

Multiple Eviction: An Investigation of Chain Displacement in Dane County, Wisconsin

Urban Affairs Review
2021, Vol. 57(2) 527–551
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DOI: 10.1177/1078087419886114
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Abstract

Within a context dominated by the seemingly paradoxical juxtaposition of gentrification and abandonment in New York City during the early 1980s, Peter Marcuse developed an influential typology of displacement that can be conceptualized as a movement from the most readily observable forms of “last-resident” displacement to increasingly less measurable forms of “exclusionary displacement” and “displacement pressure.” While the typology depends heavily on the explanatory frame of demographic transition and the movement out of space, Marcuse also included the possibility of a contradictory form of “chain displacement” that often occurs in non- and/or pregentrification spaces without demographic change. Using geocoded data from 16 years of eviction records in Dane County Wisconsin, this research not only demonstrates the existence of chain displacement within specific neighborhoods, but also exposes sites of “multiple eviction” that combine with forms of disadvantage and relative demographic “stability” rather than patterns more characteristic of gentrification processes.

Keywords

displacement, chain displacement, eviction, neighborhood change, gentrification

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Introduction

Recent scholarship on evictions in the United States has raised important theoretical issues regarding how to accurately conceptualize urban displacement. Despite some variation in the emerging literature, *on the whole*, it has provided empirical evidence for the prevalence of displacement through eviction occurring *outside* the boundaries of gentrifying space in neighborhoods characterized more by chronic poverty and social precariousness rather than demographic transition toward more affluence and privilege or the reorganization and revaluation of local housing markets that are commonly associated with gentrification processes.

Locating eviction-based displacement in nongentrifying urban space potentially poses at least two problems for researchers concerned with evaluating the impact of displacement on households and neighborhoods. First, the prevalence of eviction in nonaffluent, nongentrifying urban space reinforces the contentious view that gentrification produces a relatively insignificant number of forced moves among poor renters (Desmond and Gershenson 2017; Freeman and Braconi 2004; Kasarda et al. 1997; Vigdor 2002). Not only does this view tend to run counter to established community-level observations and a small empirical literature linking eviction to gentrification (Chum 2015; Sims 2016; The Anti-eviction Mapping Project 2016), but it also threatens to destabilize the ontological foundation of gentrification itself since most of the analysis of the subject over the last half-century has tended to assume that there is either a strong and/or direct relationship between the two or that gentrification is defined principally through displacement as a way of distinguishing it from less politically controversial concepts such as “revitalization” or “redevelopment” (Lees, Slater, and Wyly 2008; Smith and Williams 1986).

A second, related issue arises due to methodological considerations regarding the use of eviction as a proxy for the larger process of urban displacement. A key feature of eviction relative to other forms of direct displacement—for example, “self-help” eviction and landlord harassment, rent increases, or lease nonrenewal—is the utilization of state power to remove people from property. The court documents, informant surveys, and observational data that are unique to this process have provided strong evidence that eviction is disproportionately experienced by poor, non-White, female-headed families (Desmond and Gershenson 2017; Hartman and Robinson 2003). Researchers have also found that success in the court room heavily favors property owners which further magnifies social disparities (Boston Bar Association Task Force on the Civil Right to Counsel 2012; Public Justice Center 2015; Seron et al. 2001). The combination of these issues suggests that rather than symbolizing

the “tip of the iceberg” of a larger undifferentiated displacement process—and therefore representative of urban displacement more generally—eviction may represent unique displacement processes employed by property owners within specific urban and regional contexts. Accordingly, eviction may assume different forms in different urban housing markets. In certain situations, eviction may occur predominately in nonaffluent, nongentrifying housing submarkets that are produced primarily through racial and economic exclusion, while in other contexts eviction may be induced through gentrification. The potential particularity of eviction consequently makes generalizable assumptions about the relationship between eviction and gentrification somewhat tenuous.

