ethnic group, where Cubans experience lower rates relative to Mexicans and Puerto Ricans (Cahill & Franklin, 2013; Kuebler & Rugh, 2013; Rugh, 2014).

Few studies have examined how Asian neighborhoods have fared during or after the Recession. The exception is Rugh and Massey's (2010) study that found Asian segregation had a negative association with foreclosures. They attributed this finding to concentrated affluence among Asian Americans. While little is known about Asian neighborhoods, a number of studies have examined Asian American homeowners. Asian American homeowners had lower foreclosure rates than other racial minorities (Bocian, David, Garrison, & Sermons, 2012; Reid & Laderman, 2008). Rugh (2015) also found foreclosure rate differences among Asian American ethnic groups—Vietnamese and Koreans had higher foreclosure rates than Chinese, Japanese, and Taiwanese homeowners (see also Ong, Pech, & Pfeiffer [2013]). Also, Patraporn, Tran, and Ong (2015) examined the affluent and racially diverse neighborhoods of East San Gabriel Valley, California, and explained that Asian Americans had lower default and foreclosure rates than other groups in part because Asian homeowners were less likely to have subprime loans or variable interest loans.

Communities of Constraint versus Resurgent Neighborhoods

Minority neighborhoods have unevenly recovered because they were formed by different historical contexts and reasons. These distinctions are tied to income and immigration policies.

For low-income minorities and immigrants, they have fewer options in neighborhood choice and may live in racially segregated neighborhoods called *communities of constraint*—these areas are linked to concentrated disadvantage and limited neighborhood resources (Walton, 2015).

Alternatively, immigration laws favor professionals and wealthier individuals, which have brought immigrants with significant economic means to the United States. These individuals have more options in where they can afford to live. Many of these households can decide to live in a resurgent neighborhood because of ethnic group-specific resources or in-language resources. The following describes the origins of communities of constraint and resurgent neighborhoods as related to homeownership.

Formation of Communities of Constraint

Housing policies and informal discrimination have created communities of constraint. For example, Black segregation is in large part caused by historic government policies that sanctioned or encouraged racial discrimination (Crossney & Bartelt, 2005; Gotham, 2000; Immergluck, 2009; Schwartz, 2014). Though *de jure* discrimination has ended, there are several factors that contribute to *de facto* discrimination in the housing market, which constrain where individuals can live. Relative to White homeowners, racial minority groups were informed and shown fewer homes in a national audit study (Turner et al., 2013). For example, Blacks were told about 17% fewer homes than Whites, and Asian homebuyers were shown 19% fewer homes than Whites (Turner et al., 2013). This study also found that perspective homebuyers whose race was identifiable because of name or English-language speaking ability experienced similar discrimination. Because of exclusion and discrimination, communities of constraint have been linked to a combination of negative housing outcomes, such as lower home values, higher

vacancy rates, and poorer housing quality—these disparities persist for middle-class Black neighborhoods (Adelman, 2004; Friedman, Gibbons, & Galvan, 2014).

The origins of Latino and Asian residential concentration differ from Black segregation because of how these groups migrated to the United States, impacting resources available in ethnic enclaves. Many of these neighborhoods were a starting point for employment, particularly for immigrants who were not proficient in English (Bates, 1997; Chiswick & Miller, 2005; Diaz, 2005). Studies of Chinese enclaves in New York showed that kinship and family networks further established these neighborhoods (Hum, 2014; Zhou, 1992). Ethnic enclaves have historically been viewed as communities of constraint. For example, enclaves oftentimes were linked to poorer housing conditions (Diaz, 2005; Logan & Stults, 2011).

However, ethnic enclaves have become economically diverse with recent immigrant laws that favor immigrants with more capital. While low-income enclaves are still prevalent in cities, there has been a growth of middle- and upper-income ethnic neighborhoods that are oftentimes located in suburban areas, or *resurgent neighborhoods*. The following provides a more detailed description of resurgent neighborhoods.

Formation of Resurgent Neighborhoods

Variations of resurgent neighborhoods have become more recognized in literature over the past couple of decades. Li's (1998) seminal work on *ethnoburbs*, or suburban ethnic communities in the San Gabriel Valley, described places of significant residential and business concentration of Asian immigrants. Since then, Logan et al. (2002) termed a similar phenomenon, *ethnic communities*, where residents have the socioeconomic means and greater residential choice to live in Whiter neighborhoods but choose to live among coethnic residents. Vo and Danico (2004) also explore the concept of *postsuburban spaces* in Orange County, where

Vietnamese and Korean communities have political and economic independence and concentration.

More recently, *resurgent neighborhoods* have been used to describe middle-class coethnic residential concentration (Brown & Chung, 2008; Walton, 2015; Wen et al., 2009). While ethnoburbs and postsuburban spaces focus on suburban areas, resurgent neighborhoods include non-suburban communities. In addition, resurgent neighborhoods can include residents who comprise of the same racial/ethnic background, but can also be of different nativity status (Walton, 2015). In contrast, ethnic enclaves or ethnoburbs are typically characterized as comprised of large immigrant populations (Li, 1998).

Resurgent neighborhoods exist for several reasons. First, some immigrants arrive with greater socioeconomic resources and can afford to directly move to middle-class suburbs (Li, 1998; Logan et al., 2002; Singer, 2008; Zhou, 1992). Second, individuals use familial or social networks to decide where to live (Alba et al., 1999; Chung & Brown, 2007). Consequently, immigrants who move to resurgent neighborhoods bring other family and friends. Third, these neighborhoods offer residents other benefits, including reprieve from White discrimination (Hunt et al., 2007; Lacy, 2004; Pickett & Wilkinson, 2008; Walton, 2012), as well as access to ethnic businesses and institutions that White neighborhoods do not have, such as educational institutions (Zhou, 2007) and health providers (Spencer & Chen, 2004).

These neighborhoods may also provide class-based resources that are not available in low-income enclaves. Lee and Zhou (2015) detail how immigration selection impacts the growth of resurgent neighborhoods for Asian Americans.¹³ Immigration policies favor Asian immigrants

¹³ Hing (1993) also describes the role of U.S. immigration policy and how it has shaped Asian American communities. While historic immigration laws sought cheap Asian labor in the 19th century, new laws in the 20th century favored Asians who are professionals with higher incomes, in large part because of the 1965 Immigration

who oftentimes are more educated or wealthier than their counterparts who stay in the home country; these immigrants may also have more education or skills than the average American (Lee & Zhou, 2015). As a result, this *hyperselected* group of Asian immigrants has the capital to create and support resurgent neighborhood-based resources that are class-based. They contrast Chinese immigrants with Mexican immigrants, where Mexican immigrants are oftentimes less educated than their counterparts in Mexico—consequently, Mexican neighborhoods may not have a concentration of residents who have the economic means to set up neighborhood-based institutions (Lee & Zhou, 2015).

Additional literature has similarly focused on the benefits of Asian American resurgent neighborhoods. For example, De la Roca, Ellen, and O’Regan (2014) found that Asians are more likely to live among highly educated neighbors in Asian neighborhoods than their counterparts who live in Whiter neighborhoods. Li (1998) also found that ethnoburbs have an overrepresentation of Chinese residents in banking, real estate, and finance than Los Angeles County. In contrast, there is a dearth of literature on the benefits of Latino resurgent neighborhoods, as much of the literature still describes the deleterious effects from Latino segregation. The exception is Vallejo (2012), who examined how a professional organization in Santa Ana, California promoted middle-class ethnic capital and economic mobility for Latina business owners.

Benefits from resurgent enclaves in health, education, and employment may extend to homeownership. There are no studies that connect resurgent neighborhoods to housing outcomes. While housing discrimination policies have contributed to concentrated poverty, lower home values, poorer housing quality, and higher rates of foreclosures, homeowners who choose

Act and Immigration Act of 1990 (Hing, 1993). More recently with the EB-5 program, Asian investors have been granted green cards after they substantially invest and create at least 10 jobs (Simons et al., 2016).

resurgent neighborhoods would potentially have access to institutions that impact lending, credit, and housing.¹⁴ Higher-income neighborhoods have lower subprime mortgages, fewer foreclosures, and/or faster recovery from the recession (Aalbers, 2009; Grover et al., 2008; Immergluck & Smith, 1999; Mellnick et al., 2016). I predict that resurgent neighborhoods will similarly have low default/foreclosure rates because they converge class and ethnic advantages, even with higher minority racial resident concentration.

Research Questions

This study examines the default and foreclosure outcomes of homeowners who live in racially concentrated neighborhoods based on class, focusing on the effects of resurgent neighborhoods. I examine homeowners and whether their default and foreclosure rates differ based on neighborhood racial composition and class. .

The following questions guide the study:

1. What are the default and foreclosure rates for homeowners by neighborhood type in 2008 to 2009 for Los Angeles County?
2. Does living in resurgent neighborhoods reduce homeowners' likelihood of default and foreclosure relative to neighborhoods without racial concentration?
3. Do the effects of resurgent neighborhoods persist after accounting for other individual homeowner and neighborhood characteristics?

I test these questions for homeowners in Los Angeles County because the Southern California region has a sizable Latino and Asian population who are forming middle-class

¹⁴ Ethnic banks are an example of lending institutions in resurgent neighborhoods. Informal and formal forms of ethnic lending has existed in minority and immigrant neighborhoods since early U.S. history to fill the credit needs of these groups that could not access mainstream banks (Hum, 2011). However, the growth of large Asian banks has contributed to the growth of resurgent neighborhoods with the globalization and deregulation of the financial sector (Dymski & Mohanty, 1999). Dymski and Mohanty (1999) also argue that large formal Asian financial institutions have helped clients move from enclaves to ethnoburbs by supporting residents and businesses. Zonta (2015) traces the growth of Chinese and Korean banks into increasingly suburban areas in Los Angeles and New York. She also found that Los Angeles Chinese banks have increasingly originated mortgages in wealthier suburbs

neighborhoods. San Gabriel Valley has seen a concentration of middle-class Asian and Latino residents from the 1990s (Li, 1998). Carcamo (2015) also describes the growth of middle-class Latino neighborhoods in Los Angeles, including Downey, Whittier, and Van Nuys. Clark et al. (2015) similarly demonstrates that Latino and Asian residential preferences shape the neighborhood landscape in Los Angeles because of the decline of White and Black residential concentration.

Methodology

Data Sources

The study utilizes proprietary and public data to answer the research questions. First, I used DataQuick, a proprietary dataset that collects single-family residential property information on home purchase and housing transactions, including defaults and foreclosures.¹⁵ These data also include borrower names, loan information, property address, sale price, home value, and other household information. However, DataQuick does not include borrower self-reported race/ethnicity.

Second, I used the Decennial 2000 Census surname dictionary to impute the race/ethnicity of homeowners. The Census Bureau counted the surnames for each racial group and calculated the proportion of the time that the surname was linked to a person that was White, Black, Latino, Asian and Pacific Islander, and American Indian (Word, Coleman, Nunziata, & Kominski, 2008). For surnames with at least 100 counts, the Census developed the surname

¹⁵ DataQuick defines defaults as when a homeowner receives a legal Notice of Default document, which is at least 30 days after the lender contacted the homeowner about foreclosure avoidance assessment. Foreclosures are recorded as the date that a homeowner receives the Notice of Sale, or that the property can be sold at public auction. Homeowners who received multiple notices were counted only once unless the homeowner name changed in 2007, in which they were then excluded. The study focuses on homebuyers of single-family homes, and does not cover condominiums because single-family homes comprise the largest share of foreclosures (Foote et al., 2008). Hartley (2014) also proved that single-family and multi-family housing markets are affected by foreclosure differently in his analysis of supply and dis-amenity mechanisms. While there are exceptions (Foote et al., 2008; Rugh, 2015), most foreclosure studies focus on single-family homes (Biswas, 2012; Immergluck & Smith, 2006; Ong & Pfeiffer, 2008; Rugh & Massey, 2010; Schuetz et al., 2008).

dictionary (N = 151,671 names). The 2000 Census surname list is the most widely used surname dictionary in several disciplines, including public health (Adjaye-Gbewonyo, Bednarczyk, Davis, & Omer, 2014; Derose, Contreras, Coleman, Koebnick, & Jacobsen, 2013; Elliott et al., 2009), political science (Collet, 2005; Grofman & Garcia, 2014), and housing studies (Ong et al., 2014; Patraporn et al., 2015; Rugh, 2015).¹⁶

Third, I used 2005-2009 5-year American Community Survey data to identify tract socioeconomic characteristics: median household income, median home value, percentage of foreign-born, and percentage of homeowners. The first three data are used to construct the neighborhood typology (see “Neighborhood Typology” section for more information). These variables are averaged across the time period.

I use this time period rather than 2000 data for several reasons. First, this study examines housing outcomes leading up to 2009. At-risk homeowners do not look for resources at the time of purchase, but instead when they are experiencing challenges. Thus, neighborhood characteristics around time of risk are more relevant than the neighborhood at time of purchase. Second, it takes time for social networks and neighborhood resources to develop after a population moves into an area. Third, I also tested if there were major changes in neighborhoods over time using 2000 tract data, and found consistent results.¹⁷ The rest of the section describes how variables were constructed and the logistic regression models.

¹⁶ While useful when race/ethnicity is unavailable in a dataset, there are several issues to consider when implementing surname methods. First, The Census Bureau surname list can lead to higher false positives when used to identify racial groups because it was designed to pre-identify groups (Abrahamse et al., 1994). Additionally, surname dictionaries is more effective for some segments of the population, such as foreign-born individuals (Eschbach et al., 2006), men and older people (Wong et al., 2010), and groups that have more discernable surnames including Latinos and some Asian groups (Fiscella & Fremont, 2006).

¹⁷ I conducted robustness tests using 2000 Census tract data to examine if there were differences in the results. Of the 6 regressions, the coefficient for neighborhood typology, household factors, and tract owners were similar in magnitude and signs as models using 2010 Decennial data to determine resurgent neighborhoods. These tests indicate consistency among data sources.

Homeowner Cohort

I focus on sample of 2007 Los Angeles County homeowners using Los Angeles County Assessor parcel data, and created two groups based on purchase date: 1) between 2000 and 2003 (pre-housing boom), and 2) between 2004 and 2006 (housing boom) using DataQuick.¹⁸ Each group was assigned a dummy variable to understand temporal effects of home purchases. I imputed homeowner race using the 2000 Census dictionary—homeowners were assigned to a racial group if the surname had at least a 70% probability for a racial group.¹⁹

Neighborhood Typology

I created several types of neighborhoods to test the effect of resurgent neighborhoods on default and foreclosures. I adopted Walton’s (2015) typology, which categorized neighborhoods based on spatial concentration, nativity, and socioeconomic status. Walton (2015) first identified areas of group concentration using a local Moran’s I test of contiguous edges, which measures local spatial clustering. Moran’s I describes patterns of spatial autocorrelation based on the group concentration in each tract relative to the county (Anselin, 1995). In other words, the statistic accounts for unusually high racial concentration in a tract and also takes into consideration high

¹⁸ I created these categories based on Ong et al.’s (2014) findings, in which Los Angeles County home prices rose slowly until 2003; between 2003 and 2006 home prices increased more than 50 percent. Los Angeles home prices also began to fall after they peaked in 2006. Purchase year is important because there were of dramatic changes in home prices that affected negative equity. Palmer (2015) found a 6.5% difference in default rates when simulating 2006 homebuyers if they had the same price path as 2003 borrowers. Also, in 1999, the housing market was still recovering from the first boom in high-risk lending and recession from the 1990s (Immergluck, 2009). Thus, I am focusing on homeowners who purchased homes during the housing cycle that began after the smaller recession during the 1990s and ended before the most recent Great Recession. By focusing on homeowners in 2007, my sample excludes those who may have purchased during the 2000s housing bubble and may have moved before 2007 or lost their home. Among homeowners who were unable to prevent foreclosure, they were more likely to have had high-risk loans (Avery et al., 2008).

¹⁹ The dictionary uses the national decennial census to estimate racial probabilities. However, the dictionary may underestimate the probabilities for certain racial/ethnic groups for smaller geographies with varying racial composition. For example, the 2000 Census dictionary identifies that 40% of individuals with the surname “Lee” is White, 17% is Black, and 38% is Asian or Pacific Islander. These probabilities are based on the national population, which was 75% White, 12% Black, and 4% Asian in 2000. However, Asian Americans are overrepresented in Los Angeles—in 2000, they comprised 12% of the county, compared to about 43% Whites and 10% Blacks. If the Census dictionary was constructed for Los Angeles, it is likely the probability that the surname “Lee” belongs to an Asian or Pacific Islander would be higher than 38%.

populations in contiguous tracts. I designated tracts with a significantly high spatial autocorrelation ($\alpha < 0.05$) of Whites, Blacks, Latinos, and Asians as neighborhoods of concentration using the 2010 Decennial Census. A single tract can be categorized as statistically significant concentration if the proportion of the group is high relative to other tracts in the county.

Among the neighborhoods with racial concentration, I categorized them into one of four groups based on nativity and socioeconomic status: resurgent, community of constraint, immigrant enclave, and not-concentrated neighborhoods (see Table 1). Resurgent neighborhoods include areas of high socioeconomic status regardless of nativity. Walton (2015) then distinguished low-income neighborhoods by nativity. Tracts with a higher proportion of native-born residents are a “community of constraint,” and tracts with more foreign-born residents are an “enclave.” I added “not concentrated” neighborhoods, which do not have a statistically significant concentration of a racial group relative to nearby tracts.

Table 1. Neighborhood typology

Type	Dominant Nativity Status <i>(threshold: 36%)</i>	Dominant Socioeconomic Status <i>(threshold: \$55,000 income, \$567,000 home value)</i>
Resurgent	Native/Foreign-born	High
Community of constraint	Native-born	Low
Enclave	Foreign-born	Low
Not concentrated	-	-

Note: Tracts that had a statistically significant concentration of a racial group were categorized as “not concentrated” if the racial group had less than 50 residents in the tract.

Source: 2009 ACS 5-year Estimates, 2010 Decennial Census.

I used ACS data on household income and mean home value to classify neighborhoods by socioeconomic status. Walton (2015) used the county average to determine what is considered

high and low socioeconomic status.²⁰ I similarly used the median county average to categorize neighborhoods. The county's median household income was about \$55,000 and the median home value was \$567,000 in the 2009 5-year ACS estimates (adjusted to 2013\$). Tracts with a median household income *and* home value above these thresholds were categorized as “high” socioeconomic status.

If tracts did not meet these thresholds, they were then designated based on the nativity indicator. Walton (2015) used one threshold for all counties in California to categorize which ones had high concentrations of foreign-born residents. I similarly use the average percentage of foreign-born for the county for all tracts, which was 36%.²¹ Tracts with more than 36% were classified as having a disproportionately higher percentage of foreign-born residents (enclave), and the remaining tracts were defined as having more native-born residents (community of constraint). I applied these typologies to Asian and Latino neighborhoods. Blacks and Whites in Los Angeles County are primarily native-born (or 93% and 82%, respectively, in the 2009 5-year ACS estimates). Thus, neighborhoods with Black or White concentration were only categorized by socioeconomic status (e.g., “Black high socioeconomic status” or “White low socioeconomic status”). “White” is used to denote non-Hispanic Whites hereon after. Non-Hispanic Blacks and Asians were used for the analysis.

²⁰ I conducted a sensitivity analysis on income using the top quartile rather than the 50% cut-off in household income and home value. I found that the top 75% income threshold produces qualitatively similar results as the 50% criteria in direction and magnitude of coefficients. The analysis produced lower odds ratios across the neighborhood typologies, which is expected because homeowners who live in areas within the 50% to 75% upper threshold in income were then categorized as enclaves and communities of constraint.

²¹ I tested if there were differences in results when using the county proportion of foreign-born by race to test an alternative classification of enclaves. According to the ACS 2009 5-year estimates, about 68% of Asian Americans and 44% of Latinos were foreign-born. Among tracts with a concentration of Latinos, 44% foreign-born rate was approximately the top quartile threshold in nativity. There were no Asian tracts with more than 68% foreign-born residents. Thus, I used the top quartile of foreign-born residents among Asian neighborhoods (41%). With this new criterion of 44% foreign-born for Latino enclaves and 41% for Asian enclaves, there were no qualitative differences in results for statistical significance, direction, and magnitude, which support consistency of my findings.

Table 2 displays the number of tracts in Los Angeles County and homeowners by purchase date and neighborhood typology. About 44% of tracts did not have a significant racial concentration. Clark et al. (2015) found similar trends in Los Angeles, where the magnitude of Latino and Asian residents has corresponded to a decrease of homogenous White and Black neighborhoods and an increase of mixed neighborhoods. The remaining tracts had a statistically significant concentration of a group—20% were categorized as White neighborhoods (or 449 tracts), followed by 20% Latino neighborhoods (464 tracts), 9% Asian neighborhoods (217 tracts), and 7% Black neighborhoods (171 tracts). Resurgent neighborhoods are fairly prevalent between Asian and Latino neighborhoods. A majority (53%) of Asian tracts were classified as resurgent, while about 37% of Latino tracts were resurgent.

Table 2. Los Angeles homebuyers and number of tracts per neighborhood typology

Neighborhood Type	# of tracts	% of tracts	# of homeowners	% of homeowners
<i>Latino</i>				
Resurgent	156	7%	6,192	9%
Enclave	216	9%	4,374	6%
Community of constraint	92	4%	3,308	5%
<i>Asian American</i>				
Resurgent	115	5%	4,483	6%
Enclave	66	3%	1,529	2%
Community of constraint	36	2%	2,273	3%
<i>Black</i>				
High SES	66	3%	2,771	4%
Low SES	105	5%	2,159	3%
<i>White</i>				
High SES	222	10%	7,955	11%
Low SES	227	10%	6,091	9%
<i>Not concentrated</i>	1,029	44%	29,110	41%

TOTAL	2,330		70,245	
--------------	-------	--	--------	--

Note: SES = socioeconomic status.

Source: DataQuick, 2009 ACS 5-year Estimates, 2010 Decennial Census.

Table 3 includes the socioeconomic characteristics and racial composition of the neighborhood types. As expected, resurgent neighborhoods had higher median household incomes and home values than enclaves and communities of constraint. Residents in Asian resurgent neighborhoods had the highest average household income than residents in other neighborhoods; homeowners in Latino and Asian resurgent neighborhoods also had the highest median home value. Latino and Asian resurgent neighborhoods, on average, had a majority White population with a statistically significant concentration of Latinos or Asians, respectively. White and Black low socioeconomic neighborhoods did have a majority Latino population—as Clark et al. (2015) found, Los Angeles’ significant Latino population has contributed to the decline of White and Black segregation.

