Differential Pathways of Neighborhood Change and Perceived Neighborhood Reputation

Lydia Wileden[1]
Department of Sociology and Public Policy
Population Studies Center
Institute for Social Research
University of Michigan

Paper Proposal Submitted to the
Population Association of America 2019 Annual Meeting

Abstract: Within the study of neighborhood change processes, researchers have generally under-theorized the importance of *reputation* as a key measure and mechanism of neighborhood evolution. To correct for this, this paper seeks to understand how neighborhoods' demographic and economic trajectories between 1980 and 2016 influence contemporary perceptions of neighborhood reputation. Using newly-collected data on neighborhood knowledge and reputation from an online panel of respondents in Los Angeles, Chicago, and Washington, D.C., this paper examines how substantively different pathways of neighborhood change influence the reputational hierarchy of neighborhoods within a given city. Initial results examining static neighborhood characteristics and aggregate measures of neighborhood change offer a puzzle, alternately emphasizing the importance of contemporary racial composition or longitudinal economic change as the most significant determinants of neighborhood prestige. Future research will clarify these results using group based trajectory models to reveal how typologies of neighborhood change pathways influence neighborhood reputation.

[1] Correspondence should be addressed to Lydia Wileden, Population Studies Center, Institute for Social Research, University of Michigan, 426 Thompson St., Ann Arbor, MI 48106 (email: lwileden@umich.edu). This research was supported in part by fellowship funding through the NICHD training grant to the Population Studies Center at the University of Michigan (T32 HD007339).

I. Introduction

The processes driving neighborhood change have been of persistent interest to social scientists for decades. While researchers have developed many theories of how neighborhoods change over time – from ecological models of invasion-succession[i] to models of residential preference and neighborhood selection[ii] – much of this work has relied on hypothetical neighborhoods, rather than real urban contexts, or made implausible assumptions about how people experience and perceive urban spaces to draw conclusions. Additionally, these models generally ignore the ways in which a place's status elevates or declines over time – and how status shifts may draw resources and people. As a result of these shortcoming, existing theories fail to fully model processes underlying neighborhood change. In particular, researchers have under-theorized the importance of *reputation* as a key mechanism and measure of neighborhood evolution.

To correct for this, this paper seeks to understand how neighborhoods' demographic and economic trajectories between 1980 and 2016 influence contemporary perceptions of neighborhood reputation. Reputation here is defined as the meaning and esteem attributed to a place that situates it within the urban hierarchy[iii]. Existing literature suggests that reputation can be consequential for a neighborhood and its residents – limiting social and economic opportunities[iv], drawing or repelling residents and business[v]. Many studies have sought to understand the determinants of neighborhood reputation, but these studies have generally examined questions of reputation or desirability cross-sectionally[vi], ignoring the reality that reputations may be based on how a place has evolved over time and not just its current circumstances[vii]. For example, it is unknown whether places held in the highest esteem by city residents in 2018 are those that have long been the most elite and exclusive – possibly with a long-standing, wealthy white population – or those that have seen recent and dramatic shifts in composition – like a rapidly gentrifying neighborhood.

As a first step to understanding the role of reputation in the dynamic feedback loop of neighborhood evolution – influencing the choices of residents and investment, which shapes a place's reputation and further influences the choices of residents and investment – this paper uses unique data to interrogate how levels, changes, and trajectories of neighborhood demographic and socio-economic factors contribute to perceptions of neighborhood reputation. Its goal is to understand how substantively different pathways of neighborhood change influence the reputational hierarchy of neighborhoods within a given city. Initial results examining static neighborhood characteristics and aggregate measures of neighborhood change offer a puzzle, alternately emphasizing the importance of contemporary racial composition or longitudinal economic change as the most significant determinants of neighborhood prestige. Future research will clarify these results using group based trajectory models to reveal how typologies of neighborhood change pathways influence neighborhood reputation.

II. Data and Methods

Data

Social scientists' failure to incorporate reputation and perception into models of neighborhood evolution is in part due to a lack of available data.[viii] In an effort to correct this data deficiency, I developed and fielded a unique, online pilot survey to capture differences in neighborhood knowledge and the salience of neighborhood reputations in three US cities. The survey was conducted between January and April of 2018 via Qualtrics, an online survey platform, and asked respondents in Los Angeles, Washington, D.C., and Chicago[ix,x] about their

knowledge of and experience with neighborhoods in their city of residence. Qualtrics was also contracted to recruit survey participants from a pool of existing online research panel participants, using city-specific quotas that were proportionally representative of each city's population by race/ethnic category and gender parity.[xi] In total, the survey collected 1566 responses (Los Angeles N = 614; Chicago N = 533; D.C. N = 410).