The two seemingly contradictory approaches—that is, eviction as a form of gentrification-induced displacement and eviction as a strategy enabled in what might be described as nongentrifying housing submarkets—lead to new directions in thinking about urban displacement. First, it suggests that different urban locations may produce more or less of each form of eviction-based displacement based on scalar differentiation. Not only do regional-scale dynamics in particular influence the history of built environments and their relationship to urban change—for example, “loft living” in Soho (Shkuda 2016; Zukin 1982) versus “weak-center” gentrification in Los Angeles (Reese, DeVerteuil, and Thach 2010)—but also uneven economic development between regions produces a range of housing market pressures that are experienced differently at the neighborhood scale. Regional differentiation might furthermore help explain some of the variance in eviction patterns found in characteristically rustbelt cities, such as Milwaukee (Desmond 2016), as well as in information- and technology-based sunbelt cities, such as San Francisco (The Anti-eviction Mapping Project 2016). Second, the possibility of different eviction processes facilitates new thinking regarding a larger urban geography of displacement and the various forms of displacement produced *within* urban systems—for example, gentrification-induced versus exploitation- or exclusion-based forms. The further potential for dynamic relationships among different, but proximate displacement geographies that may or may not occur through eviction and which are nested within regional unevenness—as Marcuse (1985) proposed—may, thus, expose determinate features of local displacement processes such as the geographical structure of tenure relations between property owners and renters at the urban scale that are crucial for structuring eviction.

Through an analysis of eviction in Dane County, Wisconsin, this research seeks to unravel some of these considerations. Toward that end, the article begins with a review of the literature on displacement which is, then, followed by an analysis of eviction according to some of the key concepts raised by previous scholars and, particularly, the concept of “chain displacement”

introduced by Peter Marcuse (1985). The findings show that rather than being primarily associated with gentrification or similar demographic transitions, eviction in the county is concentrated in neighborhoods experiencing chronic poverty and social precariousness. We conclude that this particular type of eviction-based displacement is facilitated by forms of structured exclusion that resonate with theories in urban geography such as housing submarkets and class-monopoly rent.

Literature Review

First-Wave Displacement Literature: From Succession to “Negro Removal”

Prior to World War II, the forced migration of people *within* U.S. urban systems¹ was rarely given attention by scholars. For example, one of the first urban models to highlight displacement presented it as an incidental part of an ecological process of equilibrium and succession among so-called “natural areas” (Park, Burgess, and McKenzie 1967). According to this Chicago School approach, forced moves were naturalized as group responses caused by external shocks—typically immigration—to stand-alone, unlinked urban systems that produced disequilibrium in the organic composition of the urban whole. The first scholarship explicitly addressing urban displacement in the United States however really begins following the Second World War as an attempt to expose the consequences engendered through the forced removal of households from “blighted” neighborhoods that were demolished under the urban renewal program.² Despite necessitating displacement by design, the program showed little concern for the problem of displacement. Initial assistance for displaced households was weak and localities were only required to develop a “feasible method for the temporary relocation of families displaced from the urban renewal area” (Hartman 1971, p. 747). Ensuing protest and neighborhood activism over what was increasingly understood as a form of racialized displacement—or “negro removal”—from many emerging community organizations gradually led to a strengthening of urban renewal relocation policies, such as minimum compensation assistance to displaced persons, as well as significant research documenting the consequences of urban renewal displacement on relocated households (Halpern 1995; Hartman 1971, 1974; Mollenkopf 1978; Teaford 1990; Zipp 2010). The growth of displacement research during this period—much of which was carried out or provoked by nascent community-based organizations (CBOs) and activist scholars—showed not only that blight was often employed as an ethnoracial strategy

by urban elites, but also that the experience of displacement was contingent on systems of “racial capitalism” (Robinson 1983). Consequently, this work showed that in many instances displaced non-White households were essentially reconcentrated in nearby racially segregated neighborhoods where they often faced repeated rounds of urban renewal *and* private market displacement (Hartman 1971).

Second-Wave Displacement Literature: Distinguishing Gentrification-Induced Displacement

As federal urban infrastructure development wound down or devolved into block grant programs in the early 1970s, a new so-called “back to the city” “urban renaissance” began to unfold initiating new forms of nonstate, decentralized displacement from within centrally located housing markets—what Hackworth and Smith (2001), referencing the uneven development produced through suburbanization, referred to as “real estate ‘frontiers.’” In this early post-urban renewal revitalization period, diverse inner-city (re)valorization processes became subsumed under a larger, albeit more imprecise concept, “gentrification,” that would frame the second wave of urban displacement literature.³ Thus, in addition to continuing to document the magnitude of displacement that was central to the earlier period of urban renewal-based displacement research (LeGates and Hartman 1982; Sumka 1979), one of the distinguishing aims of second-wave displacement literature was the effort to separate types of *in-place* investment given that early “postindustrial” inner-city revitalization (Ley 1996) unlike more state-centered efforts occurred in ways that often concealed both the process and the actors within housing markets.