Table 3. Average socioeconomic characteristics by neighborhood typology

Neighborhood Type	Income	Home Value	% Foreign-born	% Homeowner	% Latino	% Asian	% Black	% White
<i>Latino</i>								
Resurgent	\$87,328	\$673,167	28%	63%	23%	17%	1%	52%
Enclave	\$44,379	\$450,249	47%	39%	73%	11%	4%	8%
Comm. of constraint	\$48,951	\$428,416	27%	55%	50%	5%	44%	9%
<i>Asian American</i>								
Resurgent	\$97,202	\$680,582	29%	66%	23%	17%	0.1%	54%
Enclave	\$49,628	\$461,375	46%	47%	70%	16%	1%	10%
Comm. of constraint	\$56,118	\$379,196	25%	60%	50%	8%	1%	24%
<i>Black</i>								
High SES	\$78,666	\$630,050	27%	65%	30%	15%	1%	45%
Low SES	\$40,488	\$440,149	38%	33%	57%	9%	26%	12%
<i>White</i>								

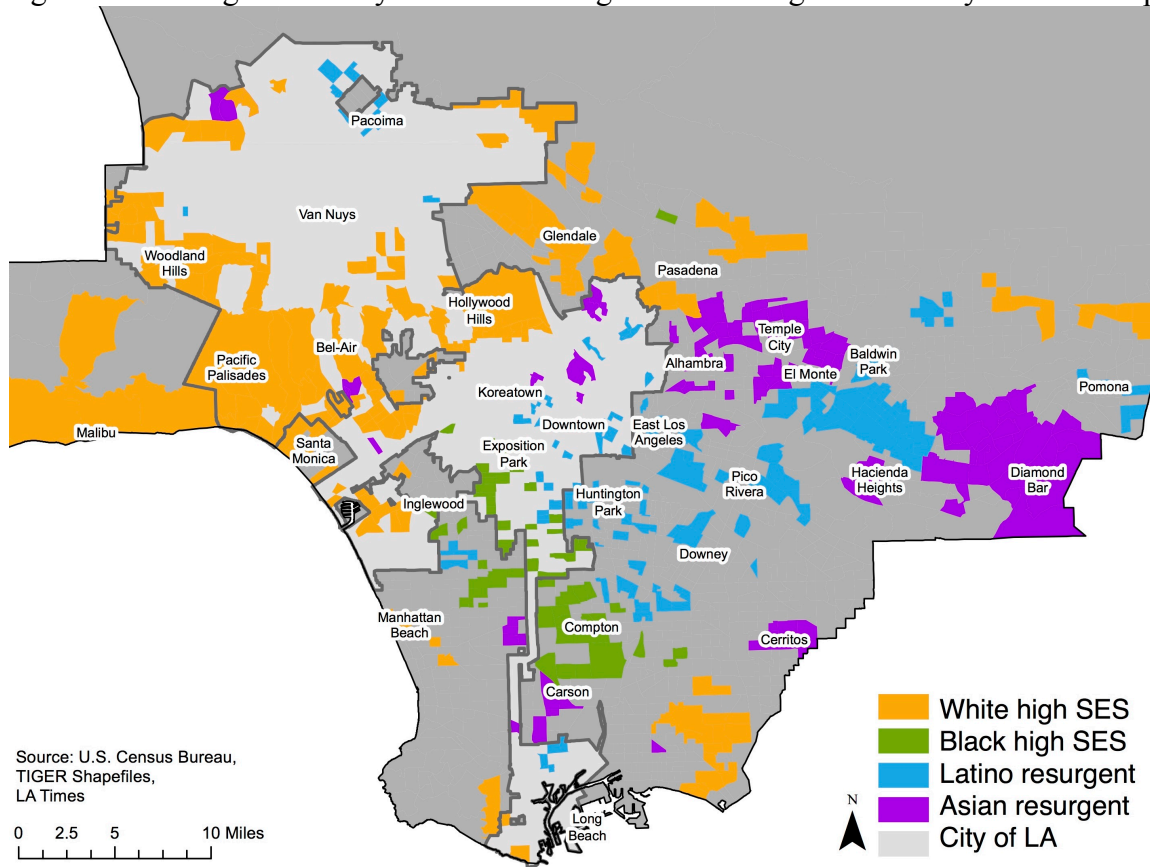
High SES	\$95,179	\$653,758	28%	69%	25%	22%	0.5%	46%
Low SES	\$49,692	\$464,709	42%	42%	58%	14%	1%	20%
<i>Not concentrated</i>	\$65,141	\$549,660	35%	50%	49%	11%	4%	30%
Los Angeles County	\$55,476	\$508,800	36%	49%	47%	13%	9%	29%

Note: SES = socioeconomic status.
Source: 2009 ACS 5-year Estimates.

Figure 1 displays a map of resurgent and high socioeconomic neighborhoods in the county. Most of the Asian and Latino resurgent neighborhoods fall outside of the City of Los Angeles boundaries and are geographically dispersed throughout the county. Many of the White high socioeconomic neighborhoods are located throughout the city and the northern side of Los Angeles County, which aligns with Logan et al.’s (2012) finding of the heavy suburbanization of immigrants and minorities in Los Angeles. In contrast, about half of the Black high socioeconomic neighborhoods are centrally located in the county, which had become established middle-class Black neighborhoods after the Supreme Court outlawed racially restrictive covenants.²²

²² Restrictive housing covenants had limited Black homeowners in the central city. After they were outlawed in the late 1940s, middle-class Black residents moved to further western parts of the city to access improved public amenities (Chapple, 2010). However, the county has seen a decline of Black residents, with many moving to further inland counties particularly since the 1965 Watts Riots and recently due to housing affordability (Pfeiffer, 2012).

Figure 1. Los Angeles County Middle- and High-Income Neighborhoods by Racial Group



Models

I estimated the probability that a homeowner defaulted or foreclosed in 2008 or 2009 based on neighborhood typology and purchase date using logistic regressions. (Ong, Pech, and Pfeiffer [2014] found that foreclosures peaked in Los Angeles in 2008). Logistic regressions are used to test associated odds with binary dependent variables—defaults and foreclosures were coded as dummy variables.

Then, the models estimated the associated odds of default or foreclosure after controlling for household and tract variables (see Table 4). Homebuyer characteristics included the homeowner’s imputed racial identity using the surname methodology. Other variables were collected or calculated from DataQuick:

- Number of loans borrowed

- Loan to home value ratio, which uses sale price to approximately home value, and set at a maximum of 1.1.²³
- Type of mortgage interest, which is set as a dummy variable where 0 equals fixed interest and 1 equals variable interest. DataQuick does not include interest rate. Thus, loans were not assessed as subprime or not. However, fixed-rate loans comprise a declining proportion of the subprime market (Quercia et al., 2004).²⁴
- Sale price (adjusted to 2013\$),²⁵
- Year of purchase, and
- Owner-occupied home (dummy variable).²⁶

These variables used were consistent with previous studies (Coulton et al., 2008; Ferreira & Gyourko, 2015; Molina, 2016). I used the 2009 5-year ACS to identify the percentage of homeowners in the tract. Finally, the neighborhood typology was incorporated as dummy

²³ The sale price was used because of the data challenges in identifying the home values. First, county tax assessor information does not have home values under California's Proposition 13. This Proposition was passed in 1978 and limits property assessment to no greater than 2% each year since the home's 1975 base year value of assessment. The only time that a home property value is reassessed is when the homeowner changes or if new construction occurs. Zillow offers estimates of home value, but only recently offered its microdata to the public. However, Zillow has been critiqued because of user-contributed data (see Gelman & Wu, 2011; Hagerty, 2007). Thus, sale price offers the closest approximation of home value in Los Angeles. There were a small number of outliers that were above 1.1 (0.4% of homeowners in my cohort), which may result from clerical errors or individuals with significant assets put towards their loan. Without additional data, it is impossible to differentiate between artificial or real outliers. If there are some individuals with significant loans, these are the exception and represent a small percentage of homeowners, which is not the focus of the analysis.

²⁴ While Home Mortgage Disclosure Act (HMDA) does include interest rates, there are a number of issues with joining HMDA and DataQuick. Other studies have linked individual data with Home Mortgage Disclosure Act data on credit and subprime loans for the Metropolitan Statistical Area (MSA) level (see Rugh & Massey, 2010), subprime lending per 10,000 homeowners (Ong & Pfeiffer, 2008), or tract level (Ong, Pech, & Pfeiffer, 2014). However, HMDA does not include individual property identification variables that can be linked to DataQuick. Instead, HMDA has individual loans with the tract geography. Thus, the only way to link HMDA and DataQuick would be to use the loan values, which is fraught with challenging data link errors such as differences in reporting loan and houses that may have similar loan amounts in the same tract. HMDA also only recently will require lending institutions to report loan borrower debt, but the rule will not be enacted until January 2018 (Consumer Financial Protection Bureau, 2017). Newman (2010) also outlines additional issues with linking foreclosure data to HMDA.

²⁵ Sale price was also taken out of the model to understand if adjusting to 2013\$ did not add statistical significance. While sale price did not inflate over time, the coefficients were similar and sale price added statistical power, as assessed by likelihood ratio tests.

²⁶ The majority of homeowners in the cohort live in their home (or 85%). Those who do not live in their homes were also included for a couple of reasons. First, homeownership is the significant driver of asset building among minorities (Taylor et al., 2011) Thus, it is important to include these properties for homeowners, even if they are purchasing homes for reasons other than residence to understand how they investments are affected because they are located in these areas. Also, previous studies have found that minority neighborhoods have a larger share of investment properties than non-minority areas, which may affect nearby properties and the odds of default or foreclosure outcomes in enclaves and communities of constraint (for example, see Ellen et al., 2013; Hwang, 2015; Pfeiffer & Molina, 2013).

variables in the regression to test if they had a statistically significant effect on the odds that a homeowner defaulted or foreclosed relative to neighborhoods without a statistically significant concentration of a racial group.

Table 4. Logistic regression model variables

Variables	Source
Neighborhood typology	
Latino	
Resurgent	2010 Decennial Census, 2009 5-year ACS
Enclave	2010 Decennial Census, 2009 5-year ACS
Community of constraint	2010 Decennial Census, 2009 5-year ACS
Asian	
Resurgent	2010 Decennial Census, 2009 5-year ACS
Enclave	2010 Decennial Census, 2009 5-year ACS
Community of constraint	2010 Decennial Census, 2009 5-year ACS
Black	
High SES	2010 Decennial Census, 2009 5-year ACS
Low SES	2010 Decennial Census, 2009 5-year ACS
White	
High SES	2010 Decennial Census, 2009 5-year ACS
Low SES	2010 Decennial Census, 2009 5-year ACS
Not concentrated	2010 Decennial Census, 2009 5-year ACS
Household variables	
Race	DataQuick, 2000 Census Bureau surname dictionary
Loan: Home Value	DataQuick
Number of Loans	DataQuick
Type of interest (fixed or variable)	DataQuick
Sale Price	DataQuick
Purchase Year (2000-2003; 2004-2006)	DataQuick
Owner-occupied (dummy)	DataQuick
Tract variables	
% Homeowners	2009 5-year ACS
Dependent Variables	
Likelihood of Default	DataQuick
Likelihood of Foreclosure	DataQuick

Note: SES = socioeconomic status.

Table 5 provides summary statistics for the homeowners. Of the 70,245 homeowners in the County, about 40% are identified as Latino, 26% as White, 8% as Asian American, and 0.4%

as Black using the surname imputation method.²⁷ About 61% of homeowners had variable interest loans. A majority (72%) purchased their home between 2004 and 2006 and are owner-occupied units (85%). The average loan to home value ratio was 0.862, which means that most homeowners took out loans that were valued less than the sale price of the home, though the average number of loans taken out was 1.54. Finally, the average sale price was about \$597,000 (the median was \$508,000).

Table 5. Variable summary statistics for cohort

Variables	Frequency/Mean	SD
<i>Categorical Variables</i>		
Homeowner race		
Latino	40%	
Asian	8%	
Black	0.4%	
White	26%	
Variable Interest	61%	
Purchase Year (2004-2006)	72%	
Owner-occupied units	85%	
<i>Continuous Variables</i>		
Loan: Home Value	0.862	0.214
Number of Loans	1.54	0.549
Sale Price (scaled by 10,000)	597,242	438,472

Source: DataQuick

This study used three logistic regression models to calculate the odds that a homeowner is likely to default or foreclose based on their individual or neighborhood characteristics:

$$\text{Model 1: } \ln(P / (1-P)) = B_0 + B_1(\text{neighborhood typology})_1$$

$$\text{Model 2: } \ln(P / (1-P)) = B_0 + B_1(\text{neighborhood typology})_1 + \mathbf{B_2 (\text{household characteristics})}_2$$

²⁷ The surname method also undercounts Black and White homeowners based on surname, in large part due to the historic legacies of slavery (Inscoc, 1983). According to the 2009 ACS 5-year estimates, about 7% of homeowners in the county were Black, and 47% were non-Hispanic White. Many surnames that are associated with Whites or Blacks do not meet the threshold over 70%. For example, “Williams” has a 49% chance of being White and 47% of being Black. Thus, interpretations of household racial identification for Blacks and Whites should be analyzed with caution in the logistic regressions.

$$\text{Model 3: } \ln(P / (1-P)) = B_0 + B_1(\text{neighborhood typology})_1 + B_2 (\text{household characteristics})_2 + \mathbf{B_3 (\text{neighborhood \% owners})}_3$$

The models add variables in each subsequent step, and each model is used to calculate the odds of default and foreclosure, respectively—thus, a total of 6 models are used. The first model examines the effect of neighborhood typology and whether higher income and racial concentration contribute to higher or lower odds of default or foreclosure. Model 2 adds in household characteristics to test if neighborhood typology is still statistically significant after accounting for these variables. The third model adds in neighborhood percentage of homeowners to see if this additional neighborhood variable impacts the associated odds of neighborhood type and default or foreclosure. The models then test if neighborhood racial concentration and class have a statistically significant association with odds of defaulting or foreclosure, over and above the effect of household and neighborhood characteristics. Predicted probabilities were also calculated to compute the probabilities of default/foreclosure for a homeowner by type of neighborhood to help interpret the practical significance of the results (Williams, 2012).

Limitations

It is important to note several limitations to the methods used in this analysis. First, the variables used are restricted to those that are available and can be linked to DataQuick. While other omitted variables related to homebuyer or loan characteristics such as income, employment status, debt, loan interest rate, and loan servicer are proven to contribute to foreclosures (Laderman & Reid, 2008; Quercia et al., 2007), these data in ACS and Home Mortgage Disclosure Act (HMDA) cannot be linked to individual home records in DataQuick,²⁸ Thus,

²⁸ Additional tract variables were included in the original models such as educational attainment, unemployment rates, racial composition, vacancy, and loan delinquency rates from ACS and U.S. Housing and Urban Development. Nearest school Academic Performance Index scores were also included. The full model had insignificant likelihood ratio tests relative to a more parsimonious model that is used in the paper. These additional

these omitted variables may affect the findings and are important areas of future research. Second, the models cannot assess direction of causality—whether resurgent neighborhoods offer protections for homeowners and/or if the homeowners already have a lower propensity for default/foreclosure. Still, the findings will provide important nuances into the effects of class and race on default and foreclosure outcomes.

Findings

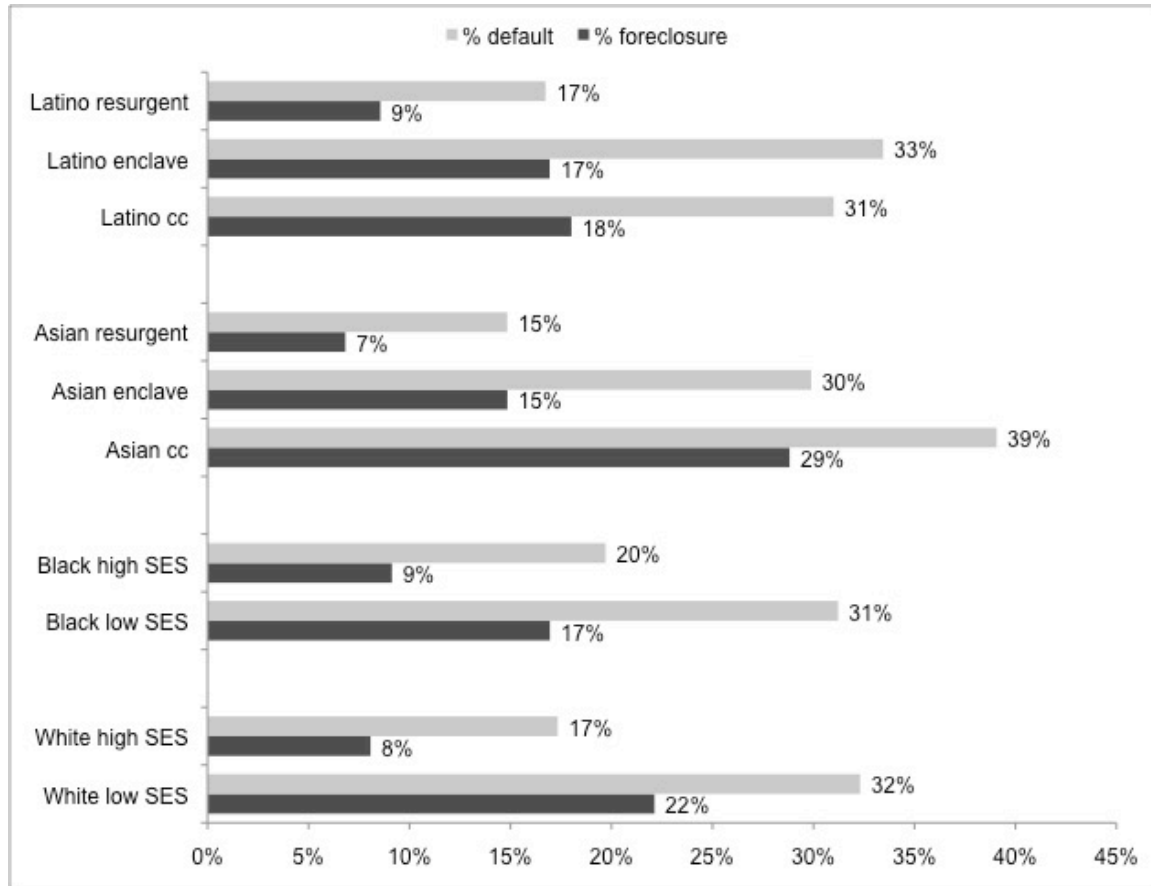
Default and Foreclosure Outcomes for Homeowners by Neighborhood Typology

The findings demonstrate that homeowners in resurgent neighborhoods have lower rates of default or foreclosure relative to their counterparts in other neighborhoods. Figure 2 shows the percentage of homeowners in a neighborhood who defaulted or foreclosed out of all homeowners in the cohort. Asian resurgent neighborhoods had the lowest default and foreclosure rates among all neighborhood types (or 15% and 7%, respectively). Latino resurgent neighborhoods had the second lowest default (17%) and the third lowest foreclosure rate (9%). Moreover, White and Black high-income default and foreclosure rates were also low. However, Black high-income neighborhoods had the highest default rate among higher income neighborhoods (or 20%).

Consistent with other studies, higher income neighborhoods had lower rates of default and foreclosure than poorer neighborhoods (Lee, Rosentraub, & Kobie, 2010). Also, the values are similar to Ong et al.'s (2014) study of Los Angeles County, which found that 8% of homeowners who purchased houses between 1999 and 2004 foreclosed. However, the foreclosure rates vary significant for lower-income neighborhoods because the analysis focuses on those who live in neighborhoods with racial concentration rather than foreclosure rates by homeowner race regardless of neighborhood.

tract variables from the original model did not add statistical power because these variables are endogenous with the data used to construct the neighborhood typology.

Figure 2. Default and Foreclosure Rates by Neighborhood Typology



Source: LA County Parcel Data 2007; DataQuick; ACS

Asian neighborhoods had both the greatest class differences in default and foreclosure outcomes. For example, there was a 24% difference in default rates between Asian resurgent and communities of constraint. In contrast, Latino resurgent neighborhoods had a 16% difference in default rates relative to Latino enclaves. The class distinctions are then particularly pronounced among Asian neighborhoods than for other racially concentrated neighborhoods.

Nativity may also matter more for Asian areas than Latino neighborhoods. For example, there was a 14% difference in foreclosure rates between Asian enclaves and communities of constraint. In contrast, Latino enclaves and communities of constraint had a 1% difference in foreclosure rates.

The findings demonstrate that homeowners in resurgent neighborhoods have lower rates of default and foreclosure, similar to other high-income neighborhoods. There are also important class distinctions by race. However, these analyses are limited because resurgent households and neighborhoods have higher socioeconomic statuses. How do the odds of default/foreclosure differ by neighborhood typology, after controlling for other neighborhood and individual characteristics?

Logistic Regression Model Results

Tables 6 and 7 display the results of the models by default and foreclosure, respectively. To test differences in effects of class and racial concentration, the odds ratios for neighborhood typology are relative to neighborhoods without racial concentration. The models demonstrate that homeowners in resurgent neighborhoods have a lower likelihood of default or foreclosure across the models.²⁹ Model 1 in Table 6 shows that the odds a Latino resurgent homeowner will default is 0.64 times the odds that a homeowner in a not-concentrated neighborhood will default ($p < 0.01$). Asian resurgent homeowners also have lower odds of default than homeowners in not-concentrated neighborhoods (0.55, $p < 0.01$). In contrast, the odds that homeowners in Latino enclaves would default was 1.58 times the odds that homeowners in not-concentrated neighborhoods ($p < 0.01$). For homeowners in Asian communities of constraint, the odds of default were more than 2 times the odds of default for homeowners in not-concentrated neighborhoods. (See Appendix for information about additional tests for robustness.)

Latino resurgent homeowners had lower odds of foreclosure than their counterparts in not-concentrated neighborhoods (see Table 7). The odds that homeowners in Asian resurgent

²⁹ Logistic regressions model factors that influence the probability of an outcome. These regressions also produce odds ratios, which compare the odds one subgroup of homeowners to default/foreclose by the odds of another subgroup. If the odds ratio is 1, then both subgroups are equally likely to default/foreclose. Odds ratios less than 1 suggest that when other factors are equal, the odds of default/foreclosure for the first subgroup is less than the odds of default/foreclosure for latter subgroup while odds ratios greater than 1 show the opposite pattern.

neighborhoods will foreclose is 0.49 times the odds that homeowners in not-concentrated neighborhoods will foreclose ($p < 0.01$). There were also class differences. The odds that homeowners in Latino communities of constraint would foreclose was 1.46 times the odds that homeowners in not-concentrated neighborhoods would foreclose ($p < 0.01$). The odds of foreclosure for Asian communities of constraint homeowners was 2.68 times the odds of foreclosure for homeowners in not-concentrated neighborhoods.

Table 6. Odds ratios predicting homeowner likelihood of default

VARIABLES	Model 1	Model 2	Model 3
Neighborhood Typology			
Latino Resurgent	0.64 ***	0.79 ***	0.78 ***
Latino Enclave	1.58 ***	1.18 ***	1.23 ***
Latino Community of Constraint	1.43 ***	1.17 ***	1.18 ***
Asian Resurgent	0.55 ***	0.76 ***	0.73 ***
Asian Enclave	1.34 ***	1.10	1.12 **
Asian Community of Constraint	2.02 ***	1.44 ***	1.43 ***
Black High SES	0.80 ***	0.83 ***	0.82 ***
Black Low SES	1.43 ***	1.14 **	1.21 ***
White High SES	0.66 ***	0.85 ***	0.82 ***
White Low SES	1.50 ***	1.19 ***	1.19 ***
Not concentrated	Omitted	Omitted	Omitted
Household Factors			
Race			
Latino		1.92 ***	1.92 ***
Asian		0.89 ***	0.89 ***
Black		1.21	1.22
NHW		Omitted	Omitted
Year of Purchase			
2000-2003		Omitted	Omitted
2004-2006		2.38 ***	2.37 ***
Other Variables			
Owner Occupied		0.78 ***	0.78 ***
Sale Price		1.00 ***	1.00 ***
Loan: Home Value Ratio		8.81 ***	8.91 ***
Number of Loans		1.16 ***	1.16 ***
Variable Interest		2.07 ***	2.08 ***
Neighborhood Factors			
% Owners			1.33 ***
Observations	70,242	70,215	70,191

Note: Sale price, median household income, and home value are scaled by 10,000. Loan: Home Value has a maximum set at 1.1. SES = socioeconomic status.