For each city, respondents used interactive maps[xii] to indicate their neighborhood of residence and other city neighborhoods with which they were familiar. In total, respondents could select from 83 neighborhoods in Los Angeles, 83 neighborhoods in Chicago, and 72 neighborhoods in Washington, D.C. After selecting neighborhoods on the maps, respondents were surveyed about their knowledge of those neighborhoods, including how they would assess the neighborhoods' reputations. Specifically, respondents were asked, "How would you assess the reputation of [NEIGHBORHOOD X]?" Answers could range from 1 (very undesirable) to 4 (very desirable). Pooling responses by neighborhood for both residents and non-residents, I use this data to develop an average measure of perceived neighborhood reputation for each neighborhood in my data set across the three cities (N=238). Finally, to explore the neighborhood dynamics underlying reputation assessments, I merge this data with longitudinal demographic and socio-economic census data from 1980 to 2016[xiii], weighted to conform to neighborhood boundaries as defined in the interactive survey maps.

Methods

Using this data, I first estimate multivariate regressions to explore the relationship between neighborhood reputations and levels and aggregate changes in neighborhood characteristics. The first (1) model examines the relationship between reputations and neighborhood demographics in 2016. This model asks, "How do current neighborhood conditions relate to perceptions of neighborhood reputation?" The second (2) model is motivated by the understanding that neighborhood reputation may not reflect current neighborhood conditions but rather changes in the neighborhood over time. It uses variables capturing the aggregate percent change in a characteristic between 1980 and 2016 to ask, "How do changes in neighborhood conditions over time relate to current perceptions of neighborhood reputation?" A third (3) model combines these two previous models, to try to understand how current neighborhood conditions and changes in those conditions over time influence perceptions of neighborhood reputations. As discussed below, future research will build on the findings of these models to develop trajectory typologies of neighborhoods and will ultimately assess how disparate pathways of neighborhood evolution – not just aggregate measures of change – influence perceptions of neighborhood reputation.

III. Preliminary Results

Results from these initial models (see Table 1) suggest two divergent stories about the determinants of neighborhood reputations. The first (model 1), tells a story about the relevance of neighborhood racial composition, suggesting that current racial demographics are the most substantive determinants of neighborhood reputation, while economic factors appear to have no effect on reputation. From this static model of composition's effect on reputation, I find that neighborhoods with higher proportions of white residents are more desirable, such that a standard deviation increase in percent white (26 percent) corresponds to a third of a point increase in the reputation of a neighborhood – a significant increase given that reputation here is measured on a four-point scale. Surprisingly, I find a smaller but positive effect for percent black

as well, such that a standard deviation increase in percent black (34 percent) corresponds with a tenth of a point increase in neighborhood reputation.[xiv]

In contrast, model 2 – examining the relationship of change in neighborhood characteristics and neighborhood perception – emphasizes the relevance of changes in economic composition as a driver of neighborhood reputation. This model suggests that increases in neighborhood household income between 1980 and 2016 most strongly predicts neighborhood desirability[xv]. A one-thousand-dollar increase in median household income corresponds with a nearly two-third point increase in neighborhood reputation. Meanwhile, changes in neighborhood racial composition over time do not appear to be major factors in determining neighborhood reputation. This finding contradicts the suggestion in the previous model that racial composition is the critical dimension to understanding neighborhood desirability.

A third model, that combines both 2016 levels and aggregate changes between 1980 and 2016, suggests that the truth lies somewhere in the middle. While the most strongly significant effects determining neighborhood reputation are driven by variables capturing levels of racial composition, I continue to find marginal significance for the effect of change in median household income over time.

Table 1. Neighborhood Characteristics and Average Neighborhood Reputation

	Model 1	Model 2	Model 3
2016 Levels			
% White	.0108***		.0097***
% Black	.0034***		.0034***
% Asian	.0078**		.0073*
% Homeowners	.0007		0.0021
Median Home Value (Thousands)	.0003*		.0004*
Median Rent (Thousands)	-.1871		-0.1528
Household Income (Thousands)	.0030*		0.0013
Population (Thousands)	-.0008		-0.0006
1980 - 2016 Change			
Δ % White		-.0067	0.0051
Δ % Black		.0000	.0000
Δ % Asian		.0004	.0027
Δ % Homeowners		-.0011	-.0035
Δ Median Home Value (Thousands)		.0082	-.0088
Δ Median Rent (Thousands)		-.4615***	-.0989
Δ Household Income (Thousands)		.6181***	.1446‡
Δ Population (Thousands)		-.0018	.0282
R^2	.567	.303	.581
F	37.57***	12.43***	19.12***