Attention to distinguishing in-place investment was most clearly represented in the shift toward developing typologies of neighborhood investment that were employed to more accurately identify both the specific types of urban transformation and their unique relationships to displacement processes. For example, second-wave displacement literature in the late 1970s and early 1980s displayed a strong concern for distinguishing “incumbent rehabilitation”—that is, “physical improvement by incumbent residents . . . with no significant change in the socioeconomic status or characteristics of the [neighborhood] population” (Clay 1979, p. 7)—from upgrading neighborhoods experiencing resident turnover and demographic change. Not only was this distinction useful for elevating neighborhood demographic trends *as well as* physical improvement as key features of the gentrification process, but it also helped demonstrate the impact gentrifying neighborhoods could have on estimations of risk by residents in similar, often gentrification-adjacent, neighborhoods that might induce individual household

reinvestment strategies with minimal displacement impacts. In a representative study of this approach, Clay (1979) found that displacement in gentrifying neighborhoods in 30 cities in the United States was more than double the rate in neighborhoods characterized by incumbent upgrading. He furthermore noted that “displacement in an upgrading neighborhood is often voluntary movement” as “many of those who left [incumbent] upgraded neighborhoods could have afforded to stay” since “increases in rents and prices of houses were not nearly as high as they were in gentrification neighborhoods” (Clay 1979, p. 52). Put in other words, second-wave gentrification-based displacement research sought to disentangle the sometimes porous boundaries between direct and indirect displacement caused by different (re)investment processes.

The most significant and widely cited neighborhood typology-based analysis of displacement was produced by Grier and Grier (1978). The Grier and Grier (1978, p. 8) conceptualization is specific and involves three essential characteristics that define displacement moves as follows:

1. “. . . beyond the household’s reasonable ability to control or prevent; . . .”
2. “. . . [occurring] despite the household’s having met all previously-imposed conditions of occupancy”;
3. “. . . [making] continued occupancy by that household impossible, hazardous, or unaffordable.”

Using this definition to base an analysis of displacement in 14 cities, the authors calculated that among the various types of neighborhood processes—and contrary to Clay’s findings—gentrification was actually “a minor contributor to the overall displacement problem” (p. 17). The authors asserted “that the numbers displaced annually are no higher than the low hundreds for most cities, and probably do not exceed the low thousands even in the most active [sic], like Washington, D.C.” (p. iii). They ultimately conclude that “. . . [they] found virtually no statistics dealing expressly with displacement as a direct result of unaided private reinvestment or ‘gentrification’” (p. 17).

The Grier and Grier (1978) definition is important because it reflected a general shift within gentrification research during this period toward questions of neighborhood-level change as the principal source for determining causality given that the primary agents initiating displacement had become less readily observable. Building on this approach, Schill and Nathan (1983, p. 47) argued that previous research on displacement was essentially inadequate because it did not distinguish between similar outcomes with different causes such as when “reinvestment-related displacement . . . [results] from

forces that resemble disinvestment, as when a landlord withholds services to empty a building for speculative purposes.” Schill and Nathan consequently add two additional considerations to the three provided previously by Grier and Grier, emphasizing the specificity of “reinvestment” or gentrification-induced displacement which

4. “occurs as a result of *neighborhood* reinvestment or upgrading, through, for example, higher rents, conversion to condominiums, eviction for renovation, or increases in property taxes”;
5. “results in a *neighborhood* with tenants or owner-occupants of higher socioeconomic status, as measured by income, educational attainment, or occupation, than before” [emphasis added] (1983, p. 47).

One of the most important theoretical elaborations of how two radically different de- and revalorization processes could produce similar displacement outcomes was produced by Peter Marcuse (1985, p. 206) whose typology of “different ways of measuring displacement” consistently remains one of the most often cited references for a complex understanding of the range of displacement processes. Placed within a context of post-Fordist urban restructuring in New York City, Marcuse presents four types of displacement that are also explicitly intended to build on the Grier and Grier (1978) framework through the inclusion of increasingly less direct forms: (1) direct last-resident displacement, (2) direct chain displacement, (3) exclusionary displacement, and (4) displacement pressure. The first of these, “last-resident” displacement, generally refers to a method of operationalizing displacement based on residential moves from individual housing units and can occur in any location. The other categories however are forms of displacement that are rooted in neighborhood-level processes that differ “significantly and in a spatially concentrated fashion from changes in the housing market as a whole” (Marcuse 1985, p. 207). “Exclusionary” displacement in this context is more typical of gentrification but can occur in any context where tenants of similar socioeconomic backgrounds are “prevented from moving in” due to a reduction in available housing units from, for example, either rent increases *or* abandonment (Marcuse 1985, p. 206). In each context, “displacement pressure” also tends to encourage households to voluntarily displace themselves