*** = $p < 0.01$, ** = $p < 0.05$, * = $p < 0.1$

Table 7. Odds ratios predicting homeowner likelihood of foreclosure

VARIABLES	Model 1	Model 2	Model 3
Neighborhood Type			
Latino Resurgent	0.63 ***	0.78 ***	0.76 ***
Latino Enclave	1.35 ***	1.04	1.09 *
Latino Community of Constraint	1.46 ***	1.23 ***	1.24 ***
Asian Resurgent	0.49 ***	0.66 ***	0.64 ***
Asian Enclave	1.15 *	0.96	0.99
Asian Community of Constraint	2.68 ***	1.94 ***	1.93 ***
Black High SES	0.69 ***	0.72 ***	0.70 ***
Black Low SES	1.35 ***	1.10	1.18 ***
White High SES	0.58 ***	0.75 ***	0.72 ***
White Low SES	1.88 ***	1.54 ***	1.55 ***
Not concentrated	Omitted		Omitted
Household Factors			
Race			
Latino		1.69 ***	1.69 ***
Asian		0.88 **	0.87 **
Black		1.64 ***	1.65 ***
NHW		Omitted	Omitted
Year of Purchase			
2000-2003		Omitted	Omitted
2004-2006		2.70 ***	2.69 ***
Other Variables			
Owner Occupied		0.69 ***	0.69 ***
Sale Price		1.00 ***	1.00 ***
Loan: Home Value Ratio		9.38 ***	9.47 ***
Number of Loans		1.34 ***	1.34 ***
Variable Interest		3.00 ***	3.01 ***
Neighborhood Factors			
% Owners			1.46 ***
Observations	70,245	70,217	70,193

Note: Sale price, median household income, and home value are scaled by 10,000.
 Loan: Home Value has a maximum set at 1.1. SES = socioeconomic status.
 *** = $p < 0.01$, ** = $p < 0.05$, * = $p < 0.1$

Model 2 incorporates individual household characteristics to estimate homeowner likelihood to default or foreclose. These household factors help to explain homeowner defaults and foreclosures. For example, the odds that Latino homeowners default is 1.92 times the odds that White homeowners will default ($p < 0.01$, see Table 6). The odds that individuals with variable interest mortgages would foreclose was 3 times the odds that homeowners with fixed interest would foreclose ($p < 0.01$, see Table 7).

After accounting for these household factors, resurgent neighborhoods are still statistically associated with lower odds of default or foreclosure relative to not-concentrated neighborhoods. For example, the odds that Asian resurgent homeowners would default was 0.73 times the odds that homeowners in not-concentrated neighborhoods would default ($p < 0.01$). The odds that Latino resurgent homeowners would foreclose was 0.76 times the odds that homeowners in not-concentrated neighborhoods would foreclose ($p < 0.01$).

Predicted probabilities were also calculated because they are easier to interpret and can test if there are statistically significant differences by neighborhood types for the average homeowner (Williams, 2012). The following predicted probabilities were calculated for neighborhood typology at the mean value for the remaining independent variables and are statistically significant ($p < 0.01$, see Table 8). Overall, the predicted probability of default/foreclosure is lowest for higher income neighborhoods and follows the other patterns presented in the analysis. The predicted probability of defaulting is lowest for Asian resurgent neighborhood homeowners (0.1563), followed by Latino resurgent homeowners (0.1647).

Table 8. Predicted probabilities of default/foreclosure by neighborhood typology from logistic regression analysis

Neighborhood Type	Predicted Probability Default	Predicted Probability Foreclosure
Latino resurgent	0.1647	0.06947
Latino enclave	0.2372	0.09652
Latino community of constraint	0.2297	0.1087
Asian resurgent	0.1563	0.05887
Asian enclave	0.2204	0.08831
Asian community of constraint	0.2657	0.1589
Black high SES	0.1710	0.06395
Black low SES	0.2333	0.1037
White high SES	0.1711	0.06563
White low SES	0.2312	0.1317

Note: Predicted probabilities were calculated for the mean of number of loans, loan to home value ratio, type of interest, sale price, year of purchase, owner-occupied, homeowner race, and percentage of homeowners in the tract. All of the predicted probabilities were significantly different at $p < 0.01$.

As with default/foreclosure rates, there were differences based on nativity based on racial composition. Among lower-income Latino neighborhoods, the predicted probability of default was similar, or 0.2372 for enclaves and 0.2297 for communities of constraint. On the other hand, there were larger differences among lower-income Asian neighborhoods. Asian communities of constraint had higher predicted probabilities of default (0.2657) than enclaves (0.2204). Additionally, Asian neighborhoods had the highest and lowest predicted probabilities. For example, Asian resurgent neighborhoods had the lowest predicted probability of default, while Asian communities of constraint had the highest predicted probability of default among all neighborhood types. Overall, the predicted probabilities of foreclosure follow similar patterns based on neighborhood typology and were also statistically significant ($p < 0.01$).

In summary, the logistic regressions and predicted probabilities demonstrate that homeowners in resurgent neighborhoods follow similar patterns as others in high-income neighborhoods after accounting for household and neighborhood variables. While all wealthier neighborhoods had lower predicted probabilities of default, Asian resurgent homeowners in particular had the lowest predicted probabilities of default/foreclosure. The intersection of class and racial advantages may contribute to these patterns. However, these effects do not extend to low-income Latino or Asian neighborhoods. Communities of constraint and enclave homeowners had higher predicted probabilities of default/foreclosure relative to other neighborhoods.

Implications and Conclusions

The study finds that racial and class concentration has different default and foreclosure outcomes for homeowners. While neighborhood segregation has historically been associated with higher homeownership risks, it depends on the class *and* racial background of the area.

Other studies have found that borrower race and class (Bocian et al., 2012); spatial dimensions of race and class (Lee et al., 2010); and particularly Black and Latino segregation contributed to increased foreclosure rates (Hall et al., 2015a; Hall et al., 2015b; Molina, 2012; Rugh & Massey, 2010). However, this study illuminates nuances in housing literature by demonstrating that racial concentration can benefit some homeowners, particularly those in Asian and Latino resurgent neighborhoods. The results also contribute to our understanding of why racial segregation persists. Racial minorities may choose these neighborhoods because they offer housing benefits and coethnic resources, even as the United States is becoming more racially diverse.

Future studies can build on the findings in several ways. While the results show a statistically significant difference in predictive probabilities of default/foreclosure between resurgent and lower-income neighborhoods, the findings cannot distinguish the direction of causation. Thus, the neighborhoods may attract homeowners with lower borrower risk and/or if the neighborhoods could offer additional resources that may protect homeowners. These homeowners may have lower borrower risk because they are of higher income background and may qualify for prime loans. It is likely that both factors are influencing the outcomes because higher-income neighborhoods were not targeted for subprime loans as frequently as low-income neighborhoods (Laderman & Reid, 2008; Immergluck, 2009).

Alternatively, resurgent neighborhood may have lending institutions or real estate resources that are available in ethnic enclaves, but are class-based. For example, Hum (2017) describes the Asian minority banks that offer niche loan products, which are predominantly given to coethnic clientele and contribute to rise of Asian high-income homebuyers and investors in New York Asian neighborhoods. There is also some evidence of informal social networks that provide residents with housing resources. In their analysis of household decisions, Smith et al.

(1991) explained how an Asian Sacramento resident helped sponsor and resettle Southeast Asian residents into the neighborhood because of employment opportunities. This individual then helped to not only provide them with housing, but also contributed to the area become increasingly Asian. In these examples, ethnic neighborhoods may have institutionalized or informal networks that offer housing resources that either draw on existing residents or bring additional coethnic households.

Second, homeowners in resurgent and high-income neighborhoods overall had lower rates of default and foreclosure. However, Asian resurgent neighborhoods had the lowest rates of default or foreclosure than other neighborhoods, including White high-income neighborhoods. While Latino resurgent neighborhoods had lower rates of default and foreclosure relative to other neighborhoods, they still had higher rates than Asian resurgent neighborhoods. These outcomes may result from differences in migration and capital. As previously explained, hyperselected and hyPOSElected immigrants affect individual and neighborhood capital (Lee & Zhou, 2015). The findings do not preclude that there are Latino middle-class homeowners. However, as Vallejo (2012) described, middle-class Mexicans may have more ties to poorer family members or more likely may be the financial safety net of other family members. With more resources going towards family members, it may take longer for Mexican institutions to form in Latino resurgent neighborhoods. Additional research on homeownership resources in Asian and Latino resurgent neighborhoods can further our understanding of different outcomes and immigrant integration pathways.

Third, the model did not disaggregate by ethnic group or national origin for Latino and Asian homeowners. It is important for future studies to distinguish among ethnic groups because of significant differences in socioeconomic status based on immigration and migratory histories,

which affect housing outcomes (for example, see Cahill & Franklin, 2013; Kuebler & Rugh, 2013; Rugh, 2015; Ong, Pech, & Pfeiffer, 2014). However, it is difficult to differentiate between Latino groups without self-reported national origin because of the similarities in surname. Among Asian ethnic groups, additional analyses may need to be conducted on the block group level because of the few number of Asian ethnic-group tracts that could be classified as resurgent neighborhoods.³⁰ An ethnic group analysis may also explain the differences by class and nativity among Asian neighborhoods. Disparities in default/foreclosure rates may result from divergent Asian immigration policies, which favor highly skilled professional from Asia and less-educated refugees and family (Hing, 1993; Ong et al., 1994). Fourth, the results may not apply to other geographies. It is common for foreclosure studies to focus on a single county or state because of the different foreclosure laws (see Newman, 2010). Immergluck (2010) found significant geographic variation in real estate-owned foreclosed properties across the country. Metropolitan areas with greater drops in home values or newer suburbs were associated with a growth of these properties. While Los Angeles houses at risk of foreclosure could sell faster in a hotter housing market, more recent ethnic neighborhoods in other states with weaker markets may function differently (Immergluck, 2010).

Furthermore, Los Angeles County has a sizable Latino and Asian populations that have steadily grown since World War II in large part because of ongoing immigration (Singer, 2008). Other metropolitan areas with low proportions of foreign-born, Latino, and/or Asian residents will not have resurgent neighborhoods. In a preliminary analysis, more recent immigrant gateways with resurgent neighborhoods have higher foreclosure risk scores than those in more established immigrant metropolitan areas, which may suggest that newer immigrant regions do not offer the same class- and racial-specific resources.

³⁰ Preliminary analyses identified 14 Indian, 12 Korean, 37 Chinese, and 1 Vietnamese resurgent tract.

The findings add to growing literature on benefits related to minority neighborhoods and housing. While housing studies oftentimes highlight the benefits associated with White resident concentration, resurgent neighborhoods offer a framework to understand minority neighborhoods as an asset rather than a liability. Wright et al. (2005) critique the normative framework of White neighborhoods as the zenith of homeownership outcomes because it implicitly problematizes immigrant or minority residents wanting to live with coethnic neighbors. In this case, Asian resurgent and Latino neighborhoods also had either lower or comparable default and foreclosure risks as high-income White neighborhoods. As racial concentration continues to shape the housing market in cities and suburbs (Logan, 2014; Logan & Stults, 2014), future studies can add to understand the intersection of race and class by understanding these linkages between housing and socioeconomic resources in resurgent neighborhoods.

Appendix

To test the robustness of these results, additional models were estimated. The typology separates neighborhoods by income and nativity among low-income neighborhoods. To understand if these categories added statistically significant power in predicting default and foreclosure, I calculated a logistic model using neighborhoods of racial concentration categorized by income regardless of nativity. As with Model 1, low-income Asian or Latino neighborhoods had statistically greater odds of default/foreclosure than neighborhoods without concentration. However, a likelihood ratio test between this model and Model 1 showed that parsing out nativity among low-income neighborhoods added more statistical power in predicting the likelihood of default/foreclosure than the parsimonious categorization of neighborhoods only by income and racial concentration.

Logistic regression models were also tested with tract variables for racial concentration, household income, home value, and nativity. These models tested whether the neighborhood typology (Model 2) was robust relative to a model that only had tract variables of similar socioeconomic characteristics. A logistic model using only these tract variables to predict default/foreclosures with household characteristics had similar statistically significant associations with the likelihood of default/foreclosure. However, a likelihood ratio test of Model 2 produced a higher value than the model with tract variables—thus, the goodness of fit for Model 2 is stronger than using separate tract variables. In contrast, a likelihood ratio test of tract and neighborhood typology variables did not produce statistically significant results—the neighborhood typology variables were collinear with tract variables.

Finally, Model 3 was tested for robustness. The goodness of fit between Model 2 and 3 showed that adding in tract percentage of homeowners was statistically significant ($p < 0.01$). These tests strengthen the argument that the combinations of variables that comprise the neighborhood typology are robust, and that they have a stronger relationship with default/foreclosure than measuring tract socioeconomic variables separately.

References

- Aalbers, M. (2009). Geographies of the financial crisis. *Area*, 41(1), 34-42.
- Abrahamse, A. F., Morrison, P. A., & Bolton, N. M. (1994). Surname analysis for estimating local concentration of Hispanics and Asians. *Population Research and Policy Review*, 13(4), 383-398. doi: 10.1007/BF01084115.
- Adelman, R. M. (2004). Neighborhood opportunities, race, and class: The Black middle class and residential segregation. *City & Community*, 3(1), 43-63. doi: 10.1111/j.1535-6841.2004.00066.x.

- Adjaye-Gbewonyo, D., Bednarczyk, R. A., Davis, R. L., & Omer, S. B. (2014). Using the Bayesian Improved Surname Geocoding Method (BISG) to create a working classification of race and ethnicity in a diverse managed care population: a validation study. *Health services research*, 49(1), 268-283. doi: 10.1111/1475-6773.12089.
- Alba, R. D., Logan, J. R., Stults, B. J., Marzan, G., & Zhang, W. (1999). Immigrant groups in the suburbs: a reexamination of suburbanization and spatial assimilation. *American Sociological Review*, 64, 446–460. doi: 10.2307/2657495.
- Anacker, K. B., Carr, J. H., & Pradhan, A. (2012). Analyzing foreclosures among high-income Black/African American and Hispanic/Latino borrowers in Prince George’s County, Maryland. *Housing and Society*, 39(1), 1-28. doi: 10.1080/08882746.2012.11430598.
- Anselin, L. (1995). Local indicators of spatial association—LISA. *Geographical Analysis*, 27, 93–116.
- Avery, R. B., Brevoort, K. P., & Canner, G. B. (2008). The 2007 HMDA data. *Federal Reserve Bulletin*, 94, 107-146.
- Bader, M. D., & Warkentien, S. (2016). The fragmented evolution of racial integration since the Civil Rights Movement. *Sociological Science*, 3, 135-166. doi: 10.15195/v3.a8.
- Bates, T. (1997). Financing small business creation: The case of Chinese and Korean immigrant entrepreneurs. *Journal of Business Venturing*, 12(2), 109-124. doi: 10.1016/S0883-9026(96)00054-7.
- Biswas, A. (2012). Housing submarkets and the impacts of foreclosures on property prices. *Journal of Housing Economics*, 21(3), 235-245. doi: 10.1016/j.jhe.2012.05.002.
- Bocian, D. G., Davis, D., Garrison, S., & Sermons, B. (2012). *The state of lending and its impact on US households*. Washington, DC: Center for Responsible Lending.

- Cahill, M. E., & Franklin, R. S. (2013). The Minority Homeownership Gap, Home Foreclosure, and Nativity: Evidence from Miami-Dade County. *Journal of Regional Science*, 53(1), 91-117. doi: 10.1111/jors.12014.
- Carcamo, C. (2015, August 5). Latinos' rising fortunes are epitomized in Downey. *The Los Angeles Times*. Retrieved from <http://www.latimes.com/local/la-me-downey-latinos-20150805-story.html>.
- Chan, S., Gedal, M., Been, V., & Haughwout, A. (2013). The role of neighborhood characteristics in mortgage default risk: Evidence from New York City. *Journal of Housing Economics*, 22(2), 100-118. doi: 10.1016/j.jhe.2013.03.003.
- Chapple, R. (2010). From Central Avenue to Leimert Park: The shifting center of Black Los Angeles. In D. Hunt & A.-C. Ramon (Eds.), *Black Los Angeles: American dreams and racial realities* (pp. 60-80). New York: New York University Press. Charles, C. Z. (2003). The dynamics of racial residential segregation. *Annual Review of Sociology*, 29(1), 167-207. doi: 10.1146/annurev.soc.29.010202.100002.
- Chiswick, B. R., & Miller, P. W. (2005). Do enclaves matter in immigrant adjustment? *City and Community*, 4(1), 5-35. doi: 10.1111/j.1535-6841.2005.00101.x.
- Chung, S-Y., & Brown, L. A. (2007). Racial/ethnic residential sorting in spatial context: Testing the explanatory frameworks. *Urban Geography*, 28(4), 312-339. doi: 10.2747/0272-3638.28.4.312.
- Clark, W. A. V., Anderson, E., Osth, J., & Malmberg, B. (2015). A multiscale analysis of neighborhood composition in Los Angeles, 2000-2010: A location-based approach to segregation and diversity. *Annals of the Association of American Geographers*, 105(6), 1260-1284. doi: 10.1080/00045608.2015.1072790.

- Collet, C. (2005). Bloc voting, polarization, and the panethnic hypothesis: The case of Little Saigon. *Journal of Politics*, 67(3), 907-933. doi: 10.1111/j.1468-2508.2005.00345.x.
- Consumer Financial Protection Bureau. (2017). "Reportable HMDA data: A regulatory and reporting overview reference chart." Washington, DC: Consumer Financial Protection Bureau. Retrieved from https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/201710_cfpb_reportable-hmda-data_regulatory-and-reporting-overview-reference-chart.pdf.
- Coulton, C., Chan, T., Schramm, M., & Mikelbank, K. (2008). *Pathways to foreclosure: A longitudinal study of mortgage loans, Cleveland and Cuyahoga County, 2005-2008*. Cleveland, OH: Center on Urban Poverty and Community Development, Case Western Reserve University.
- Crossney, K. B., & Bartelt, D. W. (2005). The legacy of the home owners' loan corporation. *Housing Policy Debate*, 16(3-4), 547-574. doi:10.1080/10511482.2005.9521555.
- Crump, J. (2013). The housing boom and bust in the Twin Cities. *Housing Policy Debate*, 23(1), 144-158. doi: 10.1080/10511482.2012.756821.
- De la Roca, J., Ellen, I. G., & O'Regan, K. M. (2014). Race and neighborhoods in the 21st century: What does segregation mean today?. *Regional Science and Urban Economics*, 47, 138-151. doi: 10.1016/j.regsciurbeco.2013.09.006.
- Derose, S. F., Contreras, R., Coleman, K. J., Koebnick, C., & Jacobsen, S. J. (2013). Race and ethnicity data quality and imputating using U.S. Census data in an integrated health system: The Kaiser Permanente Southern California experience. *Medical Care Research and Review*, 70(3), 330-345. doi: 10.1177/1077558712466293.

- Diaz, D. R. (2005). *Barrio urbanism: Chicanos, planning, and American cities*. New York: Routledge.
- Dymski, G., & Mohanty, L. (1999). Credit and banking structure: Asian and African-American experience in Los Angeles. *The American Economic Review*, 89(2), 362-366.
- Ellen, I. G., Madar, J., & Weselcouch, M. (2013). *The foreclosure crisis and community development: Exploring REO dynamics in hard-hit neighborhoods*. New York: Furman Center for Real Estate & Urban Policy.
- Elliott, M. N., Morrison, P. A., Fremont, A., McCaffrey, D. F., Pantoja, P., & Lurie, N. (2009). Using the Census Bureau's surname list to improve estimates of race/ethnicity and associated disparities. *Health Services and Outcomes Research Methodology*, 9(2), 69-83. doi: 10.1007/s10742-009-0047-1.
- Eschbach, K., Kuo, Y.-F., & Goodwin, J. S. (2006). Ascertainment of Hispanic ethnicity on California death certificates: Implications for the explanation of the Hispanic mortality advantage. *American Journal of Public Health*, 96(12), 2209-2215. doi: 10.2105/AJPH.2005.080721.
- Ferreira, F., & Gyourko, J. (2015). A new look at the U.S. foreclosure crisis: Panel data evidence of prime and subprime borrowers from 1997 to 2012 (Working Paper No. 21261). Washington, DC: The National Bureau of Economic Research. <http://www.nber.org/papers/w21261>.
- Fischella, K., & Fremont, A. M. (2006). Use of geocoding and surname analysis to estimate race and ethnicity. *Health Services Research*, 41(4 part 1), 1482-1500. doi: 10.1111/j.1475-6773.2006.00551.x.

- Foote, C. L., Gerardi, K., Goette, L., & Willen, P. S. (2008). Just the facts: An initial analysis of subprime's role in the housing crisis. *Journal of Housing Economics*, 17(4), 291-305. doi: 10.1016/j.jhe.2008.09.005.
- Frey, W. H. (2014). *Diversity explosion: How new racial demographics are remaking America*. Washington, DC: Brookings Institution Press.
- Friedman, S. (2008). Do declines in residential segregation mean stable neighborhood racial integration in metropolitan America? A research note. *Social Science Research*, 37(3), 920-933. doi: 10.1016/j.ssresearch.2007.06.010.
- . (2011). Bringing proximate neighbours into the study of US residential segregation. *Urban Studies*, 48(4), 611-639. doi: 10.1177/0042098009360684.
- Friedman, S., Gibbons, J., & Galvan, C. (2014). Declining segregation through the lens of neighborhood quality: Does middle-class and affluent status bring equality? *Social Science Research*, 46, 155-168. doi: 10.1016/j.ssresearch.2014.03.003.
- Gelman, I. A., & Wu, N. (2011, January). Combining structured and unstructured information sources for a study of data quality: A case study of Zillow.com. In *System Sciences (HICSS), 2011 44th Hawaii International Conference on* (pp. 1-12). IEEE.
- Gibson, C., & Jung, K. (2006). *Historical Census Statistics on the Foreign-born Population of the United States, 1850 to 2000*. Washington, DC: Population Division, US Census Bureau.
- Glaeser, E., & Vigdor, J. (2012). *The end of the segregated century: Racial separation in America's neighborhoods, 1890-2010*. New York City: The Manhattan Institute's Center for State and Local Leadership. Retrieved from https://www.manhattan-institute.org/pdf/cr_66.pdf.

- Gotham, K. F. (2000). Urban space, restrictive covenants and the origins of racial residential segregation in a US city, 1900–50. *International Journal of Urban and Regional Research*, 24(3), 616-633. doi: 10.1111/1468-2427.00268.
- Grofman, B., & Garcia, J. R. (2014). Using Spanish surname to estimate Hispanic voting population in voting rights litigation: A model of context using Bayes' theorem. *Election Law Journal: Rules, Politics, and Policy*, 13(3), 375-393.
- Grover, M., Smith, L., & Todd, R. (2008). Targeting foreclosure intervention: An analysis of neighborhood characteristics associated with high foreclosure rates in two Minnesota counties. *Journal of Economics and Business*, 60(1-2), 91-109. doi: 10.1016/j.jeconbus.2007.07.001.
- Hagerty, J. R. (2007, February 14). "How good are Zillow's estimates?: Popular home-price web site often gets it right but can be way off the mark, we find." *The Wall Street Journal*.
- Hall, M., Crowder, K., & Spring, A. (2015a). Neighborhood foreclosures, racial/ethnic transitions, and residential segregation. *American Sociological Review*, 80(3), 526-549. doi: 10.1177/0003122415581334.
- . (2015b). Variations in housing foreclosures by race and place, 2005-2012. *The Annals of the American Academy of Political and Social Science*, 660, 217-237. doi: 10.1177/0002716215576907.
- Hartley, D. (2009). The effect of foreclosures on nearby housing prices: Supply or dis-amenity? *Regional Science and Urban Economics*, 49, 108-117. doi: 10.1016/j.regsciurbeco.2014.09.001.
- Hing, B. O. (1993). *Making and remaking Asian America through immigration policy: 1850-1990*. Stanford University Press.

- Hum, T. (2011). Minority banks in New York City: Is the Community Reinvestment Act relevant? *Journal of Civil Rights and Economic Development*, 25(3), 501-524.
- . (2014). *Making a Global Immigrant Neighborhood: Brooklyn's Sunset Park*. New York: Temple University Press.
- . (2017). A shared future: Minority banks, homeownership, and prospects for New York City's multi-racial immigrant neighborhoods (Working Paper). Cambridge, MA: Joint Center for Housing Studies of Harvard University.
http://jchs.harvard.edu/sites/jchs.harvard.edu/files/a_shared_future_minority_banks_homeownership_prospects.pdf.
- Hunt, M. O., Wise, L. A., Jipguep, M-C., Cozier, Y. C., & Rosenberg, L. (2007). Neighborhood racial composition and perceptions of racial discrimination: Evidence from the Black Women's Health Study. *Social Psychology Quarterly*, 70, 272-289. doi: 10.1177/019027250707000306.
- Hwang, J. (2015). *Racialized recovery: Post-foreclosure pathways in distressed neighborhoods in Boston*. Cambridge, MA: Joint Center for Housing Studies, Harvard University.
- Hyra, D., & Rugh, J. S. (2016). The US great recession: Exploring its association with Black neighborhood rise, decline and recovery. *Urban Geography*, 37(5), 700-726. doi: 10.1080/02723638.2015.1103994.
- Hyra, D., Squires, G. D., Renner, R. N., & Kirk, D. S. (2013). Metropolitan segregation and the subprime lending crisis. *Housing Policy Debate*, 23(1), 177-198. doi: 10.1080/10511482.2012.697912.