‡ = p<.10, * = p<.05, **=p<.01, *** = p<.001

IV. Analytical Plan

The contradictory nature of my initial findings may in part be explained away by models that better capture how neighborhoods have changed over time. Thus, as a next step to elucidate the role of neighborhood demographic and economic characteristics – past and present – in determining contemporary perceptions of neighborhood reputation, I plan to use group based trajectory models to capture not only that neighborhoods changed but the different pathways through which such change occurred. For example, the present, crude measures of change over time likely obscure important differences in change processes, capturing only differences in the beginning and end points of a variable. With these measures, a neighborhood that went from 5% to 50% white between 1980 and 2016 but saw all that change in the last decade appears in the above models as identical to a neighborhood that saw the same aggregate, but slower, linear change over time. Theoretically, there are many reasons to believe that these neighborhoods are substantively different from one another in ways that may affect their reputation. Using trajectory models will allow me to develop a typology of neighborhood change pathways between 1980 and 2016, and to ultimately gain greater clarity around how substantively different pathways of neighborhood change influence the reputational hierarchy of neighborhoods.

.

---

[i] Duncan and Duncan 1957; McKenzie 1924; Burgess 1925; Hoover and Vernon 1959

[ii] Krysan 2002; Charles 2003; Schelling 1971; Bruch and Mare 2006

[iii] This definition of reputation follows the work of Hortulanus 1995, as cited in Permentier, Van Ham, and Bolt 2008

[iv] Galster 2007, Wilson 1996

[v] Wacquant 1993

[vi] For a full discussion of the literature on factors contributing to neighborhood reputation, see Permentier, Van Ham, and Bolt 2008

[vii] For a notable exception, see Logan and Collver 1983

[viii] For examples of relevant studies that incorporate neighborhood reputation into their research, see Semyonov and Kraus 1982; Logan and Collver 1983; Permentier et al 2011; Permentier 2012; Permentier et al 2008

[ix] The cities were selected because of their geographic diversity, relevance to urban research, and for the anticipated pervasiveness of neighborhood names in each city.

[x] Qualtrics leveraged IP locations of potential respondents to target recruitment to only those respondents living in each city. Additionally, the survey used three-step verification of a respondent's neighborhood of residence as a quality control measure to verify that respondents were actual city residents. Respondents were first required to answer the question, "Are you a resident of X city." Any negative response resulted in the termination of the survey. Respondents were then required to self-report the name of the neighborhood in which they lived in the city. Nonsensical responses and responses indicating residence in a suburb of the city were replaced following the initial data collection. Finally, respondents were required to select their neighborhood of residence on the map. Responses where the named neighborhood was not within a 30-minute drive (per Google Maps) of the centroid of the neighborhood selected on the survey map were also replaced in a second round of data collection.

[xi] Qualtrics was also contracted to recruit survey participants from a pool of existing online research panel participants, using city-specific quotas that were proportionally representative of each city's population by race/ethnic category and gender parity.

[xii] Maps for each city were developed to highlight neighborhood names and the spatial arrangement of neighborhoods within the city. Though neighborhood boundaries and names are understood by researchers to be subjective, it was important for consistency and ease of implementation to use pre-determined neighborhood names and boundaries in this research. Boundaries and neighborhood names were identified by comparing city-developed GIS shape files, other reputable place-mapping projects, and lists on place-based amenity websites like Zillow, OpenTable and AirBnB. In total, respondents could select from 83 neighborhoods in Los Angeles, 83 neighborhoods in Chicago, and 72 neighborhoods in Washington, D.C.

[xiii] Census data is from the Longitudinal Tract Database and the 2011-2016 American Communities Survey. LTDB data available here: http://www.s4.brown.edu/us2010/Researcher/Bridging.htm

[xiv] One possible explanation for the effect of white and black population on neighborhood reputation is the use of Hispanic population as the control group. This choice was made to highlight different potential effects in concentrations of white and black populations. Additionally, this effect might be driven by the different meanings of race across my three cities. While Chicago and DC are predominantly black-white cities, the sizeable Hispanic population in Los Angeles may attenuate some results.
[xv] All financial data and comparisons use 2010 dollars.