[when] a family sees the neighborhood around it changing dramatically, when their friends are leaving the neighborhood, when the stores they patronize are liquidating . . . and when changes in public facilities, in transportation patterns, and in support services all clearly are making the area less livable. (Marcuse 1985, p. 207)

Finally, Marcuse includes an additional measure of “chain displacement” that considers previous households that were displaced “at an earlier stage in the physical decline of the building or an earlier rent increase” and, thus, might produce a displacement count that “[exceeds] the number of units from which displacement occurs” (Marcuse 1985, p. 206).

While much attention has been given to Marcuse’s intervention and especially the critique of the narrowness of direct, last-resident displacement as a method that often excludes both exclusionary displacement and displacement pressure, very little has been given to empirically testing the notion of chain displacement. Among the four types of displacement offered by Marcuse, chain displacement is unique because it is understood to be the only one of the four that occurs almost exclusively in pre- and/or nongentrifying contexts. Thus, whereas displacement pressure may occur in both gentrifying and nongentrifying circumstances and exclusionary displacement is essentially a gentrification-based form of displacement rooted in neighborhood change, chain displacement focuses attention on individual housing units or buildings nested within neighborhoods and considers multiple households among a similar demographic population that may have been displaced previously from the same location. Under this scenario, displacement—including eviction—may become a regular feature of a particular housing submarket that is undergoing neither revalorization nor demographic change and is defined principally by special structures, such as racial exclusion and even exploitation, as Desmond and Wilmers’ (2019) recent work suggests.

Third-Wave Displacement Literature: From Gentrification to Poverty-Induced Forced Mobility

The general concern over displacement that emerged in the late 1970s through the mid-1980s gradually fell to the background as scholarship centered around a more enduring gentrification process—vis-à-vis abandonment—and a “preoccupation with researching the consumer preferences of middle-class gentrifiers” (Slater 2009, p. 306). Interest in measuring displacement consequently waned during much of the 1990s until the mid-2000s when questions regarding the magnitude of displacement within gentrifying neighborhoods returned to academia through influential articles by Jacob Vigdor (2002) and Lance Freeman (Freeman 2005; Freeman and Braconi 2004). Vigdor’s (2002, p. 136) neoclassical analysis destabilized the assumed relationship between gentrification and displacement by arguing that “displacement is neither a necessary nor a sufficient condition” of gentrification. His results showed that, at least in Boston, “The exit of less educated households from units in gentrifying areas occurs no more frequently—and may indeed occur less frequently—than in other areas” (Vigdor 2002, p. 161).

Following Vigdor, Freeman's work directly addressed this methodological issue by employing counterfactuals to determine the relative magnitude of gentrification-based displacement. Freeman argued that without a baseline displacement rate—such as in the work of Schill and Nathan—researchers “cannot compare displacement rates in gentrifying and nongentrifying areas” without also estimating the “relative mobility of households in different types of neighborhoods” (p. 466).⁴ Freeman's method subsequently produced surprising results that were challenged by scholars who questioned the amount of selection bias that may have occurred through the process of gentrification itself as well as important considerations regarding the determination of the counterfactual control group which, as Newman and Wyly (2006, p. 28) point out,

includes residents of some of the poorest areas of the city including all of the Bronx and parts of Brooklyn and Queens with high poverty rates. We might expect that these residents move more frequently than those in other areas of the city, producing an artificially high standard to use as a comparison for displacement rates from gentrifying neighbourhoods.