- Immergluck, D. (2009). *Foreclosed: High-risk lending, deregulation, and the undermining of America's mortgage market*. New York: Cornell University Press. doi: 10.7591/9780801458828.
- . (2010). Neighborhoods in the wake of the debacle: Intrametropolitan patterns of foreclosed properties. *Urban Affairs Review*, 46(1), 3-36. doi: 10.1177/1078087410375404.
- Immergluck, D., & Smith, G. (2006). The external costs of foreclosure: The impact of single-family mortgage foreclosures on property values. *Housing Policy Debate*, 17(1), 57-79. doi: 10.1080/10511482.2006.9521561.
- . (1999). *Two steps back: The dual mortgage market, predatory lending, and the undoing of community development*. Chicago, IL: The Woodstock Institute.
- Inscore, J. C. (1983). Carolina slave names: An index to acculturation. *The Journal of Southern History*, 49(4), 527-554. doi: 10.2307/2208675.
- Kroll-Smith, S., & Brown-Jeffy, S. (2013). A tale of two American cities: Disaster, class and citizenship in San Francisco 1906 and New Orleans 2005. *Journal of Historical Sociology*, 26(4), 527-551. doi: 10.1111/johs.12021.
- Kuebler, M. (2012). Lending in the modern era: Does racial composition of neighborhoods matter when individuals seek home financing?: A pilot study in New England. *City & Community*, 11(1), 31-50. doi: 10.1111/j.1540-6040.2011.01391.x.
- Kuebler, M., & Rugh, J. S. (2013). New evidence on racial and ethnic disparities in homeownership in the United States from 2001 to 2010. *Social Science Research*, 42(5), 1357-1374. doi: 10.1016/j.ssresearch.2013.06.004.

- Lacy, K. R. (2004). Black spaces, Black places: Strategic assimilation and identity construction in middle-class suburbia. *Ethnic and Racial Studies*, 27(6), 908-930. doi: 10.1080/0141987042000268521.
- . (2012). All's fair? The foreclosure crisis and middle-class Black (in) stability. *American Behavioral Scientist*, 56(11), 1565-1580. doi: 10.1177/0002764212458279.
- Laderman, E., & Reid, C. (2008). *Lending in low-and moderate-income neighborhoods in California: The performance of CRA lending during the subprime meltdown*. San Francisco, CA: Federal Reserve Bank of San Francisco.
- Lee, J., & Zhou, M. (2015). *The Asian American Achievement Paradox*. New York: Russell Sage Foundation.
- Lee, S., Rosentraub, M. S., & Kobie, T. F. (2010). Race, class and spatial dimensions of mortgage lending practices and residential foreclosures. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 3(1), 39-68. doi: 10.1080/17549171003764611.
- Li, W. (1998). Anatomy of a new ethnic settlement: The Chinese *Ethnoburb* in Los Angeles. *Urban Studies*, 35(3), 479-501.
- Li, Y., & Walter, R. (2013). Single-family housing market segmentation, post-foreclosure resale duration, and neighborhood attributes. *Housing Policy Debate*, 23(4), 643-665. doi: 10.1080/10511482.2013.835331.
- Lichter, D. T., Parisi, D., & Taquino, M. C. (2015). Toward a new macro-segregation? Decomposing segregation within and between metropolitan cities and suburbs. *American Sociological Review*, 80(4), 843-873. doi: 10.1177/0003122415588558.

- Logan, J. R. (2014). *Separate and unequal in suburbia*. Providence, RI: US 2010 Project.
- Retrieved from
- <https://s4.ad.brown.edu/Projects/Diversity/Data/Report/report12012014.pdf>.
- Logan, J. R., & Stults, B. J. (2011). *The persistence of segregation in the Metropolis: New findings from the 2010 Census*. Providence, RI: US 2010 Project. Retrieved from
- <https://s4.ad.brown.edu/Projects/Diversity/Data/Report/report2.pdf>.
- Logan, J. R., Zhang, W., & Alba, R. D. (2002). Immigrant enclaves and ethnic communities in New York and Los Angeles. *American Sociological Review*, 299-322. doi: 10.2307/3088897.
- Mellnik, T., Cameron, D., Lu, D., Badger, E., & Downs, K. (2016). "America's great housing divide: Are you a winner or loser?" *Washington Post*. Retrieved from
- <https://www.washingtonpost.com/graphics/business/wonk/housing/overview/>.
- Molina, E. T. (2012). Reversed gains? The foreclosure crisis and African-American neighborhoods in the Los Angeles region, 2008-2009. In I. Banks, G. Johnson, G. Lipsitz, U. Taylor, D. Widener, & C. Woods (Eds.), *Black California dreamin': The crises of California's African-American communities* (p. 127-142). Santa Barbara, CA: UCSB Center for Black Studies Research.
- . (2016). Neighborhood Inequalities and the Long-Term Impact of Foreclosures: Evidence from the Los Angeles–Inland Empire Region. *City & Community*, 15(3), 315-337. doi: 10.1111/cico.12192.
- Newman, K. (2010). Go public!: Using publicly available data to understand the foreclosure crisis. *Journal of American Planning Association*, 76(2), 160-171. doi: 10.1080/01944360903586738.

- Ong, P., Bonacich, E., & Cheng, L. (1994). "The political economy of capitalist restructuring and the new Asian immigration." In P. Ong, E. Bonacich, & L. Cheng (eds). *The new Asian immigration in Los Angeles and global restructuring* (pp. 3-38). Philadelphia: Temple University Press.
- Ong, P. M., Pech, C., & Pfeiffer, D. (2014). *The foreclosure crisis in Los Angeles*. Los Angeles, CA: UCLA Luskin School of Public Affairs Lewis Center California Policy Options.
- Ong, P., & Pfeiffer, D. (2008). Spatial variation in foreclosures in Los Angeles (Working Paper No. 22). Los Angeles: UCLA Ziman Center. Retrieved from <http://www.anderson.ucla.edu/Documents/areas/ctr/ziman/2008-22.pdf>.
- Patraporn, R. V., Tran, L. D., & Ong, P. M. (2015). Risks and Rewards in Wealth Building: Asian American Homeownership and Foreclosure Pre and Post Housing Boom in East San Gabriel Valley, California. *AAPI Nexus: Policy, Practice and Community*, 13(1), 122-148. doi: 10.17953/1545-0317.13.1.122.\
- Pfeiffer, D. (2012). Has exurban growth enabled greater racial equity in neighborhood quality? Evidence from the Los Angeles region. *Journal of Urban Affairs*, 34(4), 347-371. doi: 10.1111/j.1467-9906.2011.00596.x.
- Pfeiffer, D., & Molina, E. T. (2013). The trajectory of REOs in Southern California Latino neighborhoods: An uneven geography of recovery. *Housing Policy Debate*, 23(1), 81-109. doi: 10.1080/10511482.2012.731655.
- Pickett, K. E., & Wilkinson, R. G. (2008). People like us: Ethnic group density effects on health. *Ethnicity & Health*, 13, 321-334. doi: 10.1080/13557850701882928.
- Palmer, C. (2015). Why did so many subprime borrowers default during the crisis: Loose credit or plummeting prices? doi: [10.2139/ssrn.2665762](https://doi.org/10.2139/ssrn.2665762).

- Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *The annals of the American academy of political and social science*, 530(1), 74-96. doi: 10.1177/0002716293530001006.
- Quercia, R. G., Stegman, M. A., & Davis, W. R. (2007). The impact of predatory loan terms on subprime foreclosures: The special case of prepayment penalties and balloon payments. *Housing Policy Debate*, 18(2), 311-346. doi: 10.1080/10511482.2007.9521603.
- . (2004). Assessing the impact of North Carolina's predatory lending law. *Housing Policy Debate*, 15(3), 573-601. doi: 10.1080/10511482.2004.9521514.
- Raymond, E., Wang, K., & Immergluck, D. (2016). Race and uneven recovery: neighborhood home value trajectories in Atlanta before and after the housing crisis. *Housing Studies*, 31(3), 324-339. doi: 10.1080/02673037.2015.1080821.
- Rugh, J. S. (2014). Double jeopardy: Why Latinos were hit hardest by the US foreclosure crisis. *Social Forces*, 93(3), 1139-1184. doi: 10.1093/sf/sou107.
- . (2015). Painting the Whole Picture: Foreclosure Rates among Asian American Ethnic Groups in Orlando, Florida, and Phoenix, Arizona. *AAPI Nexus: Policy, Practice and Community*, 13(1), 149-177.
- Rugh, J. S., Albright, L., & Massey, D. S. (2015). Race, space, and cumulative disadvantage: A case study of the subprime lending collapse. *Social Problems*, 62(2), 186-218. doi: 10.1093/socpro/spv002.
- Rugh, J. S., & Massey, D. S. (2010). Racial segregation and the American foreclosure crisis. *American Sociological Review*, 75(5), 629-651. doi: 10.1177/0003122410380868.
- Schwartz, A. F. (2014). *Housing policy in the United States*. New York: Routledge.

- Schuetz, J., Been, V., & Ellen, I. G. (2008). Neighborhood effects of concentrated mortgage foreclosures. *Journal of Housing Economics*, 17(4), 306-319. doi: 10.1016/j.jhe.2008.09.004.
- Simons, R. A., Wu, J., Xu, J., & Fei, Y. (2016). Chinese investment in U.S. real estate markets using the EB-5 program. *Economic Development Quarterly*, 30(1), 75-87. doi: 10.1177/0891242415620009.
- Singer, A. (2008). Twenty-first-century gateways: An introduction. In A. Singer, S. W. Hardwick, & C. B. Brettell (Eds.), *Twenty-first century gateways: Immigrant incorporation in suburban America* (pp. 3-30). Washington, DC: The Brookings Institute.
- Smith, M. P., Tarallo, B., & Kagiwada, G. (1991). Colouring California: New Asian immigrant households, social networks and the local state. *International Journal of Urban and Regional Research*, 15(2), 250-268. doi: 10.1111/j.1468-2427.1991.tb00633.x.
- Spencer, M. S., & Chen, J. (2004). Effect of discrimination on mental health service utilization among Chinese Americans. *American Journal of Public Health*, 94(5), 809-814. doi: 10.2105/AJPH.94.5.809.
- Tienda, M., & Fuentes, N. (2014). Hispanics in metropolitan America: New realities and old debates. *Annual Review of Sociology*, 40, 499-520. doi: 10.1146/annurev-soc-071913-043315.
- Turner, M. A., Santos, R., Levy, D. K., Wissoker, D., Aranda, C., Pitingolo, R., & The Urban Institute. (2013). *Housing discrimination against racial and ethnic minorities 2012*. Washington, D.C.: The Urban Institute. Retrieved from http://www.huduser.org/portal/Publications/pdf/HUD-514_HDS2012.pdf.

- Vallejo, J. A. (2012). *Barrios to burbs: The making of the Mexican American middle-class*. Stanford: Stanford University Press. doi: 10.11126/stanford/9780804781398.001.0001.
- Walton, E. (2012). Resurgent ethnicity among Asian Americans ethnic neighborhood context and health. *Journal of health and social behavior*, 53(3), 378-394. doi: 10.1177/0022146512455426.
- . (2015). Making sense of Asian American ethnic neighborhoods: A typology and application to health. *Sociological Perspectives*, 58(3), 490-515. doi: 10.1177/0731121414568568.
- Wen, M., Lauderdale, D. S., & Kandula, N. R. (2009). Ethnic neighborhoods in multi-ethnic America, 1990-2000: Resurgent ethnicity in the ethnoburbs?. *Social Forces*, 425-460. doi: 10.1353/sof.0.0244.
- Williams, R. (2012). Using the margins command to estimate and interpret adjusted predictions and marginal effects. *The State Journal*, 12(2), 308-331.
- Wong, E. C., Palaniappan, L. P., & Lauderdale, D. S. (2010). Using name lists to infer Asian racial/ethnic subgroups in the healthcare setting. *Medical Care*, 48(6), 540-546. doi: 10.1097/MLR.0b013e3181d559e9.
- Word, D. L., Coleman, C. D., Nunziata, R., & Kominski, R. (2008). *Demographic aspects of surnames from Census 2000*. Washington, DC: Bureau of the Census. Retrieved from <http://www2.census.gov/topics/genealogy/2000surnames/surnames.pdf>.
- Wright, R., Ellis, M., & Parks, V. (2005). Re-placing Whiteness in spatial assimilation research. *City & Community*, 4(2), 111-135. doi: 10.1111/j.1540-6040.2005.00107.x.
- Zhou, M. (1992). *Chinatown: The socioeconomic potential of an urban enclave*. Philadelphia: Temple University Press.

- . (2007). "The ethnic system of supplementary education: Nonprofit and for-profit institutions in Los Angeles' Chinese immigrant community." In B. Shinn & H. Yoshikawa (eds)., *Toward positive youth development: Transforming schools and community programs* (pp. 228-251). New York: Oxford University Press.
- Zonta, M. M. (2015). Are US-Chartered Chinese and Korean Banks Resilient in the Face of New Challenges? Evidence from Los Angeles and New York. *AAPI Nexus: Policy, Practice and Community*, 13(1), 178-205.

CHAPTER 4: PATHS TO AMERICAN INCORPORATION:
ETHNOSPATIAL ADVANTAGE OF MIDDLE-CLASS LATINO AND ASIAN
HOMEOWNERS IN LOS ANGELES

Introduction

Homeownership remains a keystone to achieve the American Dream and a pathway to social inclusion. First, homeownership is important for families of color because it is their largest form of wealth (Taylor et al., 2011). Second, homeownership is associated with social inclusion and citizenship, where citizenship is not necessarily tied to legal immigration status (Saegert et al., 2009). While debated, homeowners are still largely presumed to be more invested in their neighborhoods because their property taxes pay for local amenities and public goods – or the “homevoter hypothesis” (Fischel, 2009). McCabe (2016) also outlines how the U.S. government and real estate industry have made significant investments to link homeownership with American citizenship, promoting wealth, and neighborhood stabilization. American society has thus been structured to prioritize homeowners over renters. Accordingly, immigrants and people of color use homeownership to cement their place in society.

While homeowners are perceived as good citizens, minority and immigrant concentration has been associated with risks for wealth accumulation because houses in non-White neighborhoods do not appreciate in value (Flippen, 2004) or are slow to recover from the Great Recession (Mellnick et al., 2016; Raymond et al., 2016). Minority neighborhoods have also been linked with higher rates of subprime lending, predatory lending, and foreclosures (Immergluck, 2009; Mayer & Pence, 2008; Wyly et al., 2006). These studies support place stratification theory, which asserts that minorities and immigrants are spatially sorted based on their racial position in society. Consequently, minority and immigrant neighborhoods fall below White neighborhoods in housing quality and property values. These studies also uphold spatial assimilation theory,

which describes how immigrants and minorities will assimilate into Whiter neighborhoods to access higher quality amenities when they have the socioeconomic means to move (Alba & Logan, 1993; Charles, 2003; Friedman & Rosenbaum, 2004; Intrator et al., 2016). There are also non-economic factors that contribute to minorities and immigrants choosing to live in Whiter areas, including race-based stereotypes that associate particularly Black or Latino neighborhoods with poorer quality public amenities and resources (Charles, 2003).

However, some studies have problematized these theories. First, Wright et al. (2005) critiqued spatial assimilation as debasing “the citizenship and rights of naturalized and native-born non-White persons” because it uses proximity to White middle-class suburban homeowners as the sole indicator of “membership and belonging” (Wright et al., 2005, p. 113). Li (2009) also identified issues in place stratification, which presents minority areas as resource-deficient and temporary. White neighborhoods do concentrate advantage, but these theories do not account for empirical evidence of growing middle-class ethnic neighborhoods and affiliated “middle-class ethnic capital,” including professional networks, political agency, culturally-sensitive health services, lower barriers to employment, and reprieve from White discrimination (Chiswick & Miller, 2005; De la Roca et al., 2014; Fang & Brown, 1999; Lacy, 2004; Li, 2009; Vallejo, 2012; Walton, 2015; Zhou, 1992). Spatial assimilation also ignores evidence that larger coethnic communities have a positive effect on homeownership rates (Flippen, 2010).

To address the limitations of spatial assimilation and place stratification, studies have used several terms to describe coethnic residential preference in middle- and upper-income neighborhoods, including “ethnic community” (Logan et al., 2002), “ethnoburb” (Li, 2009), and “resurgent ethnicity” (Walton, 2012; Wen et al., 2009). These theories counter the notion that minority or immigrant neighborhoods are inherently associated with socioeconomic problems. However, there are limitations to these terms. “Ethnic community” is vague and can encompass

neighborhoods of varying income levels, while “ethnoburb” focuses on suburban neighborhoods and does not encompass urban coethnic concentration (Li, 1998). The origins of “resurgent ethnicity” are unknown and the term is a misnomer because it inaccurately suggests that race/ethnicity has recently emerged as a driver for residential patterns. Resurgent ethnicity also argues that coethnic concentration can form from greater choice in residents and not from institutional disadvantage or constraints (Walton, 2012).

I conceptualize a new theory: *ethnospatial advantage*, which builds on these previous theories.³¹ Ethnospatial advantage argues that immigrants and minorities move into coethnic middle-class neighborhoods for socioeconomic mobility because these neighborhoods offer race- and class-based resources that are unavailable in Whiter neighborhoods. This theory adds nuance and multiple pathways for residential patterns. Spatial assimilation prescribes a linear model—as groups accumulate socioeconomic means and become more incorporated into American society, minority and immigrant residents will move into Whiter or more integrated areas. Instead, ethnospatial advantage explains how increasing socioeconomic status and greater acculturation does not always lead to ethnic dispersion among non-Whites, but can instead lead to coethnic concentration.

Existing literature on middle-class minority neighborhoods has examined Black homeowners (Lacy, 2004; Pattillo, 2005). The emergence of Black middle-class neighborhoods reflected class-based resources that contributed to these residents moving out of poorer Black areas. However, these middle-class neighborhoods were constrained by racial restrictive covenants, discriminatory lending practices, White rejection of racial integration, and other

³¹ Ethnospatial advantage does not distinguish between racial and ethnic preferences. Similar to ethnic enclaves, ethnospatial advantage can include either members of the same racial group (e.g., a neighborhood of Asian Americans) or ethnic group (e.g., a neighborhood of Chinese residents). For brevity, ethnoracialspatial was not used.

formal and informal structures; consequently, middle-class Black neighborhoods still lag behind White neighborhoods in amenities and resources (Cashin, 2000; Pattillo, 2005).

In contrast, Asian and Latino middle-class neighborhoods have mostly formed after the 1965 Hart-Cellar Immigration Act, which changed preferences for national origin to family reunification, education, and skills; the Immigration Act of 1990 strengthened these preferences for high-skilled professionals. These laws changed migrant composition—the majority of immigrants now arrive from Latin America and Asia rather than Europe (Hing, 1993). With more socioeconomic resources, some immigrants move directly to middle-class suburbs and develop class-based ethnic institutions (Lee & Zhou, 2015). These coethnic middle-class neighborhoods provide other benefits, including reinforcing coethnic group identity (Aguilar-San Juan, 2009), access to highly educated neighbors (De la Roca et al., 2014), lower default and foreclosure rates (see Chapter 3), and protection from White discrimination (Lacy, 2004).

This study formulates the framework for ethnospatial advantage using interviews of Latino and Asian homeowners in Los Angeles County middle-class coethnic and White middle-class areas to understand how homeowners choose where to live. This comparison illuminates differences in neighborhood choice factors and how these factors contribute to homeowner perceptions of socioeconomic mobility. I found that homeowners moved to their neighborhoods for their family's socioeconomic mobility. However, homeowners described differences in perceptions in familial expectations and neighborhood racial composition and how it relates to socioeconomic mobility, which shaped if they chose a coethnic or White neighborhood. Furthermore, the results counter the assumption that minorities and immigrants must rely on White neighborhoods to access higher-quality neighborhoods and provide insights about how policymakers and planners can develop non-White areas and resources.

Spatial Assimilation and Place Stratification

Spatial assimilation and place stratification are prominent theories that have been used for several decades to understand immigrant and minority residential patterns. These theories emphasize different elements of racial and economic residential segregation. Yet, both highlight the aggregated affluence and higher quality goods found in White neighborhoods, which inadvertently dismisses resources available in ethnic areas.

Spatial assimilation posits that first-generation households live in low-income ethnic enclaves upon arrival. The subsequent generations relocate into Whiter neighborhoods when they become more familiar with American institutions and/or can afford to move, granting them access to improved resources and amenities including higher-performing schools, lower crime rates, and improved municipal services (Alba et al., 1999; Denton & Massey, 1988; Intrator et al., 2016; Massey & Denton, 1985; Wright et al., 2005). In contrast, enclaves have been characterized as economically deprived and barriers to American assimilation (Li, 2009; Wen et al., 2009). Minority and immigrant integration into White suburbs is perceived as a solution to decrease neighborhood inequality (Intrator et al., 2016).

There is evidence supporting spatial assimilation. Native-born Latinos and Asian Americans tend to live in Whiter neighborhoods than immigrants, particularly among those of higher socioeconomic status (Alba & Logan, 1993; Charles, 2003; Denton & Massey, 1988; Lichter et al., 2015). Residence in Whiter neighborhoods has been associated with higher housing quality for Latino and Asian residents (Charles, 2003). However, spatial assimilation depends on context. Ethnic groups have different segregation patterns. For instance, Puerto Ricans tend to live in more segregated areas than Mexicans or Cubans (Denton & Massey, 1988; Jargowsky, 1997). Studies on Los Angeles have also found that Mexicans are more spatially assimilated than Chinese, Koreans, and Filipinos (Wright et al., 2005; Yu & Myers, 2007).

Additionally, segregation patterns depend on the time of arrival. More recent immigrants are more likely to live in middle-class coethnic neighborhoods than immigrants who arrived earlier—as some middle-class coethnic neighborhoods develop, they are also self-reinforcing and become increasingly non-White over time (Allen & Turner, 1996; Wright et al., 2005).

Furthermore, spatial assimilation does not explain enduring segregation. Place stratification focuses on structural barriers and discrimination that persist in the housing market, and has predominantly examined Black-White segregation (Alba & Logan, 1993). While the Fair Housing Act of 1968 outlawed housing discrimination, minorities and immigrants still experience informal housing constraints. For example, the U.S. Department of Housing and Urban Development found that minority homeowners were informed of fewer houses and apartments than Whites in paired audit tests (Turner et al., 2013). Furthermore, potential homebuyers or renters who were readily identifiable as minorities or immigrants through name or speech experienced discrimination (Turner et al., 2013).

Place stratification asserts that groups are residentially sorted based on their group's relative position in society; groups with the least power experience the most discrimination and least residential mobility (Alba & Logan, 1993; Freeman, 2000). Even after controlling for income, studies have found that particularly Blacks and Latinos live in segregated areas with poorer housing conditions than Whites (Charles, 2003). For example, middle-class Latinos were more likely than White counterparts to live in neighborhoods with abandoned buildings and barred windows (Friedman et al., 2014).

A New Framework: Ethnospatial advantage

Emerging studies have called for a reframing and modification of spatial assimilation and place stratification (Li, 2009; Wen et al., 2009; Wright et al., 2005). While these theories may explain European immigrant assimilation patterns in the early 20th century and some Latino and

Asian residential patterns (Massey & Denton, 1985), there are growing middle-class ethnic neighborhoods across the country (Aguilar-San Juan, 2005; Carcamo, 2015; Li, 2009; Lung-Amam, 2017; Pfeiffer, 2016; Vallejo, 2012; Vo & Danico, 2004). Most of the literature on middle-class ethnic neighborhoods has focused on Latinos and Asians.³²

As previously described, scholars have used inconsistent terms to describe middle-class coethnic neighborhoods. Similar to strategic assimilation, resurgent ethnicity describes minority or immigrant coethnic residential preferences that are not restricted based on income or result from housing discrimination (Chung & Brown, 2007; Wen et al., 2009). Resurgent ethnicity builds on literature that separates in-group preferences from racial prejudice or preserving White status (Charles, 2003) and can include foreign-born or native-born residents (Walton, 2012).