The issue of how to properly measure gentrification-based displacement has recently been reoriented toward a concern over “everyday displacement” through a new group of scholars focusing on eviction as a proxy for displacement (Chum 2015; Desmond 2016; Sims 2016; Sullivan 2017). Through the use of new data to measure one form of displacement, this emerging scholarship further challenges the exclusive association with gentrification in the literature and places urban displacement more firmly within poverty, housing discrimination, and regional housing market dynamics. Not only does the shift resurface the effort to separate different types of local displacement as previous gentrification scholars attempted to do, but also, through a connection to different types of neighborhoods, collectively the work raises important theoretical questions that are commonly used to explain spatialized patterns of unequal exchange such as racialized housing submarkets (Courant 1978; Cutler, Glaeser, and Vigdor 1999) and class-monopoly rent (Harvey 1974). These geographic approaches assume that uneven spatial patterns form through restrictive or exclusionary structures to produce extramarket forces that determine forms of unequal exchange with regard to housing at the neighborhood level. The highly racialized process was originally described as a “Black tax” or the cost of segregation experienced by segregated households. More recent investigations into the subject have shown that while price premiums may not be immediately observable in housing cost differentials, they may be shown to exist when housing quality is taken into consideration (Bayer et al. 2017; Myers 2004). Applied to eviction, these contributions suggest that high-eviction neighborhoods may be better interpreted as special geographies

produced at the urban scale through various forms of exclusion—for example, poverty, structured scarcity, racism, and gentrification—such that the conditions for displacement through property owner mobilization of the state become reasonable at the neighborhood level.

Data and Methods

Eviction data for this research come from the ongoing, project-based work of a local, nonprofit housing organization, the Tenant Resource Center (TRC). The TRC manages Dane County's Eviction Mediation Court which provides tenants and property owners—most often represented by their agents—the opportunity to resolve conflicts regarding eviction filings. Through this work, TRC compiles eviction filing records (Tenant Resource Center, n.d.) from the weekly court case docket and sends an informational mailer notifying tenants with filings of the availability of services. One of the advantages of this dataset is that residential filings are immediately identified as part of the mailing process and, thus, it is a highly accurate representation of all residential eviction filings. Records from 2000 through 2016 were cleaned for quality, georeferenced using GPS Visualizer (www.gpsvisualizer.com/geocode), and filtered in ArcMap software (Environmental Systems Research Institute [ESRI] 2011) with a match rate of 91.26%, leaving 42,865 total observations. Georeferenced eviction filings were, then, aggregated to 2010 Census block group boundaries for further analysis.

Additional time series demographic and housing data based on 2010 block group boundaries were acquired from the National Historical Geographic Information System (NHGIS) (Manson et al. 2017). NHGIS researchers have adjusted the attributes and geographies of aerial units in the Census to allow comparisons across time at the neighborhood level. Similar quantitative measures of neighborhood change have been criticized previously (Spielman and Singleton 2015)—as well as the American Community Survey (ACS) itself (Spielman, Folchb, and Nagle 2014)—for applying inappropriate weights to small geographies resulting in large error margins. However, despite potential inaccuracies, we believe that NHGIS-modified ACS block group data can be used to effectively capture major features of neighborhood-level risk dynamics, especially when operationalized as a composite score (Lian, Struthers, and Liu 2016; Spielman and Singleton 2015).

Identifying Neighborhood Risk and Change

Foundational gentrification scholarship tended to place displacement at the center of both the concept and the process (Slater 2009). One result of this

focus was that gentrification researchers have not only tended to stress the difference between re- and deinvestment forms of displacement, but also developed an ecological tendency to define neighborhood types and trajectories. Recent versions of this approach have sought to demonstrate the presence or absence of gentrification through quantitative frameworks that “operationalize” the process. Most often, these attempts are based on the production of composite indices through a variety of methods including dimension reduction techniques and probability distributions of key housing market and demographic indicators to capture the two most frequently measurable axes of gentrification—that is, residential transition and the appreciation of house values (Freeman and Braconi 2004). More complex models delineate among various stages of gentrification and offer spatial frameworks that compare local indicator values with citywide figures. Others consider additional neighborhood improvements such as changes to pedestrian and transportation infrastructure (Bates 2013; Nathalie P. Vorhees Center 2014; Zuk et al. 2018). Quantifying neighborhoods in this way has been argued to lack precision (Landis 2016); however, composite scores that bring together a number of variables into an index have also been shown to be particularly valuable at larger scales and time frames when understanding broad shifts is desirable (Chapple and Zuk 2016; Landis 2016; Nathalie P. Vorhees Center 2014). From these works, at least six dimensions of neighborhood change with respect to gentrification have been employed recently. They are represented in Table 1.

Based on guidance from this literature, we chose 10 comprehensive variables from the 2006–2010 and 2012–2016 NHGIS–ACS five-year estimates (Table 2). We assume that these combined values may approximate relative neighborhood risk and/or vulnerability to tenure shocks or ecological threats to shelter and that such threats become observable when eviction filings are recorded. Variable values were converted to *z*-scores and totaled to form an unweighted neighborhood risk index for each time period.

To determine an appropriate typology of neighborhood change—or, more specifically, to investigate whether risk, approximated through a composite of these variables, increased or decreased in an individual neighborhood—index scores were first organized categorically into quintiles from extremely high to extremely low risk. Using quintile change as a basis allowed us to distinguish a typology of neighborhoods according to three general processes: (1) the maintenance of specific risk levels, or “continuous” risk, (2) increasing risk, and (3) risk reduction (Figure 1).⁵ Given our interest in displacement, certain movements are more interesting than others. We therefore constructed a limited typology consisting of 15 different movements—including five transitions within each general risk process—that is, maintenance, increase, and

Table 1. Dimensions of Neighborhood Change from Selected Recent Articles.

Dimension	Attribute
Relational urban space	Centrally located ^{a,b,c} Spatial association with neighboring units ^d
Household/family	Household/family income ^{b,c,d,e,f,g} Racial composition and/or proportions ^{d,f,h} Persons/families at or below poverty level ^{f,g} Household type ^{e,f} Children ^f Elderly ^f Year householder moved into unit ⁱ
Education	Post-secondary educational attainment ^{b,c,d,f,g,i} Private school attendance ^f Public school quality ^a
Housing	Tenure structure—renters/owners ^{d,e,f,i} Housing price/value ^{b,c,f} Age of housing stock ^b
Employment	Professional/technical/managerial occupations ^{e,f,g} (Un)employment ^e
Transportation	Transportation-oriented development (TOD) locations ⁱ

^aDing, Hwang, and Dvirngi (2015).

^bFreeman (2005).

^cMaciag (2015).

^dBates (2013).

^eAtkinson et al. (2011).

^fNathalie P. Vorhees Center (2014).

^gTimberlake and Johns-Wolfe (2017).

^hLogan and Zhang (2010).

ⁱSutton (2018).

^jChapple and Zuk (2016).

reduction. For example, to distinguish *possible* gentrification transitions, we distinguished those neighborhoods that were originally extremely high or high in risk but, then, experienced risk reduction to either high, medium, or low risk. Risk-increasing neighborhoods were similarly organized to distinguish those neighborhoods that were of low, medium, or high risk in the 2006–2010 index and whose risk index increased by at least another quintile during the following five-year ACS 2012–2016 period. Finally, neighborhoods that maintained their respective risk quintile level across the two indices were also identified (Table 3).

Table 2. Variables Included in Indices.

	Dimension	Variable description	Direction
1	Housing	% Owner-occupied housing units	
2	Education	% Population 25 or more with four-year college degree or more	
3	Education	% Age 3+ private school attendance	
4	Employment sectors	% Professional/managerial industry employees	
5	Racial segregation	Location quotient population non-Hispanic/Latino, White alone	
6	Racial segregation	Location quotient population Hispanic/Latino	Inverse
7	Racial segregation	Location quotient population non-Hispanic/Latino, Black or African-American alone	Inverse
8	Household	Median household Income	
9	Household	% Families female-headed w/own children	Inverse
10	Household	% Families with income at or below poverty level	Inverse

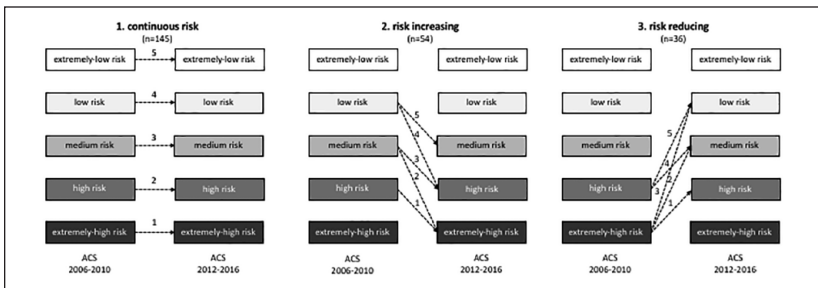


Figure 1. Neighborhood risk change typology.
 Note. ACS = American Community Survey.