I propose a new theory, *ethnospatial advantage*, which explains how ethnic neighborhoods form beyond coethnic preference. Ethnospatial advantage differs from resurgent ethnicity because the latter describes coethnic middle-class preferences, but does not theorize about resident outcomes. Additionally, ethnospatial advantage builds on spatial assimilation because middle-class coethnic neighborhoods can similarly be used as a tool for class mobility as with middle-class White neighborhoods. Similar to spatial assimilation, ethnospatial advantage theorizes that minorities and immigrants will move to neighborhoods for higher quality amenities. However, the target population is members of the same racial or ethnic group rather than White residents. Instead of a singular pathway out of racial concentration, residents can increase their socioeconomic status and stay among coethnic neighbors.

Ethnospatial advantage also differs in how it frames racial/ethnic resources. Spatial assimilation and place stratification acknowledge that there are race-based resources and

³² However, Lacy (2004) theorized about middle-class Black homeowners moving into White neighborhoods as “strategic assimilation,” or middle-class Blacks who selectively choose to live in White areas and are not restricted to stay in low-income Black neighborhoods.

opportunities, yet they assert that White resources are the ones that matter for socioeconomic mobility. Thus, proximity to middle-class White homeowners is used to measure success and progress and reinforce a deficit framing of minority and immigrant neighborhoods (Intrator et al., 2016; Wright et al., 2004). In contrast, ethnospatial advantage asserts that coethnic preferences can be tied to quality ethnic resources that are not affiliated with White neighborhoods. Existing research on ethnic neighborhoods has also proven a number of middle-class benefits. Lee and Zhou (2015) found that Chinese suburbs provide resources for Chinese and Vietnamese residents to assist young adults in accessing higher education institutions. Lung-Amam (2017) explains how Silicon Valley has become a hub for high-income Asian immigrants whose families benefit from high-performing schools and ethnic businesses. Vallejo (2012) similarly describes middle-class professional networks that help Latina business owners.³³ These resources can be of similar or higher quality than those in White areas.

The following are parameters of ethnospatial advantage. This theory includes middle-class coethnic neighborhoods in urban areas and suburbs.³⁴ Similar to ethnoburbs, ethnospatial advantage refers to neighborhoods with a sizable concentration of a racial/ethnic minority or immigrant population—these groups do not need to comprise the majority of a neighborhood because a significant concentration can still congregate class- and race/ethnic-based resources (Li, 2009; Vo & Danico, 2004). These middle-class coethnic neighborhoods can also include individuals of any nativity status to include homeowners who gained socioeconomic resources through successive generations in the U.S. or from migrating with middle- or high-income. In the

³³ While there are existing studies on ethnic banks (Zonta, 2012) that support homeownership, these banks largely do not fund home loans.

³⁴ Li's (2004) work on San Gabriel, California ethnoburbs is instrumental to ethnospatial advantage, but focuses on suburbs. Suburbs do not consistently offer higher quality resources or homeownership opportunities, particularly in declining inner-ring suburbs (Wright et al., 2004; Yu & Myers, 2007).

next section, I summarize existing literature on Latino and Asian American homeownership and neighborhood choice and then introduce the research questions and expected results.

Latino and Asian Neighborhood and Housing Choice

Existing literature on U.S. neighborhood selection describes homebuyers maximizing property value with commute time, public goods, taxes, and/or other local expenditures (Alonso, 1964; Cho, 2001; Tiebout, 1956). Public amenity preferences depend on lifecycle, including public school quality, proximity to shopping centers, and public transportation or car-oriented design (Myers & Gearin, 2001). Homebuyers also use social networks to identify neighborhoods and learn about public amenities (Lareau, 2014).

Studies on non-White residential location have primarily focused on Black and immigrant low-income renters or homebuyers. Immigrants tend to select coethnic neighborhoods if they are recent migrants who are not as fluent in English (Toussaint-Comeau & Rhine, 2004) and want access to public transportation and entertainment (Loo, 1986). These groups also heavily rely on family and friends in their housing search (Basolo & Nguyen, 2009). Chinese immigrants also used neighbors for ethnic and social capital for employment, and their neighborhoods became a refuge and source of social mobility (Zhou, 1992).

However, as these groups move into suburbs, their residential preferences may change. For instance, Darrah and DeLuca (2014) found differences in residential preferences over time for housing voucher recipients who moved into suburbs and those who did not move. Movers at first chose neighborhoods based on housing price and familiarity of the neighborhood. After living in the suburbs, these households later stated a quiet environment, safety, green space, and specific indicators of quality schools such as individualized attention and music programs became more important.

Limited literature has begun to examine middle-class Latino and Asian residential choices. For example, Buendia et al. (2017) found that Latinos moving into suburbs primarily used family and friend networks to decide where to relocate, in particular people who had already established themselves in the area. Using these networks, these families first tried to secure housing and employment and did not spend time to investigate the new suburb or social institutions. After living in a neighborhood for two years, these families then began to think about school quality and focused on keeping their children in the same schools. The study also noted that it was important for residents to live close enough to the school for their children's safety. Asian American homebuyers also sought suburbs using social networks to find neighborhoods with high-performing schools, quiet areas close to jobs, ethnic amenities, and newly built affordable housing stock (Kalita, 2005; Lung-Amam, 2017).

These examples do not compare middle-class Latino and Asian homebuying factors and do not distinguish if there are differences in neighborhood choice between White and coethnic areas. Previous literature also does not include how homebuying factors contribute to homeowners' understanding of their socioeconomic mobility. This study fills in these gaps, and illuminates different immigrant family pathways into American incorporation and the lived experiences of these homeowners.

Methodology and Data Collection

The study aims to answer the following research questions:

1. What factors influence Asian and Latino homeowner neighborhood choice in middle-class White or coethnic neighborhoods?
2. How do these factors contribute to socioeconomic mobility for homeowners in these neighborhoods?

For the first question, I predict that the homeowners will value safety, schools, and social networks for homeowners in the middle-class White and coethnic neighborhoods based on

existing literature. However, the way that they use these factors may differ. Homeowners in coethnic neighborhoods may rely more on ethnic institutions because they have a stronger preference to live near these amenities and these institutions would be more readily available in their neighborhoods; in contrast, their counterparts in White neighborhoods may not need to use or live near these amenities. To compare spatial and ethnospatial advantage patterns, I will assess how homebuying factors contribute to socioeconomic mobility. Additionally, I focus on resources used to buy a house because homeownership plays a significant role in building wealth. I hypothesize that residents in coethnic neighborhoods will use more ethnic resources or coethnic social networks to assist with socioeconomic mobility than those in White neighborhoods. In contrast, I predict that residents in White neighborhoods will use more mainstream resources or White residents to assist with home purchases.

To answer these questions, I first used spatial statistics and secondary socioeconomic Census characteristics to define target areas. Then, I recruited Latino and Asian homeowner participants through random, snowball, and convenience sampling. I interviewed 36 of these homeowners to understand reasons why these homeowners chose their neighborhood and how these homebuying factors affect their social mobility.

Site Selection

I selected two clusters of adjacent cities: 1) Lakewood, Downey, and Cerritos, and 2) Pasadena, Baldwin Park, and San Gabriel.³⁵ Several steps were taken to choose the six target cities in Los Angeles County. I adopted Walton's (2015) typology to narrow down areas with spatially concentrated middle-class racial groups. Walton (2015) first identified areas of racial

³⁵ I chose adjacent cities because distance to work would not vary as much between the cities. For example, a homeowner choosing between Lakewood and Cerritos is likely to not select one area over the other because of significant differences in commute time. I can then ascertain what other factors helped homeowners to select one city over the adjacent city.

concentration using a local Moran's I test of contiguous edges, which measures local spatial clustering.³⁶ Tracts with a significantly high spatial autocorrelation ($\alpha < 0.05$) of Whites, Latinos, or Asians according to the 2010 Census were designated as neighborhoods of concentration. A single tract was categorized as a statistically significant concentration if the proportion of the population was high relative to other tracts in the county.³⁷

Among tracts with racial concentration, I found those located in adjacent cities with comparable high socioeconomic status. I used American Community Survey (ACS) 2005-2009 data on household income and mean home value to classify neighborhoods by socioeconomic status. Similar to Walton (2015), I used the county average to determine middle-class areas. Tracts with a median household income above \$55,000 and a median home value of more than \$522,000 were categorized as middle-income areas. Among adjacent cities, I chose two clusters with predominantly White, Latino, and Asian tracts. While imperfect, this criterion can help to eliminate differences in housing prices for choosing one city over another city. Figure 1 displays the two clusters of target areas, which are located on the eastern side of the county.

Tables 1 and 2 provide additional characteristics of the six cities in which the target tracts are located relative to Los Angeles County. For the Latino and Asian cities, the target racial group increased between 2000 and 2010—the exception is Baldwin Park, which had about 80% Latinos in both years (see Table 1). In 2010, Lakewood and Pasadena White populations decreased over time, which follows trends in the County. Cerritos, Baldwin Park, and San Gabriel have higher proportions of foreign-born residents compared to Los Angeles County (see Table 2). However, the clusters have relatively lower rates of linguistically-isolated households

³⁶ Moran's I describes patterns of spatial autocorrelation based on the group concentration in each tract relative to the county (Anselin, 1995). The statistic accounts for unusually high racial concentration in a tract and also takes into consideration high populations in contiguous tracts.

³⁷ While the entire city may not have a predominant racial group, I only sampled from tracts with the statistically significant concentration of Latinos, Asians, or Whites.

compared to the county, except San Gabriel City. Additionally, the Latino areas had the lowest socioeconomic characteristics than the other target areas, which may reflect the more recent emergence of Latino middle-class areas relative to Asian middle-class neighborhoods. The Latino cities also have a lower mean age and greater percentage of households with children.

Figure 1. Map of Middle- and Upper-Income Racially Concentrated Neighborhoods and Target Areas

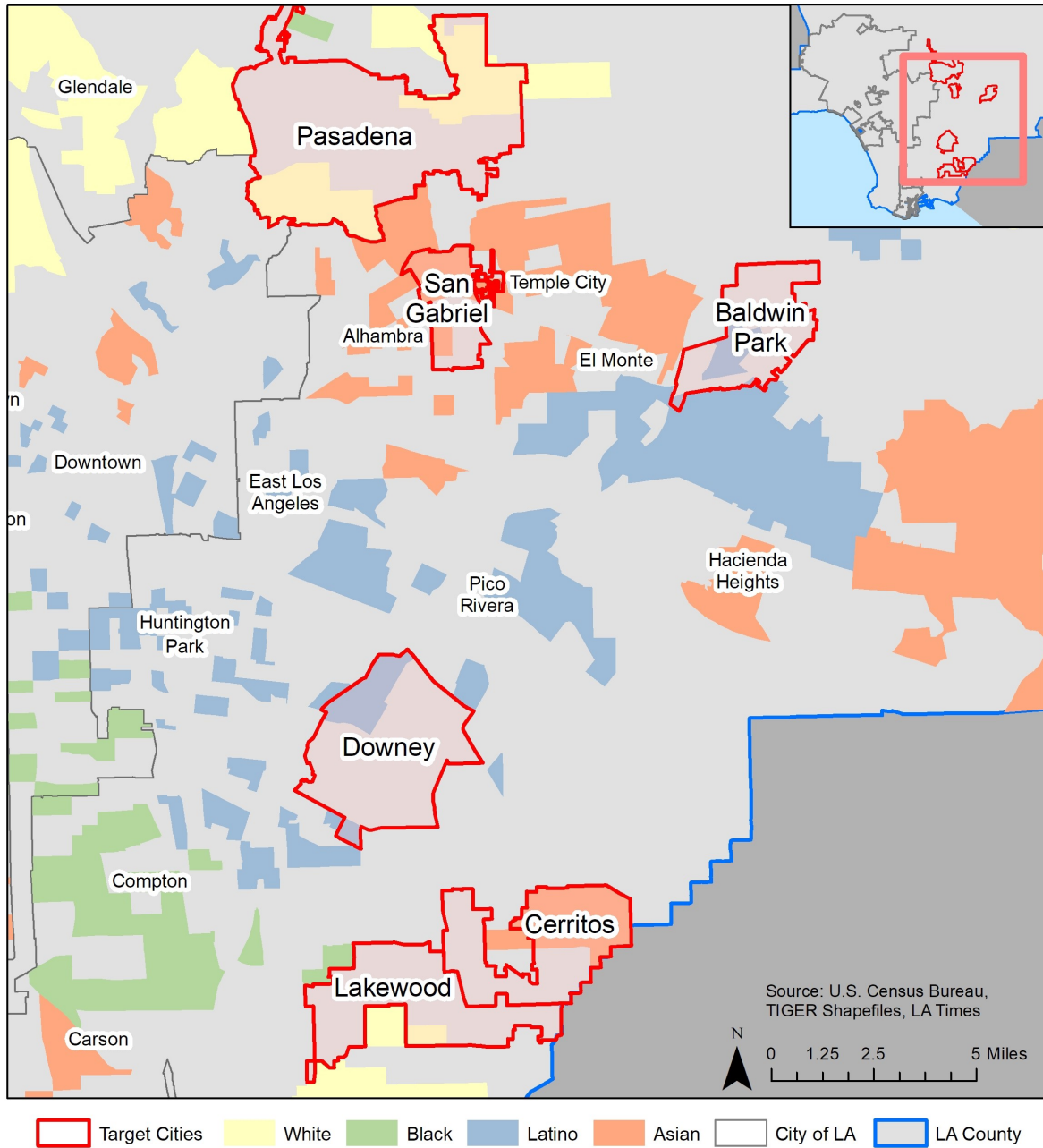


Table 1. Target Area Racial Composition

		Cluster 1						Cluster 2						Los Angeles County	
		Latino		Asian		White		Latino		Asian		White			
		Downey	Cerritos	Lakewood	Baldwin	San Gabriel	Pasadena								
2000	Total	107,323		51,488		79,345		75,837		39,804		133,936		9,519,338	
	Black	4,028	4%	3,432	7%	5,825	7%	1,219	2%	420	1%	19,319	14%	930,957	10%
	Asian	8,308	8%	30,091	58%	10,716	14%	8,826	12%	19,470	49%	13,399	10%	1,137,500	12%
	Latino	62,089	58%	5,349	10%	18,071	23%	59,660	79%	12,223	31%	44,734	33%	4,242,213	45%
	NHW	30,851	29%	11,040	21%	41,577	52%	5,508	7%	6,930	17%	52,381	39%	2,959,614	31%
2010	Total	111,772		49,047		80,048		75,390		39,718		142,013		9,818,605	
	Black	4,329	4%	3,388	7%	6,973	9%	913	1%	388	1%	14,650	10%	856,874	9%
	Asian	7,804	7%	30,363	62%	13,115	16%	10,696	14%	24,091	61%	19,595	14%	1,346,865	14%
	Latino	78,996	71%	5,883	12%	24,101	30%	60,403	80%	10,189	26%	46,174	33%	4,687,889	48%
	NHW	19,786	18%	8,141	17%	32,774	41%	3,232	4%	4,539	11%	53,135	37%	2,728,321	28%

Sources: 2000 and 2010 Decennial Census.

Note: NHW = non-Hispanic White.

Table 2. Target Area Socioeconomic Characteristics

		Cluster 1			Cluster 2			Los Angeles County	
		Latino	Asian	White	Latino	Asian	White		
		Downey	Cerritos	Lakewood	Baldwin Park	San Gabriel	Pasadena		
Nativity									
% Born outside the U.S.		34%	45%	21%	46%	54%	28%	35%	
% Linguistically Isolated	All	12%	14%	5%	20%	26%	8%	16%	
	Spanish	18%	17%	13%	22%	18%	20%	29%	
	API	29%	25%	18%	30%	42%	22%	34%	
Socioeconomic Characteristics									
% B.A.+		18%	46%	25%	10%	27%	43%	26%	
% Owner		53%	82%	73%	63%	47%	46%	49%	
Median Income		\$58K	\$86K	\$76K	\$51K	\$55K	\$62K	\$55K	
Median Home Value		\$554K	\$637K	\$525K	\$376K	\$559K	\$648K	\$522K	
Other Characteristics									
Mean Age		31.8	41.7	36.6	30.3	38.4	36.6	33.8	
% Households w/ Children (under 18 years)		46%	42%	41%	57%	37%	27%	38%	
% Married		48%	59%	52%	48%	53%	43%	45%	

Source: 2005-2009 American Community Survey.

Linguistic isolation rates are for all households and households that speak Spanish or Asian and Pacific Islander (API) languages, not among all households. Dollar amount is adjusted to 2009\$.

Homeowner Recruitment

To be eligible for the study, participants had to meet the following three criteria:

- Identify as Latino or Asian American
- Live in one of the targeted areas
- Be a first-time homebuyer or be younger than 45 years old

The third criterion was added as a result of six practice interviews with homeowners at different lifecycle stages. Respondents who were older were looking for homes to downsize because their

adult children were no longer living at home. As a result, these homeowners used different homebuying factors than other homeowners who purchased their first home (see also Chen & Lin, 2011).

Interviewees were recruited between April 2016 and May 2017. I used random, snowball, and convenience sampling to identify potential participants. First, I used DataQuick, a proprietary data set that aggregates individual-level home purchase data and includes homeowner name, mailing address, and type of property. I randomly selected single-family homebuyers with Latino and Asian surnames who purchased homes between 2000 and 2016 in tracts of racial concentration within the target cities.³⁸

I mailed letters to this random sample, inviting them to participate in an interview; letters included the researcher's contact information. If participants were interested, they were asked to contact the researcher through phone, email, or mail. Of 1,300 letters sent, 10 letters were returned because homeowners no longer lived at the address or the property was vacant. Thirty-six potential interviewees replied to the letter, and 16 participants were available to participate in an interview. The mailed information was in English with Institutional Review Board (IRB) and university information. While the low response rate (3%) does not make the findings generalizable to Latino and Asian homeowners in middle-class areas, this recruitment method helped to identify random homebuyers in the target areas.

Other interviewees were recruited by posting study information in Nextdoor, a mobile app and website where neighbors add information relevant to their community, such as crime

³⁸ I used the Decennial 2000 Census surname dictionary to impute homeowner race/ethnicity. For surnames with at least 100 counts, the Census Bureau counted the racial group and calculated the proportion of the time that the surname was linked to a person that was White, Black, Latino, Asian and Pacific Islander, and American Indian (Word et al., 2008). I used surnames with a probability of at least 50% belonging to Latinos or Asians.

reports, community events, or recommendations.³⁹ If Nextdoor members were interested in the study, they would contact the researcher through email or phone; the researcher did not approach individual Nextdoor members. Eight participants contacted the researcher and were recruited through NextDoor—four lived in Cerritos, three lived in Pasadena, and one lived in Lakewood. Twelve other interviewees were recruited through snowball or convenience sampling.⁴⁰

Analysis Strategy

The study focuses on experiences of individuals and how they understand the factors that contributed to their homebuying decision-making process and socioeconomic mobility (Corbin & Strauss, 1990). Thus, I used semi-structured interviews to ask what factors affected their decision to purchase a house in their neighborhood (see Appendix 1 for the interview guide). Interviews ranged from 30 to 60 minutes in length. First, I asked each interviewee to rank ten factors in order of importance:

- Home Price
- House Design/Form
- Neighborhood Safety
- Commute/Job Considerations
- Neighborhood Public School Quality
- Investment Value
- Proximity of Family/Friends
- Coethnic Businesses

³⁹ Nextdoor requires participants to verify their mailing address to make it a private and secure neighborhood-based app through the telephone, mail, or credit cards. Interviewees volunteered to post information about the study in their local Nextdoor page with researcher information and study eligibility, but were not asked to endorse the study.

⁴⁰ Participants received a \$25 Amazon.com gift card for their participation. If interviews were conducted in-person, they were given the gift card at the end of the interview. Interviewees who opted for phone or online interviews received the gift card through mail and provided their preferred address to the interviewer.

- Neighborhood Racial/Ethnic Composition
- Entertainment Options

While factors intersect, respondents were instructed to rank each separately without repeating numbers. They could also describe other factors not listed.⁴¹ These rankings were used to quantify differences between residents in the neighborhoods. Interviewees were also asked to describe each factor in detail. I also inquired about housing resources they used or gave to others (see Appendix 1). After each interview, I wrote memos to summarize the interview.

I used a deductive approach to code interviews and analyze interviewee responses based on these ten factors using MaxQDA. Additional themes emerged from the interviews to identify nuances within or between these ten factors (Joffe, 2012). Pseudonyms are used in the following reported findings to protect participant confidentiality. If quotations used in the analysis were edited, they were only altered for clarity.

There are several limitations to the methodology. First, the findings are not generalizable to all Latino and Asian homeowners in middle-class coethnic or White neighborhoods.

Homeowners who responded to the mailed letters or were recruited through Nextdoor are more likely to be interested in their neighborhoods than others who did not respond to the solicitation. For example, while there is limited data on Nextdoor users, an early study (Masden et al. 2014) interviewed participants who were homeowners and found that users were already engaged in their neighborhoods through existing civic organizations or informal events. Thus, respondents from Nextdoor may be more invested in their neighborhoods than those who are not using Nextdoor. Also, interested homeowners who found out about the study through the mailers may feel more comfortable with government or educational institutions because of the formal IRB

⁴¹ About 44% of respondents included an “other” factor, but with few commonalities. Some of the “other” factors included proximity to specific amenities or institutions such as parks (n = 2), a hospital (n = 1), an airport (n=1), or a specific church (n = 1). Two respondents added that the quality of their neighbors and living around people they liked was important. One interviewee was concerned about municipal spending and city management.

letters. This group may not have the same experiences as homeowners who may be of lower educational attainment and/or less familiar with university research studies.

In addition, interviews were conducted in English. Potential interviewees were given the option to participate in Spanish, but Asian participants may be biased because in-language interviews were not available. All participants elected to participate in English. As a result, they may be more acculturated to the U.S. than homeowners who did not participate in the study.

Third, the researcher's identity as an Asian American female may have affected interviews conducted in-person or online—some interviewees may have related to the researcher due to their own identity. At the end of a few phone interviews, participants inquired about the researcher's racial identity, which may indicate the importance of the researcher's positionality (see Chavez (2008) for a review of inside and outsider biases related to researcher identity).

Fourth, sampling from spatially concentrated neighborhoods in Los Angeles may not be generalizable to other White neighborhoods. Spatial assimilation literature typically examines White or integrated neighborhoods that are isolated from coethnic neighborhoods. However, Los Angeles is a metropolitan region with a minority White population, and all neighborhoods are located in close proximity to non-White ethnic concentration.

Furthermore, I use a qualitative approach because of its strength in describing the experiences, choices, and motivations for homeowners' neighborhood choice. While the previous paper provided an empirical analysis of the economic benefits of middle-class coethnic areas, it did not explain why these residents live in their neighborhoods. Qualitative methods are also beneficial in how these choices are constructed and shaped by respondent perception. At the same time, there are drawbacks to qualitative methods because respondents may have implicit biases or may not fully know how they feel about sensitive topics, including race. Thus, findings need to be interpreted by the researcher if participants give contradictory information.

Nevertheless, the study provides insights into ethnospatial advantage and the growth and/or persistence of middle-income ethnic neighborhoods. The findings include an in-depth analysis of homeowner choice with a comparison group in coethnic and White neighborhoods to distinguish class- and/or ethnic- incorporation in American suburbs. Los Angeles patterns may also have future implications for other regions that are experiencing demographic and class concentration. Ethnospatial advantage thus provides a greater diversity of understanding class and racial mobility that is in relation to the coethnic group rather than to White residents.

Findings

Participant Characteristics

Table 3 (with Appendix 2) summarizes the socioeconomic characteristics of homeowners who lived in middle-class coethnic or White neighborhoods. Participants in coethnic areas were younger than those in White neighborhoods. Female homebuyers comprised the majority of interviewees (about 70%). Interviewees were also highly educated, and a majority received at least a bachelor's or associate's degree. However, a higher proportion of respondents in White neighborhoods did not finish college. Seven respondents in coethnic neighborhoods and six interviewees in White neighborhoods earned a graduate or professional degree. Respondents had much higher educational attainment than the average person in their cities (see Table 2).

Table 3. Interviewee Characteristics by Neighborhood Type

Characteristics	Coethnic	White
# Latino	8	8
# Asian	12	8
Mean Age	36.42	41.94
% Female	70% (n = 14)	69% (n = 11)
% B.A. degree or higher	80% (n = 16)	63% (n=10)
% with children	65% (n = 13)	75% (n =12)
Average # of children (<i>among those with children</i>)	1.62	2.17
% Born outside of U.S.	20% (n = 4)	38% (n = 6)

Mean Age Moved to US (<i>among those born outside of US</i>)	7.25	5.17
% Married	95% (n = 19)	94% (n = 15)
Mean Home Value	\$660,000	\$780,000
% First-time Homebuyer	86% (n = 17)	75% (n = 12)
Average Home Purchase Year	2011	2008

There were more interviewees in White neighborhoods who had children (75%) compared to those in coethnic neighborhoods (65%); on average, interviewees with children in White neighborhoods also had more children than participants with children in coethnic neighborhoods. About 38% of respondents in White neighborhoods were born outside of the U.S. and migrated on average at the age of 5; in contrast, about 20% of homeowners in coethnic neighborhoods were not born in the U.S. and came around the age of 7. The foreign-born rate of respondents in White neighborhoods was higher than the average person in Lakewood and Pasadena, while the foreign-born rate of respondents in coethnic neighborhoods was lower than the average person in the coethnic areas (see Table 2).

Homeowners in White neighborhoods lived in homes of higher home value (about \$780,000) than those in coethnic neighborhoods (\$660,000). On average, the interviewees owned homes of higher value compared to residents in their cities. While a majority of respondents were first-time homebuyers, there were some respondents who bought their first house at an early age. Homeowners in White neighborhoods also bought their homes earlier (around 2008) than those in coethnic areas (around 2011).

Homebuying Factors

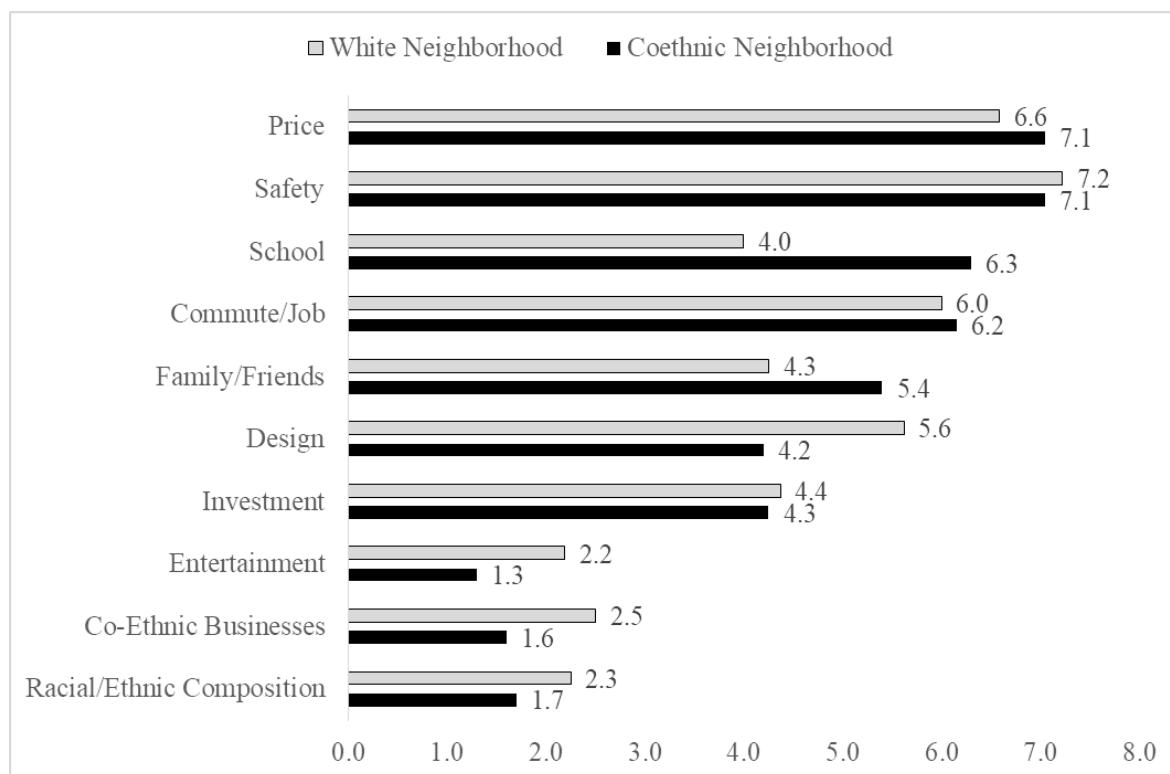
Figure 2 summarizes the average importance of homebuying factors by neighborhood typology. As expected from existing literature, homeowners prioritized home price, neighborhood safety, and commute/job factors. In contrast, entertainment options, coethnic businesses, and neighborhood racial/ethnic composition were least important. There were some

distinctions by neighborhood typology. Home design or form was not as important for homeowners in coethnic neighborhoods. However, the ranking may be impacted because some of the coethnic neighborhoods were older suburbs and homeowners knew that houses tended to be smaller in square footage. Residents in coethnic neighborhoods also considered proximity to family/friends (5.4) more important than those in White neighborhoods (4.3).

Also, homeowners ranked school quality differently by their neighborhood choice. Interviewees in White neighborhoods ranked neighborhood schools of less importance than those in coethnic neighborhoods. One potential reason for these findings is that one White area is known for high-quality private schools, and these interviewees perhaps did not value the local public schools as highly. Some of the Asian neighborhoods are also well-known for their high-quality schools. These areas may attract families who care more about school quality (see also Lung-Amam's (2017) study of Asian families in Silicon Valley).

The neighborhoods offer different alternatives and resources based on homeowner preferences. While safety and school quality were relatively important factors for all interviewees, residents had different perceptions of how their neighborhoods provided these amenities. The following describes how these amenities offer different alternatives that explain these choices. Respondents were asked their self-identified race/ethnicity, which is also reported after each quotation.

Figure 2. Average of Homebuying Factor Importance and Neighborhood Typology



Note: 1 = least important in homebuying decision, 10 = most important in homebuying decision.

Neighborhood Safety

Neighborhood safety was ranked as one of the most important factors in neighborhood choice. Homeowners overall used online resources to identify information about crimes. However, some homeowners in White areas did not search for information because of their preconceived notions that these neighborhoods were safe and an improvement from their childhood areas. In contrast, homebuyers in coethnic neighborhoods sought safe areas based on advice from their networks.

Homeowners in both types of neighborhoods used online resources to look up crime statistics. Jake described how he and his wife “looked at, there were some websites that had the crime maps, we looked up LA in general, and that’s how we started narrowing cities, and here,

we kind of checked the box that it was okay for crime” (Chinese, Asian neighborhood). Miguel similarly used crime websites and police department reports “where you could plug in an address, and it would give you, like what types of crime happened there at a certain given time, if you input a certain amount of time” (Mexican, White neighborhood). A few homebuyers also checked Megan’s Law for sex offenders in the neighborhoods.

However, some residents in White neighborhoods ranked safety as a major factor for homebuying and assumed the area was safe, although they did not search for additional information. For example, Penelope admitted, “To be honest, I didn’t really check [for safety], I just kinda knew from going there a lot on the weekends, that it was just a very quiet area we wound up settling in” (Chinese, White neighborhood). These homeowners had established impressions of the target neighborhood and took safety for granted. Isabella grew up in a nearby lower-income neighborhood and also “didn’t really look into these statistics... I just knew as a child we wouldn’t come on this side of town. So just from experience I just knew that it wasn’t what it used to be anymore” (Mexican, White neighborhood). Lang knew about neighborhood watch and social media groups—however, she did not consult these resources and responded, “I know that mostly the neighbors in my neighborhood typically watches [sic] out for each other. Other than that, that’s all I know about safety here” (Chinese, White neighborhood).

In addition to online searches, coethnic neighborhood residents viewed safety in relation to coethnic residents, family, and friends. Santiago describes feeling safe with Latino neighbors: “We have a couple Latinos in our neighborhood and they’re like very cool. They come over, they talk to us about their day, so I think that’s one the things that makes it feel more welcoming” (Mexican, Latino neighborhood). Emma received information about the safety of the area from her realtor, who is a family friend: “I ask the realtor in her face, how’s the area, and I trust what she had to say because she herself had a house in [the neighborhood], so said it was a pretty safe

neighborhood and so it was mostly word of mouth” (Taiwanese-Japanese, Asian neighborhood). She trusted her realtor and relied mostly on her to assess safety.

Some homebuyers in coethnic neighborhoods did not view their neighborhoods as safe. Yet, Irene still chose her area because of proximity to family and work, which would allow her to reach her children quickly if a situation happened at her children’s school:

Proximity to family and friends for having our children being picked up or being watched while we’re away at work is priceless... Well I live in this area so I know the safety is not best, now however once we really started looking for homes in the further areas, we were traveling 40 to 45 minutes because of traffic so, although the school district isn’t the best, it is easier access. I am only ten minutes away, my husband, is only five minutes away, my sister and my mom live down the street literally, so we had to take those into consideration, and that’s why we ended up purchasing here (Mexican, Latino neighborhood).

Thus, Irene prioritized access to her children’s neighborhood school as a way to define safety and comfort for her and her family (Buendia et al., 2017).

School Quality

Similar to neighborhood safety, a fourth of interviewed homeowners used online resources to assess school quality. While homeowners in coethnic areas once again used their social networks to gather information, some homeowners in White areas had the option of sending their children to private schools if they became dissatisfied with their public schools.

Interviewee online searches relied mostly on Redfin, a real estate site that includes estimated school service boundaries based on the property address and a school rating.⁴² The scores range from 1 through 10, where a score of 10 is the highest quality school. Truong searched for houses in three cities because “the school district mainly,” focusing on “the school grades and those places that had at least an 8 or above [on Redfin]” (Vietnamese, Asian neighborhood). Lorenzo used the same rating threshold to pick schools and neighborhoods: “I

⁴² Redfin (2018) uses an aggregate rating score from GreatSchools, which incorporates state test scores, student progress ratings, college readiness, advance course enrollment, and equity issues.

looked online and saw what ratings the schools had and made sure my children could attend the schools with the highest ratings...we ended up picking like an 8” (Mexican, Latino neighborhood). To supplement online materials, Mackenzie was the exception and looked beyond test scores, searching for:

...GATE (Gifted and Talented Education) programs, and if they have dual-language immersion, things like that are the types of things that I’m looking for, because I just want to see the type of curriculum that my child will have, so there, I’m not concerned about test scores because they have the support at home...it’s more about what the school has to offer (mixed Asian-Pacific Islander, White neighborhood).

Homeowners in White and coethnic neighborhoods also differed in how they describe neighborhood schools. Similar to safety, some homeowners in White neighborhoods were not as concerned about school quality. For example, Isabella lives in the White neighborhood with high-performing private schools, and described how:

The city is on moving to the right direction. I think I’m happy right now...A lot of the public school systems are trying to collaborate and a lot of the higher income families are trying to get back into the public system and to bring up the quality of education (Mexican, White neighborhood).

Though Isabella has children in public schools, she was not as concerned about their outcomes. While Lang explained that schools were important, she described how “I actually didn’t know anything about the school at the time we were searching...We’re looking like ‘oh okay well the school next to our neighborhood’s not too bad’” (Chinese, White neighborhood).

If the public schools were not suitable, these homeowners discussed opting for or having the choice of private school. For instance, Pari explained, “Schools didn’t quite match our needs, but that’s just I think an LA county issue, so we actually chose a private school for our child” (Indian, White neighborhood). These homeowners resemble Kimelberg’s (2014) middle-income families who chose to live in urban school districts because they have the financial means to change to private schools if they became concerned about their child’s outcomes.

In contrast, some homeowners in coethnic neighborhoods began their search using school as a top priority. For example, Jake described how his search for houses spanned the Los

Angeles region based on school rankings:

Our list was narrowed down to cities with well-known school districts...Um I think our biggest priority was school so we picked an area that has like the top elementary because obviously that's the nearest to us...so we definitely picked based on the zoning. We made the purchase like you know, based on rankings, we're not even near a point where we go, what's the curriculum they offer because the landscape can change a lot in three years (Chinese, Asian neighborhood).

Similarly, Emma emphasized the school districts as what she values the most about her neighborhood: "It's a nice suburb, they have nice schools... that's really great, the school system, that would be the best for kids, so yeah I mean [the neighborhood] had a good reputation for having good schools in the area" (Taiwanese-Japanese, Asian neighborhood). Sara explained her knowledge of school ratings relative to her parents' experiences:

I do know that my parents' generation when they would purchase a home they weren't exactly aware of school ratings. I guess they all assumed that all schools are okay, they didn't really know about ratings, but now our younger generation is aware of ratings and all that (Mexican, Latino neighborhood).

Sara is more accustomed to American school systems and understands how to access and assess school ratings—information that may not have been available or prioritized by her parents.

Coethnic neighborhood homeowners also used their social networks to assess schools. For example, Thomas explained how "the reason why we knew this area, is because it's next to an elementary school called X Elementary School, and we were familiar with that because [my wife's] sister taught there and she spoke highly of that school. I mean I wasn't even aware of that particular school, so it's like "it's perfect!" So we decided to take a deeper look into this particular area" (Chinese, Asian neighborhood).

Homeowners in White and coethnic neighborhoods used online resources to gather more information about neighborhood amenities. There were also some distinctions in how they

discussed neighborhood safety and school quality. Some homeowners in White neighborhoods assumed these amenities were of high quality or did not conduct much research on their own, in part based on their impressions of the area from previous experience. These homeowners could not always articulate why they had these ideas, which may reflect unconscious or implicit biases related to their neighbors' racial composition. In contrast, homeowners in coethnic areas relied on their networks or primarily used these homebuying factors as a way to narrow down their neighborhood search. The interviews elucidate how they chose their homes and how they describe these experiences. However, further analysis would need to be conducted on whether or not their decision-making processes correspond to objective measures of neighborhood schools and crime. (For example, Lung-Amam's (2017) study found that Asian homebuyers sought neighborhoods with schools with increasing test scores.)

The next section explains how residents perceive their homebuying decision as tied to socioeconomic mobility. I focus on perceptions of White neighbors and social networks. These examples elucidate how spatial and ethnospatial advantage offer different pathways for immigrants and their children.

Socioeconomic Advancement

Homeowners saw their neighborhood choice as tied to socioeconomic mobility because they were moving into middle-class neighborhoods. Interviewees tied these conceptions of mobility with homeownership and what it means for their family's betterment and American incorporation. Matthew stated that homeownership "means, hey we're working towards a better future for ourselves and our family...it's preparing a way to move forward in life, to aspire to do better in life than both of our families have done" (Mexican, White neighborhood). Thomas expressed similar thoughts about using homeownership to achieve a status that exceeds his parents' background (Chinese, Asian neighborhood). He was motivated to buy a house because:

I did not want my kids to grow up in the setting that I grew up in. You know I'm a second generation Asian American. My parents both immigrated [sic] here from Asia, and it was a struggle for them. It's the American Dream just to have a home, just to own a home. So you grow up, you hear about all these things and it's a goal that I've always wanted. And I mean don't get me wrong the apartment was great, but to actually own a home and say that it's yours, and you know that when you're paying money it's going towards you as an individual or as a family.

Consequently, homebuying was viewed as an achievement for interviewee families. Truong felt that buying a house meant for his parents: "I've made it, I have a house, I'm grateful that you did everything for me and here I am, you know, I didn't fail" (Vietnamese, Asian neighborhood).

At times, these ideas were indirectly transmitted. Sara did not recall a conversation with her parents about homeownership. Yet, she knew that her "mom's philosophy is that your children have to have more success than the parents, more education, and better careers so with that it's just assumed that also a better home" (Mexican, Latino neighborhood). Kenneth indirectly learned similar messages about homeownership:

It was just kind of one of those things that's like a progression of Pilipino life. You know go to college, get a degree, get a good job, marry, you know get a house, and then get your kids to college, it's always that straight narrative to success. We never talked about it, it was just implied, cause everyone says like, oh so and so bought a house, which again, is this meta narrative of boot strapping, picking yourself up and being successful (Pilipino, White neighborhood).

Homeowners also perceived their homebuying decision into these neighborhoods as an improvement from their childhood neighborhoods. Santiago and his wife grew up in lower-income neighborhoods. Santiago described his wife's perception of their neighborhood choice:

My wife had these high hopes for this neighborhood being the next step up...she's always lived in a working class community so when this neighborhood came up, she liked the idea mostly because these are middle class families that are doing a little better (Mexican, Latino neighborhood).

Ben grew up in a working-class minority neighborhood. He expressed how his home purchase was tied to "the goal to move out of the not so great area and move on up. You're not going to be making money and saying, I'm going to move back next door to where my parents are"

(Vietnamese, White neighborhood). These findings help to understand the homebuying factors that homeowner used by neighborhood. The following section describes direct links between neighborhood choice and socioeconomic mobility, particularly as it relates to spatial assimilation and ethnospatial advantage.

Social Status and Perception of White Neighbors

The following explains distinctions in how this advancement was described in relation to having White neighbors. While neighborhood racial composition was typically ranked low in importance (1.7. or 2.3 for coethnic and White neighborhood residents, respectively), interviewees had strong opinions about their perception of White residents. Homeowners in White neighborhoods saw living with White residents as increasing their social mobility. In contrast, those who lived in coethnic neighborhoods described increased social status because they did not have to live in proximity to Whites. These perspectives may reflect implicit biases that both groups have towards other racial groups.

A number of respondents expressed that living in a White neighborhood reflected a higher socioeconomic status because of the people and amenities tied to a predominantly White neighborhood. These perspectives align with the spatial assimilation framework. Lang grew up in a working-class ethnic neighborhood and compared its safety with her current area:

I just know that it's not as bad as where I grew up. I mean because I hear it in the news and you don't hear much here. And I think it's because of the racial... [whisper] Like you see more Whites and you don't see as much Black or Hispanic people in the neighborhoods, mostly Caucasians and then you see the occasional Asian people in the neighborhood (Vietnamese, White neighborhood).

Matthew also attributed better public amenities to his White neighborhood. He mentioned how “some of the ethnic neighborhoods unfortunately trend with higher crime, higher poverty levels and so on” (Mexican, White neighborhood). Mia connected White neighborhoods with class in contrast to Latino neighborhoods: “I think that Latinos that stay together don't always progress. I

think the ones that are in the White neighborhoods, as you say, the more classier [sic] neighborhoods, they strive for something better” (Hispanic, White neighborhood). She is then distancing herself from other Latinos, and instead is associating her experiences with the latter group because of her neighborhood choice. Similar to spatial assimilation, Mia is describing how staying in a coethnic area will hinder her ability to “progress,” and she believes her move to a White neighborhood will her succeed.

Ben shared that he perceived White neighborhoods to have higher amenities because White residents are more invested in maintaining the neighborhood:

I’m trying to be, trying to think of how I want to say this. In some ways, I have a preconception that White people care about their neighborhood more than other cultures... so, because of that, that neighborhood is better because everyone in that neighborhood is making sure that neighborhood is better...I think White people, they’re going to try and take care of their property definitely a lot more. There’s a difference between making your property better and making the neighborhood better, so you can care about your neighborhood and say I’m going to make sure my grass is green but you don’t care if the next door neighbor does. But my preconception is that with White people, I care that my next door neighbor is crappy and I’m going to bring it up at the next neighborhood meeting (Vietnamese, White neighborhood).

For many reasons, homeowners tied their status to having White residents in their areas.

On the other hand, residents in particularly Asian neighborhoods felt socially more comfortable because they did not have to think about White residents’ judgment. Aditi described in-depth the importance of feeling accepted in her neighborhood, which she associates with the existence of coethnic institutions:

When there’s ethnic foods, then there’s people around then there’s people around that are more accepting of people of color, so that would be important...I don’t know if I can speak for all Asian Americans, like my husband grew up in a totally White community, his parents clearly did not care that there were no Asians around. For me, I grew up in an Asian community and I loved growing up in an Asian community...it gave me a stronger sense of self and stronger sense of like I never had that kind of insecurity or inferiority that maybe other people have that didn’t grow up in Asian dominated communities...I don’t care about White people’s acceptance because that’s not a priority in my life, it’s just where I’m happier (Indian, Asian neighborhood).

Aditi felt more comfortable with her coethnic neighbors, but she also found elevated social status by not being made to feel inferior. Jake expressed similar values and shared that there is “just kind of familiarity, that kind of feeling you just, you’re with the same type of people, so you would imagine that you have kind of the same priorities or importance” (Chinese, Asian neighborhood). Jessica described feeling comfort with living in an ethnic neighborhood, adding ideas about being an outsider: “When I’m in spaces where it’s just Whites, I feel very much like an outsider and uncomfortable so I think living in those communities with all Whites, I think I might, I might be a little concerned” (Chinese, Asian neighborhood).

These homeowners are shielded from White discrimination and judgment, which helps them to perceive themselves beyond inferior to White residents (Lacy, 2004). Consequently, their social mobility was elevated in the coethnic neighborhoods. They also found other benefits as described including quality schools, low crime, and being able to purchase a house. These interviewees then follow ethnospatial advantage because they aim to live with neighbors of similar racial/ethnic background for improved neighborhood amenities.

However, these perspectives were primarily among Asian residents in coethnic areas. As previously described, Los Angeles has a longer history of middle-class Asian neighborhoods compared to Latino neighborhoods. Some of these Asian neighborhoods also had higher home values than nearby White areas, such as Cerritos and Lakewood (see Table 3). Thus, these residents may more readily see their neighborhood choice as associated with socioeconomic mobility than Latino homeowners. Los Angeles Latino neighborhoods are currently developing, and Latino homeowners may have similar experiences in years to come. While their homes were not worth as much as other neighborhoods, as previously discussed, Latino interviewees still shared how purchasing a home was to help advance their family and live in neighborhoods that were better than where they lived as a child.

Social Networks and Housing Resources

In large part, respondents did not use formal coethnic institutions to assist with homeownership. For financing, homeowners used mainstream banks and did not report any challenges to access a lender or broker; only one respondent used an ethnic bank. While minority and immigrant-serving homebuying organizations exist in Los Angeles, none of the interviewees used these institutions. Aditi was the exception and used ethnic media for housing—she used a Chinese realtor and Chinese newspapers to advertise when she was subletting her home (Indian, Asian neighborhood). Interviewees were then of higher socioeconomic means because they either had the means to purchase a home using their own resources and/or could rely on their social networks for financial support and connections to mainstream lenders.

Rather than formal ethnic resources, interviewees used informal social networks to help with homeownership. These networks gave advice, references, and financial support. Of all the social networks, family members were the most frequent form of support. The majority of respondents consequently gave and/or received familial assistance, even though proximity to family/friends was ranked as of middle importance. One interviewee did not use family for assistance nor give family support.

Respondents gave or received housing assistance in one of three ways: financial support, lodging, and/or referrals to organizations or individuals in the real estate industry. There were some distinctions in assistance given or received based on the neighborhood. A majority of homeowners in coethnic neighborhoods received money to help with homebuying, while only a few of them gave money. Though interviewees in coethnic neighborhoods did not give as much financial support, about a third of them provided family members with lodging. On the other hand, a third of interviewees in White neighborhoods received money from family and a majority financially supported family members.

These patterns resulted in part from different expectations of family and interdependence. First, residents in White neighborhoods had more of an independent perspective of money and family than residents in coethnic neighborhoods. A number of interviewees shared that they do not ask family for money. For example, Daniela explained that Latinos “turn to family, usually it’s always first.” However, she distanced herself from these Latinos and continued, “As opposed to me, I’ll try to get to the banks first, go to the bank institutions and see if they can assist me” (Mexican, White neighborhood). She is thus comfortable using banks and knows how to navigate them if she were to need them. Charles similarly did not view himself as similar to other Asians. He stated that he was:

...not financially connected to [his family], I am pretty independent...whereas I feel like a lot of other Asians that I do know, family, it’s that support system, I think that they feel like it gives them a safety net whereas I don’t need that support system (Vietnamese, White neighborhood).

These quotations reflect similar sentiments as respondents in White neighborhoods who saw their neighborhood choice as a way to disassociate from other coethnic residents. While they attribute relying on family to expectations, they describe how they instead do not follow these supposed cultural values. Unconsciously, these homeowners may associate financial interdependence as a barrier to their own socioeconomic mobility and independence, which may be more valued among their White residents. Hazel was persistent to not borrow money: “I made it a rule not to, I’ve been asked, but I made a rule not to ever do that” (Mexican, White neighborhood). Lang attributed her perspective of money to pride rather than cultural values: “I’m really prideful. I don’t ask for money from my parents, even if they offer. I say no, I don’t need it, I don’t want your money” (Chinese, White neighborhood).

In contrast, interviewees in coethnic neighborhoods were open to borrowing or receiving gifts of money from family. Lorenzo described a struggle to get money for the down payment:

“We had to scrounge every savings, we had to take money out of our retirement. Grandma helped too, my parents loaned me money to start this too” (Mexican, Latino neighborhood). However, he perceived it as a collective accomplishment rather than negative feelings about relying on family. Chanthy also needed her parents’ support: “I mean I think cost is a huge factor. I don’t think we could’ve moved [here] if my parents didn’t help us. So you know, just cost wise we probably would’ve ended somewhere else close by, but not [here]” (Thai, Asian neighborhood). Truong explained his interdependent relationship with family and money:

I mean, unlike Western culture where once you’re 18 you’re pretty much on your own, Asian families typically stick together very much and for me personally if I ever had to run into financial problems I’m sure my parents would help me out immensely. Whether that’s for everyone I’m not sure but I’m still very certain that Asian parents will not abandon their kids in times of stress. If they have the means, then yeah (Vietnamese, Asian neighborhood).

Truong then found strength and pride in familial connections, which he attributes to cultural values, in contrast to his strong comparison to Western parents who “abandon” their children.

Homeowners in White neighborhoods also relayed this cultural expectation, even if they did not use these connections. Rather, it was an expectation that family members would help with homebuying if need be, and these expectations were shaped by respondents’ understanding of their racial or cultural background. Isabella attributed interdependency to culture and generational aspects. Her husband is third generation Mexican and “far removed from his Hispanic culture.” She continued, “I’ve learned that there are differences. We don’t see the same family values, it’s not about extended family anymore, it’s about raising your own family and what values you can pass down to your own family” (Mexican, White neighborhood). She found that acculturated Latinos are more independent, such as her husband. Addison similarly shared:

Americans tend to have more of that nuclear family. Latinos tend to stick together, and you can pick each other up together... and once you start moving off into the second and the third generations, you know they grow up here, and they live more in a nuclear type of model (Mexican, White neighborhood).

In this explanation, Addison is attributing “Americans” to Whites. Latino and Asian homeowners in coethnic neighborhoods felt more comfortable to use some of these familial resources because of cultural expectations. While these connections were also made for those in White neighborhoods, they did not access these resources because they took pride in their independence from family and financial self-sufficiency.

Implications and Conclusion

This study illuminates potential aspects of ethnospatial advantage, which posits that middle- and high-income coethnic neighborhoods form as a means for immigrant/minority socioeconomic mobility by providing residents with race- and class-based resources.

Homeowners chose middle-class coethnic or White neighborhoods for socioeconomic mobility and to access their preferred neighborhood amenities, including schools, safety, or coethnic institutions and neighbors.

However, these homebuyers described their perceptions of and preferences for these amenities differently. Interviewees in White neighborhoods presumed that the area offered quality schools and lower crime, at times without much information beyond their impressions of the area because they associated White neighbors to these amenities. In contrast, residents in coethnic neighborhoods relied more on social networks to gather information, which confirms my first hypothesis. They preferred to use these connections and accepted values that they attributed to cultural background, including family interdependence. Middle-class Latino and Asian homebuyers also considered their purchases in different ways to improve their status. Those who did not want to live socially below Whites intentionally selected coethnic areas. Interestingly, neighborhood racial/ethnic composition and ethnic businesses were consistently ranked as one of the least important homebuying factors. Yet, they may have unconscious

understandings of neighborhood choice and neighborhood racial composition that were explicated during interviews.

My hypothesis about formal ethnic institutions in coethnic neighborhoods was not supported. While there is evidence they knew of some ethnic resources related to real estate, they mostly used family connections. Homeowner perceptions of familial expectations were shaped by connections to their own racial/ethnic or cultural background, which varied among interviewees. Lee and Zhou (2015) describe similar mechanisms that affected parents' expectations of educational attainment among Chinese and Vietnamese families. The interview questions also did not allow enough data collection on reliance of ethnic institutions—respondents could be asked to identify locations of places and businesses they have frequented in the last month to provide more concrete analyses of these connections.

Additionally, interviewees may not have required formal institutional support because they were able to purchase a house using their own and/or familial resources. Housing nonprofits typically serve lower-income homebuyers, either because of restricted program requirements and/or these clients may not have the social connections to help with homebuying. Future studies can examine more formal real estate institutions and interactions with Latino and Asian homeowners, which may be more important for middle- or higher-income households, to assess how these institutions play a larger role for less advantaged homebuyers in these neighborhoods.

The study also offers areas for future research. These findings may not currently apply to metropolitan regions with newer waves of migrants. Los Angeles has a significant concentration of ethnic resources and institutions because of its long history of immigration. Thus, respondents in White neighborhoods were able to access ethnic businesses outside of their neighborhood by driving, at times 15 to 20 minutes distance. Cities with recent migrants such as Atlanta or Portland may not have as many options for Asian or Latino homebuyers. Also, Los Angeles has

an expensive housing market, and homebuyers need access to significant capital. In other regions, homeowners encompass a broader range of socioeconomic statuses and may experience greater disparities in public and private amenities. However, Los Angeles may reflect patterns that may emerge in other geographies that have increasingly non-White populations. Homeowners in diverse ethnic neighborhoods across the country can be interviewed to better ascertain if the findings reflect growing patterns in the U.S.

Second, the study does not disaggregate by ethnic or racial groups. Those in Asian neighborhoods have higher home values than those in Latino areas. Also, the majority of respondents were of Mexican, Chinese, and Vietnamese background because they comprise the majority of the target neighborhoods. It would be important for future studies to examine if there are distinctions by national origin or racial/ethnic group background because of existing literature that has demonstrated impacts of differing migration histories on housing outcomes (for example, Cahill & Franklin, 2013; Ong, Pech, & Pfeiffer, 2014; Rugh, 2015). Also, Latino middle-class neighborhoods may still be increasing in socioeconomic status, and studies can examine neighborhood changes over time.

Other studies can also compare the findings with middle-class Black neighborhoods (Cashin, 2000; Lacy, 2004; Pattillo, 2005). The findings may be applicable to other middle-class Black families because all of the respondents spoke English and were 1.5 or second generation. These respondents were acculturated and were not as restricted as other immigrants due to English proficiency. On the other hand, the findings may not apply because of differences in immigration histories. Those who migrated or whose parents were immigrants may have come to the U.S. with more capital because of changing visa laws, particularly those from Asia.

The study was unable to test whether these residential choices improved a family's status over time. Interviews are constrained in that they rely on participant accounts. If interviewees

have implicit biases or make decisions unconsciously, they may not be able to describe these phenomena (Greenwald & Krieger, 2006). Other studies can build on these findings and follow homeowners before and after they move to examine socioeconomic changes.

Still, the findings offer a framework for understanding ethnospatial advantage and why middle-class ethnic neighborhoods are growing in the Los Angeles region. The interviewees offer a deep account of why homeowners are looking for neighborhoods that reflect their class and racial identities and biases. The singular path of moving up in status and out of a coethnic concentration does not always apply—coethnic areas do not always equate with poorer neighborhoods. These diverse middle-class neighborhoods offer homeowners options, depending on their connections to their cultural values and ethnic social networks.

Planners and policymakers may experience conflict in balancing racial integration and designing neighborhoods that may indirectly reify class and racial segregation. Much of housing programs work to desegregate minority and immigrant neighborhoods because of previously described evidence of concentrated poverty. Thus, planners and policymakers may not know how to best support areas of racial concentration without institutional disadvantage out of concern that concentration will result in poverty.

Planners may also experience contestation as residents evolve, particularly when a dominant group created the structures that shaped the neighborhood. For example, Lung-Amam (2017) describes tensions in Fremont, California over building codes that reflect older White resident post-World War II aesthetics versus the “monster homes” of new Asian immigrants who sought to build homes that reflect multigenerational households, busy lifestyles, and modern aesthetics.⁴³ In the end, planners and policymakers normalized standards that prioritized

⁴³ In contrast, see Nicolaides and Zarsadiaz’s (2017) study of Los Angeles San Gabriel Valley suburbs, in which some of the neighborhoods work to preserve White resident aesthetics through regulatory bodies, White resident political actions, builders, and Asian residents who associate these designs with elevated socioeconomic status.

preserving the existing neighborhood character, which was set by White residents, and inadvertently marginalized non-White residents who could afford to live in this area.

As the study finds, racial concentration is not always analogous with concentrated poverty. Thus, policymakers and planners can no longer assume that all homeowners will buy into White neighborhoods, particularly as the country continues to diversify. Rather, public institutions can work to build more inclusive neighborhoods by implementing actions that would benefit a broader public and be proactive in supporting ethnic-based resources. There are a number of studies that already demonstrate the challenges with planning for diversity and when planners fail to be inclusive (Cheng, 2010; Harwood, 2005; Lung-Amam, 2017; Saito, 1993; Watson, 2006). These challenges are exacerbated when planners and policymakers have a different background than new residents. If residents choose to live with coethnic neighbors, they may feel more empowered in the planning process and greater acceptance.

Yet, planners and policymakers should also work to acknowledge class divisions in these neighborhoods. As with other middle- and upper-income neighborhoods, there may be residents who are unable to afford to stay or buy into these areas. Local planners and governments should work to acknowledge income inequalities while supporting the growing diversity of residents.

Racial composition is still an important factor for what a neighborhood has to offer its residents and neighbor interactions. Ethnospatial advantage offers a new framework to understand how class and race intersect, as some homeowners have a preference for people or businesses that reflect their background and/or have interdependent relationships with their families. The study findings also identify how race still has an important role in everyday interactions (Vazquez, 2011), including the homebuying process, which socializes and helps individuals build their families and establish their place in American society.

Appendix 1. Interview Guide

Homeowner Experience and Neighborhood Choice Survey

Interview # _____

A. WARM-UP QUESTIONS

To start, I'd like to ask a few general questions.

1. When did you purchase your home?
2. Can you tell me what you value the most about your neighborhood?
3. What would you like to change about your neighborhood?

B. HOMEOWNERSHIP EXPERIENCE

4. Have you previously owned a home?
 - a. [If yes] How did it affect this home purchase experience?
 - b. [If no, move to next question]

Now I'd like for you to think back to [year of purchase], just before you made your move. In the next few questions, let's talk about your home purchase experience.

HOME SEARCH PROCESS

5. Where were you living in [year of purchase]?
6. Where did you look for housing?
 - a. What about each area attracted you?
7. Did you receive advice about choosing where to live?
 - a. [If yes] What advice did you receive?
 - i. From whom did you receive this advice?
 - b. [If no, move to next question]
8. Did you face any constraints in choosing a neighborhood? That is, did you want to live somewhere, but could not for some reason?
 - a. Could you elaborate on these constraints you faced?
9. If you did not have these constraints, where would you ideally live in Los Angeles County?
10. Please rank the following factors 1 through 10 and their importance in deciding where to buy your home. 1 indicates the most important factor, while 10 indicates the least important factor. [If interviewing with spouse/partner, clarify to fill out individually.] We will discuss each in more detail after:
 - a. Price
 - b. Housing design or form
 - c. Safety
 - d. Commute time/job considerations
 - e. School quality
 - f. Investment value
 - g. Proximity of family/friends
 - h. Location of co-ethnic businesses
 - i. Entertainment options
 - j. Racial/ethnic composition
11. Are there other factors besides these 10 factors that were also important in your home buying decision?
12. Was there a specific type of housing design or size you were looking for? For example, certain square footage, # of bedrooms and bathrooms, accessory dwelling unit, backyard space, etc.
13. When was your house built?

- a. How did the age of the house influence your homebuying decision, if at all?
- 14. Did you hear about the safety or crime in the neighborhood before purchasing your home?
 - a. Could you elaborate on where you heard this information, and what the source said?
- 15. When searching for a home, what was your occupation?
- 16. Where was your job located?
- 17. How long was your commute?
- 18. Now let's talk about the schools in your neighborhood. Did you search for neighborhood school information when searching for a home?
 - b. [if yes]: What information did you find out?
 - i. From whom/where did you find this information?
 - c. [If no, move to next question]
- 19. When you were searching for a home, did you have children?
 - d. [If yes] How many children did you have at the time?
 - i. How old were they?
 - e. [If no, move to question 23]
- 20. Did having children impact the type of house you were looking for?
 - f. [If yes] Could you elaborate?
 - g. [If no, move to next question]
- 21. Were any of your children attending school at the time?
 - h. [If yes] What school(s) did they attend?
 - i. [If no, move to next question]
- 22. When searching for your home, did you use a realtor?
 - a. [If yes, ask a-d] How did you find this person?
 - b. What was the racial/ethnic background of this person?
 - c. What did you like about the realtor?
 - d. What did you dislike?
 - e. [If no, move to next question]

HOME FINANCE PROCESS

Now, I'd like to talk about different organizations or institutions that may have helped you while purchasing your current home.

- 23. Did you receive advice on the homebuying process?
 - a. [If yes] What advice did you receive?
 - ii. From whom did you receive this advice?
 - b. [If no, move to next question]
- 24. Did you need financial help to buy your home? For example, did you receive any assistance from your family?
 - j. [if yes, continue on. If no, skip to question 30.]
- 25. Did you need to get financing to buy your home? [If yes, continue on. If no, skip to question 31.]
- 26. What kind of loan do you have?
 - k. Does your loan have any restrictions that affected your home purchase experience?
- 27. Did you have any difficulty obtaining financing?
 - l. What in particular was the trouble?
- 28. Did you use any financial institutions or companies in the homeownership process?
 - a. [If yes, ask a-d.] Which one(s) did you use?
 - b. [If ethnic institutions] Could you describe why?
 - a. Could you also explain how you used the financial institution(s)?

- b. What were the benefits of doing so? E.g., what service did they offer or if there were helpful experiences.
 - c. Did you experience any drawbacks?
 - c. [If mainstream institutions] Could you describe why?
 - a. Could you explain how you used the financial institution(s)?
 - b. What were the benefits of doing so? E.g., what service did they offer or if there were helpful experiences.
 - c. Did you experience any drawbacks?
 - d. [If no, move to next question]
- 29. Did you seek help from a housing counseling agency or nonprofit?
 - a. [If yes, ask a-d] What was the organization?
 - b. Why did you choose to use them?
 - c. What were the benefits of doing so? E.g., what service did they offer or if there were helpful experiences.
 - d. Did you experience any drawbacks?
 - e. [If no, move to next question]

C. PARENT/FAMILY HOMEOWNERSHIP EXPERIENCES

Let's move onto talking about your parents' and family experiences with homeownership.

- 30. Did your parents own a house when you were growing up?
 - m. [If yes] Did your parents fix up the house, renovate? (How did they take care of their house?)
 - n. Did your parents ever talk to you about homeownership while you were growing up?
- 31. How would you describe your parents' economic class while you were growing up?
- 32. Did you imagine you would own a home while growing up?
 - o. Can you elaborate why?
- 33. Have you ever assisted family members because of housing difficulties? [PROBE: Housing difficulties can include difficulties with paying rent or a mortgage or providing a place to stay.]
 - p. [If yes] What was the particular trouble?
 - i. In what ways did you assist them?
 - q. [If no, move to next question]
- 34. Have you ever asked family members for help with housing difficulties?
 - r. [If yes] What was the particular trouble?
 - i. In what ways did they assist you?
 - s. [If no, move to next question]

D. ASIAN/LATINO HOMEOWNERSHIP EXPERIENCES

The next couple of questions relate to [Asian/Latino] homeownership experiences and their neighborhoods.

- 35. What would you say are the main factors that [Asians/Latinos] use when choosing where to live?
 - a. What would you say at the main factors that [Asians/Latinos] like you who are middle-class, [1, 1.5, 2nd] generation, in their 30s and 40s, and English speaking?
- 36. Overall, would you say that [Asians/Latinos] who live in ethnic neighborhoods are better off, worse off, or about the same as those who move to similar middle-class non-ethnic neighborhoods?

The next few questions relate to understanding how ethnic neighborhoods may protect homeowners during times of economic stress.

37. During financial difficulties, what resources do you think [Asians/Latinos] utilize to help them with housing issues?
38. Have you had coworkers or friends who experienced housing challenges?
 - a. [PROBE: This can include financial (difficulty paying rent/mortgage) or non-financial (experienced foreclosure and needing a place to stay)
 - b. [If yes] What resources did they turn to for assistance?
 - c. [If no, skip to next question.]
39. To your knowledge, was your neighborhood affected by the recent recession?
 - d. [PROBE: For example, were there homes that foreclosed, did home values decline, or do you know any neighbors who had difficulty paying their mortgages?]
 - e. [If yes] How was your neighborhood affected?

E. ROLE OF ETHNIC NETWORKS

I want you to think about your connection to [Asian/Latino] or co-ethnic networks and resources that are inside and outside of your neighborhood relevant to housing.

40. Do you have family that live in your neighborhood?
 - a. If so, who?
 - b. If yes, how often do you visit your family?
 - c. How did family affect your decision to [move to/stay in] your neighborhood?
41. Do you have friends that live in your neighborhood?
 - a. If yes, how often do you meet with these friends?
 - b. How did friends affect your decision to [move to/stay in] your neighborhood?
42. How would you describe your relationships with your neighbors?
 - f. [PROBE: For example, would you feel comfortable asking any of them for a favor, like to look after your house if you were out of town?]
43. Do you participate in any social organizations or recreational activities?
 - a. If yes, could you elaborate on your involvement?
 - b. If no, do you participate in these organizations outside of the neighborhood? Could you describe your involvement?
44. Do you participate in a religious organization?
 - a. If yes, could you elaborate on your involvement?
 - b. If no, do you participate in these organizations outside of the neighborhood? Could you describe your involvement?
45. Do you participate in any professional organizations?
 - a. If yes, could you elaborate on your involvement?
 - b. If no, do you participate in these organizations outside of the neighborhood? Could you describe your involvement?
46. [If have children] What different activities do your children participate in?
 - g. Where are these activities located?
47. If you encountered financial issues, would you feel comfortable using these social connections already described (family, friends, professional organizations, religious organizations, etc)?
 - b. [If yes] Which would you use and why?
 - c. [if no, move to next question]
48. Have you previously lent money to individual(s) in these networks (family, friends, professional organizations, religious organizations, etc)?
 - h. [If yes] Could you elaborate on the situation?

- i. [If no, move to next question]

E. PARTICIPATION IN OTHER ACTIVITIES/SERVICES

- 49. Where do you predominantly bank?
 - a. Which location do you bank at? [PROBE: what are the nearest major cross streets?]
- 50. Do you participate in any housing-related activities? For example, a homeowner association or neighborhood watch program?
 - j. [If yes] can you describe your involvement?
- 51. Where do you predominantly go for grocery shopping?
 - k. Where is the grocery store located?
- 52. Where do you predominantly go retail shopping?
 - l. Where are the shops located?
- 53. Do you use ethnic services (e.g., hair salon/barber shop, ethnic grocery store)?
 - a. If yes, what kind?
 - b. Where are these ethnic services?
- 54. When you go out for fun, what do you usually do? This can include eating out, watching movies, recreational sport, and other activities.
Let's discuss each of these individually:
 - a. For [activity 1] where do you typically go?
 - b. For [activity 2] where do you typically go?
 - c. [If applicable] For [activity 3] where do you typically go for these activities?
 - d. [If applicable] For [activity 4] where do you typically go for these activities?

F. CONCLUDING QUESTIONS

We are almost done. The next few questions relate to reflecting on the future of your home and homeownership experience.

- 55. Do you foresee living in this neighborhood for the next 5 years?
 - a. What in particular makes you say so? [if purchased more than 4 years ago]: If you had to sell your home, do you think you would get about what you paid for it, including major improvements or additions, more than what you paid, or less than what you paid?
[if purchased within 4 years]: If you had to sell your home in 5 years, do you think you would get about what you paid for it, including major improvements or additions, more than what you paid, or less than what you paid?
 - a. How would this compare if you lived in an [ethnic/White] neighborhood?
- 56. [If live in a White neighborhood] Did you consider a mostly [Latino/Asian] neighborhood?
 - a. [If yes] Can you tell me what attracted you to an ethnic neighborhood?
 - b. [If no] Can you elaborate on why not?
 - c. Why did you eventually choose [neighborhood]?
- 57. [If live in an ethnic neighborhood] Did you consider a White neighborhood?
 - a. [If yes] Can you tell me what attracted you to a White neighborhood?
 - b. [If no] Can you elaborate on why not?
 - c. Why did you eventually choose an ethnic neighborhood?
- 58. If you had to choose between a predominantly [Latino/Asian] neighborhood and a predominant White neighborhood, where would you live and why?
- 59. If you could re-do the homebuying process, would you change anything?
- 60. To summarize our conversation, what has homeownership meant to you?

G. DEMOGRAPHIC QUESTIONS

To conclude, I'd like to ask you a few questions about your background. [Only ask questions that weren't answered during the interview; fill out the other questions that were answered during the interview.]

61. How would you describe your race or ethnicity?
62. Family composition:
Married/domestic partner? Y _____ N _____
63. What language do you prefer to speak at home? _____
64. Where were you born?
65. [IF NOT NATIVE-BORN] When did you move to the United States? _____
66. Where did you grow up?
67. What the highest level of education you have completed?
 - Did not graduate from high school
 - High school graduate
 - Completed some college, no degree
 - Bachelor's degree/Associate's degree
 - Graduate or professional degree
68. How old are you?

That's all of the questions I have for you.

69. Are there any other comments/questions that you would like to discuss before we conclude the interview?

[Turn off recorder]

The formal part of the interview is finished. I have turned off the recorder. Thank you for talking with me about your experiences living in Los Angeles. I have a few housekeeping questions before we conclude the interview.

1. [IF PHONE/ONLINE INTERVIEW] Where would you like me to send the \$25 gift card?
2. Would you be available to do a follow up interview if I have other questions?
 - a. What is the best way to contact you?
3. Do you know of any [Asian/Latinos] who currently live in Los Angeles County who would be interested in participating in an interview about their homeownership experiences? If so, could you provide me with their contact information?
4. Would you like to receive a summary of the research study's main findings?
 - a. How should I send it to you?
5. Do you have any questions or suggestions for me?

Appendix 2. Detailed Information about Interviewees

Interviewee Name	Age	Sex	Racial/Ethnic Group	Married ?	Children, (# of children)	1 st time homebuyer	US Born ?	Highest Degree
ETHNIC NEIGHBORHOOD								
Santiago	35	M	Mexican	Y	Y (2)	Y	Y	Graduate
Sofia	29	F	Latina	Y	Y (1)	Y	Y	Bachelor's
Julia	41	F	White-Hispanic	Y	Y (1)	Y	Y	High School
Elizabeth	26	F	Mexican	Y	N	Y	Y	Bachelor's
Irene	41	F	Mexican	Y	Y (2)	Y	Y	Bachelor's
Lorenzo	42	F	Mexican	Y	Y (3)	N	Y	Associate's
Luna	43	F	Guatemalan	Y	Y (2)	Y	N	Associate's
Sara	33	F	Mexican	Y	Y (1)	N	N	Bachelor's
Jessica	37	F	Chinese	Y	N	Y	Y	Graduate
Thomas	39	M	Chinese	Y	N	Y	Y	Bachelor's
Angela	40	F	Chinese	N	Y (2)	Y	N	Bachelor's
Chanthy	40	F	Thai	Y	Y (1)	Y	Y	Graduate
Aditi	42	F	Indian	Y	Y (2)	Y	Y	Graduate
Alicia	30	F	Chinese	Y	N	Y	Y	Bachelor's
Emma	49	F	Taiwanese-Japanese	Y	Y (2)	Y	Y	Graduate
Jake	32	M	Chinese	Y	Y (1)	N	Y	Graduate
Truong	32	M	Vietnamese	Y	N	Y	Y	Graduate
David	30	M	Korean	Y	N	Y	Y	Bachelor's
Harper	32	F	Pilipina	Y	Y (1)	Y	N	Bachelor's
WHITE NEIGHBORHOOD								
Isabella	46	F	Mexican	Y	Y (3)	Y	N	Some College
Daniela	41	F	Mexican	N	Y (2)	Y	Y	Bachelor's
Matthew	43	M	Mexican	Y	Y (1)	Y	Y	Some College
Mia	55	F	Hispanic	Y	Y (7)	Y	Y	High School
Mateo	57	M	Chicano	Y	Y (2)	Y	Y	Some College
Addison	37	F	Mexican	Y	Y (2)	Y	N	Some College
Ben*	31	M	Vietnamese	Y	N	Y	Y	Bachelor's
Pam*	31	F	Vietnamese	Y	N	Y	Y	Bachelor's
Penelope	44	F	Chinese	Y	Y (1)	Y	N	Graduate
Leah	38	F	White-Japanese	Y	N	Y	Y	Some College
Lang	35	F	Chinese	Y	N	Y	Y	Bachelor's
Maya	34	F	Chinese-Vietnamese	Y	Y (3)	N	Y	Graduate
Pari	43	F	Indian	Y	Y (1)	N	N	Graduate
Charles	38	M	Vietnamese	Y	N	Y	Y	Graduate
Miguel	39	M	Mexican	Y	N	Y	Y	Graduate
Hazel	45	F	Mexican	Y	Y (1)	N	Y	Bachelor's
Mackenzie	40	F	Guamanian-Pilipino-Japanese	Y	Y (2)	N	N	Bachelor's
Kenneth	36	M	Pilipino	Y	Y (1)	Y	N	Graduate

Note: *married to each other. Names are pseudonyms to protect homeowner identities.

References

- Aguilar-San Juan, K. (2005). Staying Vietnamese: Community and place in Orange County and Boston. *City & Community*, 4(1), 37-65. doi: 10.1111/j.1535-6841.2005.00102.x.
- Alba, R. D., & Logan, J. R. (1993). Minority proximity to Whites in suburbs: An individual-level analysis of segregation. *American Journal of Sociology*, 98(6), 1388-1427.
- Alba, R. D., Logan, J. R., Stults, B. J., Marzan, G., & Zhang, W. (1999). Immigrant groups in the suburbs: a reexamination of suburbanization and spatial assimilation. *American Sociological Review*, 64, 446–460.
- Allen, J. P., & Turner, E. (1996). Spatial patterns of immigrant assimilation. *Professional Geographer*, 48, 140-155.
- Alonso, W. (1964). *Location and land use: Towards a general theory of land rent*. Cambridge, MA: Harvard University Press.
- Anselin, L. (1995). Local indicators of spatial association—LISA. *Geographical Analysis*, 27, 93–116.
- Basolo, V., & Nguyen, M. T. (2009). Immigrants' housing search and neighborhood conditions: A comparative analysis of Housing Choice Voucher holders. *Cityscape*, 11(3), 99-126.
- Buendia, E., Ruiz, A., Martinez, A. G., Sykes, E., & Fisk, P. (2017). Latino neighborhood choice: Suburban relocation. In N. Area, E. Buendia, & R. Helfenbein (Eds.), *Deterritorializing/reterritorializing: Critical Geography of Educational Reform* (pp. 233-250). The Netherlands: Sense Publishers.
- Cahill, M. E., & Franklin, R. S. (2013). The Minority Homeownership Gap, Home Foreclosure, and Nativity: Evidence from Miami-Dade County. *Journal of Regional Science*, 53(1), 91-117. doi: 10.1111/jors.12014.

- Carcamo, C. (2015, August 5). Latinos' rising fortunes are epitomized in Downey. *The Los Angeles Times*. Retrieved from <http://www.latimes.com/local/la-me-downey-latinos-20150805-story.html>.
- Cashin, S. D. (2000). Middle-class Black suburbs and the state of integration: A post-integrationist vision for metropolitan America. *Cornell Law Review*, 86, 729-776.
- Charles, C. Z. (2003). The dynamics of racial residential segregation. *Annual Review of Sociology*, 167-207.
- Chavez, C. (2008). Conceptualizing from the inside: Advantages, complications, and demands on insider positionality. *The Qualitative Report*, 13(3), 474-494.
- Chen, C., & Lin, H. (2011). Decomposing residential self-selection via a life-course perspective. *Environment and Planning A*, 43, 2608-2625. doi: 10.1068/a43571.
- Cheng, W. (2010). "Diversity" on Main Street? Branding race and place in the new "majority-minority" suburbs. *Identities*, 17(5), 458-486. doi: 10.1080/1070289X.2010.526880.
- Chiswick, B. R., & Miller, P. W. (2005). Do enclaves matter in immigrant adjustment? *City and Community*, 4(1), 5-35. doi: 10.1111/j.1535-6841.2005.00101.x.
- Cho, C.-J. (2001). Amenities and urban residential structure: An amenity-embedded model of residential choice. *Papers in Regional Science*, 80, 483-498.
- Chung, S-Y., & Brown, L. A. (2007). Racial/ethnic residential sorting in spatial context: Testing the explanatory frameworks. *Urban Geography*, 28(4), 312-339.
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publishing.

- Darrah, J., & DeLuca, S. (2014). "Living here has changed my whole perspective": How escaping inner-city poverty shapes neighborhood and housing choice. *Journal of Policy Analysis and Management*, 33(2), 35-384. doi: 10.1002/pam.21758.
- De la Roca, J., Ellen, I. G., & O'Regan, K. M. (2014). Race and neighborhoods in the 21st century: What does segregation mean today? *Regional Science and Urban Economics*, 47, 138-151. doi: 10.1016/j.regsciurbeco.2013.09.006.
- Denton, N. A., & Massey, D. S. (1988). Residential segregation of Blacks, Hispanics, and Asians by socioeconomic status and generation. *Social Science Quarterly*, 69, 797-817.
- Fang, D., & Brown, D. (1999). Geographic mobility of the foreign-born Chinese in large metropolises, 1985-90. *International Migration Review*, 33(1), 137-155.
- Fischel, W. A. (2009). *The homevoter hypothesis*. Harvard University Press.
- Flippen, C. (2004). Unequal returns to housing investments? A study of real housing appreciation among black, White, and Hispanic households. *Social Forces*, 82(4), 1523-1551. doi: 10.1353/sof.2004.0069
- . (2010). The spatial dynamics of stratification: Metropolitan context, population redistribution, and Black and Hispanic homeownership. *Demography*, 47(4), 845-868. doi: 10.1007/BF03214588
- Freeman, L. (2000). Minority housing segregation: A test of three perspectives. *Journal of Urban Affairs*, 22(1), 15-35.
- Friedman, S., Gibbons, J., & Galvan, C. (2014). Declining segregation through the lens of neighborhood quality: Does middle-class and affluent status bring equality? *Social Science Research*, 46, 155-168.

- Friedman, S., & Rosenbaum, E. (2004). Nativity status and racial/ethnic differences in access to quality housing: Does homeownership bring greater parity? *Housing Policy Debate*, 15(4), 865-901.
- Greenwald, A. G., & Krieger, L. H. (2006). Implicit bias: Scientific foundations. *California Law Review*, 94(4), 945-968.
- Harwood, S. A. (2005). Struggling to embrace difference in land-use decision making in multicultural communities. *Planning, Practice & Research*, 20(4), 355-371. doi: 10.1080/02697450600766746.
- Hing, B. O. (1993). *Making and remaking Asian America through immigration policy 1950-1990*. Stanford, CA: Stanford University Press.
- Immergluck, D. (2009). *Foreclosed: High-risk lending, deregulation, and the undermining of America's mortgage market*. New York: Cornell University Press. doi: 10.7591/9780801458828.
- Intrator, J., Tannen, J., & Massey, D. S. (2016). Segregation by race and income in the United States 1970-2010. *Social Science Research*, 60, 45-60. doi: 10.1016/j.ssresearch.2016.08.003
- Jargowsky, P. (1997). *Poverty and place: Ghettos, barrios, and the American city*. New York: Russell Sage Foundation.
- Joffe, H. (2012). Thematic analysis. In D. Harper & A. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners* (pp. 328-337). Chichester, UK: Wiley-Blackwell.
- Kalita, S.M. (2005). *Suburban sahibs: Three immigrant families and their passage from India to America*. New Brunswick, NJ: Rutgers University Press.

- Kimelberg, S. M. (2014). Middle-class parents, risk, and urban public schools. In A. Lareau & K. Goyette (Eds.), *Choosing homes, choosing schools* (pp. 207-236). New York: Russell Sage Foundation.
- Lacy, K. R. (2004). Black spaces, Black places: Strategic assimilation and identity construction in middle-class suburbia. *Ethnic and Racial Studies*, 27(6), 908-930. doi: 10.1080/0141987042000268521.
- Lareau, A. (2014). Schools, housing, and the reproduction of inequality. In A. Lareau & K. Goyette (Eds.), *Choosing homes, choosing schools* (pp. 169-206). New York: Russell Sage Foundation.
- Lee, J., & Zhou, M. (2015). *The Asian American Achievement paradox*. New York: Russell Sage Foundation.
- Li, W. (2009). *Ethnoburb: The new ethnic community in urban America*. Honolulu: University of Hawai'i Press.
- Lichter, D. T., Parisi, D., & Taquino, M. C. (2015). Toward a new macro-segregation? Decomposing segregation within and between metropolitan cities and suburbs. *American Sociological Review*, 80(4), 843-873. doi: 10.1177/0003122415588558.
- Logan, J. R., Zhang, W., & Alba, R. D. (2002). Immigrant enclaves and ethnic communities in New York and Los Angeles. *American Sociological Review*, 67, 299-322.
- Loo, C. (1986). Neighborhood satisfaction and safety: A study of a low-income ethnic area. *Environment and Behavior*, 18(1), 109-131.
- Lung-Amam, W. (2017). *Trespassers?: Asian Americans and the battle for suburbia*. Oakland, CA: University of California Press.

- Masden, C., Grevet, C., Grinter, R., Gilbert E., & Edwards, W. K. (2014). Tensions in scaling-up community social media: A multi-neighborhood study of Nextdoor. *CHI 2014: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 3239-3248. doi: 10.1145/2556288.2557319.
- Massey, D. S. and N. A. Denton. (1985). Spatial assimilation as a socioeconomic outcome. *American Sociological Review*, 50(1), 94-106.
- Mayer, C., & Pence, K. (2008). *Subprime mortgages: What, where, and to whom?* (Finance and Economics Discussion Series). Retrieved from <http://www.federalreserve.gov/pubs/feds/2008/200829/200829pap.pdf>.
- McCabe, B. (2016). *No place like home: Wealth, community & the politics of homeownership*. New York: Oxford University Press.
- Mellnik, T., Cameron, D., Lu, D., Badger, E., & Downs, K. (2016). "America's great housing divide: Are you a winner or loser?" *Washington Post*. Retrieved from <https://www.washingtonpost.com/graphics/business/wonk/housing/overview/>.
- Myers, D., & Gearin, E. (2001). Current preferences and future demand for denser residential environments. *Housing Policy Debate*, 12(4), 633-659.
- Nicolaides, B. M., & Zarsadiaz, J. (2017). Design assimilation in suburbia: Asian Americans, built landscapes, and suburban advantage in Los Angeles's San Gabriel Valley since 1970. *Journal of Urban History*, 43(2), 332-371. doi: 10.1177/0096144215610773.
- Ong, P. M., Pech, C., & Pfeiffer, D. (2014). *The foreclosure crisis in Los Angeles*. Los Angeles, CA: UCLA Luskin School of Public Affairs Lewis Center California Policy Options.
- Pattillo, M. (2005). Black middle-class neighborhoods. *Annual Review of Sociology*, 31, 305-329. doi: 10.1146/annurev.soc.29.010202.095956.

- Pfeiffer, D. (2016). Racial equity in the post-civil rights suburbs? Evidence from US regions 2000-2012. *Urban Studies*, 53(4), 799-817. doi: 10.1177/0042098014563652.
- Raymond, E., Wang, K., & Immergluck, D. (2016). Race and uneven recovery: neighborhood home value trajectories in Atlanta before and after the housing crisis. *Housing Studies*, 31(3), 324-339. doi: 10.1080/02673037.2015.1080821.
- Redfin. (2018). "GreatSchools Rating." Author: <https://www.redfin.com/definition/great-schools-rating>.
- Rugh, J. S. (2015). Painting the Whole Picture: Foreclosure Rates among Asian American Ethnic Groups in Orlando, Florida, and Phoenix, Arizona. *AAPI Nexus: Policy, Practice and Community*, 13(1), 149-177.
- Saegert, S., Fields, D., & Libman, K. (2009). Deflating the dream: Radical risk and the neoliberalization of homeownership. *Journal of Urban Affairs*, 31(3), 297-317. doi: 10.1111/j.1467-9906.2009.00461.x.
- Saito, L. T. (1993). Asian Americans and Latinos in San Gabriel Valley, California: Ethnic political cooperation and redistricting 1990-92. *Amerasia Journal*, 19(2), 55-68.
- Taylor, P., Kochhar, R., Fry, R., Velasco, G., & Motel, S. (2011). *Wealth gaps rise to record highs between Whites, Blacks and Hispanics*. Washington, D.C.: Pew Research Center.
- Tiebout, C. (1956). A pure theory of local expenditures. *Journal of Political Economy*, 64(5), 416-424.
- Toussaint-Comeau, M., & Rhine, S. L. W. (2004). Tenure choice with location selection: The case of Hispanic neighborhoods in Chicago. *Contemporary Economic Policy*, 22(1), 95-110. doi: 10.1093/cep/byh008.

- Turner, M. A., Santos, R., Levy, D. K., Wissoker, D., Aranda, C., Pitingolo, R., & The Urban Institute. (2013). *Housing discrimination against racial and ethnic minorities 2012*. Washington, DC: U.S. Department of Housing and Urban Development.
- Vallejo, J. A. (2012). *Barrios to burbs: The making of the Mexican American middle-class*. Stanford: Stanford University Press. doi: 10.11126/stanford/9780804781398.001.0001.
- Vasquez, J. M. (2011). *Mexican Americans across generations: Immigrant families, racial realities*. New York: New York University Press.
- Vo, L. T., & Danico, M. Y. (2004). The formation of post-suburban communities: Koreatown and Little Saigon, Orange County. *International Journal of Sociology and Social Policy*, 24(7/8), 15-45.
- Walton, E. (2012). Resurgent ethnicity among Asian Americans ethnic neighborhood context and health. *Journal of health and social behavior*, 53(3), 378-394. doi: 10.1177/0022146512455426.
- . (2015). Making sense of Asian American ethnic neighborhoods: A typology and application to health. *Sociological Perspectives*, 58(3), 490-515. doi: 10.1177/0731121414568568.
- Watson, V. (2006). Deep difference: Diversity, planning and ethics. *Planning Theory*, 5(1), 31-50. doi: 10.1177/1473095206061020.
- Wen, M., Lauderdale, D. S., & Kandula, N. R. (2009). Ethnic neighborhoods in multi-ethnic America, 1990-2000: Resurgent ethnicity in the ethnoburbs? *Social Forces*, 88(1), 425-460.
- Word, D. L., Coleman, C. D., Nunziata, R., & Kominski, R. (2008). *Demographic aspects of surnames from Census 2000*. Washington, DC: Bureau of the Census. Retrieved from <http://www2.census.gov/topics/genealogy/2000surnames/surnames.pdf>.

- Wright, R., Ellis, M., & Parks, V. (2005). Re-placing Whiteness in spatial assimilation research. *City & Community*, 4(2), 111-135. doi: 10.1111/j.1540-6040.2005.00107.x.
- Wyly, E. K., Atia, M., Foxcroft, H., Hammel, D. J., & Phillips-Watts, K. (2006). American home: Predatory mortgage capital and neighbourhood spaces of race and class exploitation in the United States. *Geografiska Annaler, Series B: Human Geography*, 88(1), 105-132.
- Yu, Z., & Myers, D. (2007). Convergence or divergence in Los Angeles: Three distinctive ethnic patterns of immigrant residential assimilation. *Social Science Research*, 36, 254-285.
- Zhou, M. (1992). *Chinatown: The socioeconomic potential of an urban enclave*. Philadelphia: Temple University Press.
- Zonta, M. M. (2012). The continuing significance of ethnic resources: Korean-owned banks in Los Angeles, New York and Washington DC. *Journal of Ethnic and Migration Studies*, 38(3), 463-484.

CHAPTER 5: CONCLUSION

My dissertation provides evidence of an alternative immigrant pathway, in which minorities and immigrants can increase their socioeconomic status without moving out of coethnic spaces. This trajectory to American incorporation contrasts other literature that emphasizes coethnic dispersion or proximity to Whites to preserve home values and access to high-quality neighborhood amenities. Instead, these middle-class coethnic or White neighborhoods can offer options for homeowners, depending on their preference for amenities. Additionally, my findings show that there are housing benefits associated with coethnic middle-class neighborhoods. Residents have lower rates of default and foreclosure, and these home values may be similar or higher in value than residents in more predominantly White areas. My project also provides nuances in both methodology and analytical framework to examine racial/ethnic group differences by income. This nuance is important because immigrant communities are bifurcated by income as a result of immigration policies that favor professionals and low-income workers—these differences are pronounced along and within ethnic groups.

It is important to note several overall limitations and areas for future research. First, in examining neighborhood and housing choice, my project does not follow homeowners while they are buying a house. Thus, it does not trace their decision-making process and how they are working with real estate agents, lenders, and social networks. It also does not include household socioeconomic indicators before they moved. Thus, I am relying on participant recounting their experiences and/or associating socioeconomic status with default/foreclosure outcomes and neighborhood indicators. Future studies can examine households before and purchasing a home, to identify changes in socioeconomic status and the homebuying process. Lareau's (2014) study of middle-class families and school and housing choice found that homebuyers discussed the

importance of school quality but instead chose neighborhoods based on information from family and friends who were of similar “status culture” (p. 172). A similar study of immigrant middle-class households would also inform literature on neighborhood choice.

The study can also be extended to middle-class Black neighborhoods and households. However, there are several factors to consider. Surname methods are not effective for distinguishing Blacks (see Chapter 2). Thus, analyses of Black neighborhoods typically focus on predominantly Black neighborhoods (for example, Raymond et al., 2015). Ethnospatial advantage stipulates that the target group does not have to comprise a majority of the area, but instead has a sizable concentration. This distinction would affect the racial composition of examine neighborhoods, as ethnospatial advantage can occur in more integrated and diverse neighborhoods.

Additionally, there are likely different mechanisms that create or sustain minority middle-class neighborhoods—Black middle-class areas may be externally reinforced, while Latino or Asian middle-class neighborhoods may be internally reinforced. There are consistent findings that show how Blacks prefer more integrated neighborhoods relative to other groups, yet other racial groups prefer to live in areas without a sizable number of Black residents (Charles, 2006; Clark, 1991, 1992; Ellen, 2000; Farley et al., 1978; Massey & Denton, 1993). In contrast, previous literature has shown that Latino or Asian neighborhoods form out of language needs, ethnic goods and resources, and coethnic preferences (Charles, 2006; Chiswick & Miller, 2005; Nguyen, 2004; Zhou, 1992). These dynamics may affect not only community formation, but also housing benefits associated with minority and immigrant middle-class neighborhoods and how households access class- and group-specific resources. A comparison study would illuminate if

there were racial group differences and minority or immigrant access to socioeconomic opportunities.

Finally, a comparison case study of another metropolitan area is warranted to understand if the findings are unique to Los Angeles or also extend to other diverse or diversifying regions in the United States. Los Angeles has a more expensive housing market than most areas in the country (see Chapter 3). The Southern California region also has had a significant immigrant population since World War II; other emerging gateways have seen a growth of immigrants after the 1990s due to economic expansion and refugee resettlement programs (Singer, 2008). These areas have mixed evidence of residential segregation. Park and Iceland (2011) found that immigrants are less segregated in newer gateways than established immigrant gateways; in contrast, Hall (2013) found that immigrants in new areas were more likely segregated. These regional effects may affect whether racial concentration is associated with more improved housing outcomes with class- and ethnic-based social networks.

These areas of future research can expand our understanding of minority and immigrants achieving economic parity without spatial assimilation or racial dispersion. In the traditional understanding of White suburbs as the pinnacle of homeowner success, planners may inadvertently support the public amenities and resources that exist in these areas over minority neighborhoods. They may also push for other neighborhoods to imitate these resources with the intention of helping communities of color. However, planning can move beyond reinforcing the privilege or stereotyping of space based on the racialization of residents. If practitioners are open to non-White methods of community economic development, the field can improve how it supports minority and immigrant neighborhoods while addressing the perpetuation of neighborhood inequality.

References

- Charles, C. Z. (2003). The dynamics of racial residential segregation. *Annual Review of Sociology*, 167-207.
- . (2006). *Won't you be my neighbor?: Race, class and residence in Los Angeles*. New York: Russell Sage Foundation.
- Chiswick, B. R., & Miller, P. W. (2005). Do enclaves matter in immigrant adjustment? *City and Community*, 4(1), 5-35.
- Clark, W. A. V. (1991). Residential preferences and neighborhood racial segregation: A test of the Schelling Segregation Model. *Demography*, 1, 1-19.
- . (2006). Residential preferences and residential choices in a multiethnic context. *Demography*, 3, 451-466.
- Ellen, I. (2000). *Sharing America's neighborhoods: The prospects for stable racial integration*. Cambridge: Harvard University Press.
- Farley, R., Schuman, H., Bianchi, S., Colasanto, D., & Hatchett, S. (1978). Chocolate city, vanilla suburbs: Will the trend toward racially separate communities continue? *Social Science Research*, 4, 319-344.
- Hall, M. (2013). Residential integration on the new frontier: Immigrant segregation in established and new destinations. *Demography*, 50(5), 1873-1896.
- Lareau, A. (2014). Schools, housing, and the reproduction of inequality. In A. Lareau & K. Goyette (Eds.), *Choosing homes, choosing schools* (pp. 169-206). New York: Russell Sage Foundation.
- Massey, D. A., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge: Harvard University Press.

- Nguyen, M. T. (2004). The self-segregation of Asians and Hispanics: The role of assimilation and racial prejudice. *Race and Society*, 7, 131-151.
- Park, J., & Iceland, J. (2011). Residential segregation in metropolitan established immigrant gateways and new destinations, 1990-2000. *Social Science Research*, 40(3), 811-821.
- Raymond, E., Wang, K., & Immergluck, D. (2015). Race and uneven recovery: Neighborhood home value trajectories in Atlanta before and after the housing crisis. *Housing Studies*, 31(3), 324-339.
- Singer, A. (2008). Twenty-first-century gateways: An introduction. In A. Singer, S. W. Hardwick, & C. B. Brettell (Eds.), *Twenty-first century gateways: Immigration incorporation in suburban America* (pp. 3-30). Washington, DC: The Brookings Institute.
- Zhou, M. (1992). *Chinatown: The socioeconomic potential of an urban enclave*. Philadelphia: Temple University Press.