Toward an Operationalization of Chain Displacement

To determine the presence of chain displacement in Dane County, we constructed scaffolded statistical analyses. First, we wanted to test the relationship between our neighborhood risk typology and a proxy of actual displacement through eviction filings. In total, 15 negative binomial regression models were employed to evaluate the relationship to eviction filings at

Table 3. Index Summary Statistics.

	Index 2006–2010	Index 2012–2016
N	298	298
M	0.13	0.12
Median	1.00	1.15
Mode	–24.527769 ^a	–30.926728 ^a
SD	5.92	6.07
Variance	35.08	36.85
Minimum	–24.53	–30.93
Maximum	14.15	11.85

^aMultiple modes exist. The smallest value is shown.

the block group level—the dependent variable—with the different neighborhood trajectories from our neighborhood typology which were coded as dichotomous independent variables. Consistent with the Marcuseian notion of chain displacement emphasizing displacement in neighborhoods not undergoing demographic transition, we hypothesized that *continuously* high- or *continuously* extremely high-risk neighborhoods—and *not* those that were potentially gentrifying (risk reducing) or risk increasing—would show strong positive associations with eviction filings.

Second, to capture the repeated in situ quality of chain displacement *vis-à-vis* other forms of displacement that may involve forced removal from housing or neighborhoods—what Davidson (2009) described as forced moves from abstract space—and consequently demographic transition, we further cleaned and organized our eviction filing records by the names of listed defendants taking into account the considerations outlined by Desmond’s Eviction Lab at Princeton University (Eviction Lab 2018). We compared names against case numbers and addresses to determine whether a particular name was the same defendant listed on other records. Yet, despite these efforts toward accuracy, given certain conventions regarding how court data are recorded—for example, 586 of 63,410 disaggregated records listed “et al.” along with a named defendant—and the inherent difficulty of distinguishing between different individuals with identical common names—we were careful not to make assumptions and erred on the side of aggregation rather than separation. Organizing the data by defendant allowed us to tabulate the frequency of eviction filings at the individual level to approximate repeated threats to eviction or the existence of multiple forced moves. Cases of “multiple eviction” filings were aggregated to block groups and, then, further organized by severity such that, in addition to all cases of multiple

eviction filings, we distinguish among the number of times defendants appeared on filings by reducing these data into two additional categories: (1) multiple evictions of defendants listed between four and nine times and (2) those listed from 10 to 17 times—with the latter being the maximum. Using the notion of chain displacement as a framework of analysis, we hypothesized that the aggregated cases of multiple eviction filings would show the strongest association with neighborhoods that were of continuously extremely high or continuously high risk.

Results

Neighborhood Risk and Eviction

Of our 15 regression models, only six demonstrated significant improvement from the null. These included four of the five neighborhood trajectories of risk maintenance and two out of the five risk-increasing trajectories. Among these two processes, only those neighborhoods that were characterized as continuously extremely high risk were positively associated with eviction counts. In fact, the exponentiated coefficient indicates that the incidence of eviction in continuously extremely high-risk neighborhoods is 5.42 times all other neighborhoods' predicted eviction filings—or, in other words, that it is 442% higher. By comparison, the exponentiated coefficients for the continuously medium-, low-, and extremely low-risk neighborhoods were 0.49, 0.27, and 0.15 meaning that the likelihood of eviction filings in these types of neighborhoods is progressively less than all other types of neighborhoods—that is, 51%, 73%, and 85% less, respectively. Somewhat surprisingly, we also found that certain neighborhoods of increasing risk from low positions within the 2006–2010 index to relatively higher risk positions in the 2012–2016 index were also negatively associated with a risk to eviction filings. For example, the exponentiated coefficients for risk-increasing low-to-high neighborhoods is 0.28 times (or 72%) *less* and risk-increasing low-to-medium neighborhoods is 0.38 times (or 62%) *less* than the predicted number of eviction filings in all other neighborhoods (Table 4).

While a certain amount of caution should be taken when interpreting data which have been transformed into categorical variables, as a whole, the results confirm that, within Dane County, particular neighborhood trajectories are important for conceptualizing urban displacement. For the most part, save low-risk neighborhoods that experienced some increased risk, only neighborhood continuity provided consistently meaningful results. These results furthermore show that eviction filings are tied to the highest risk neighborhoods undergoing relatively insignificant demographic change—for

Table 4. Negative Binomial Regression Results.

DV	Total eviction filings		Total multiple eviction filings		4–9 Multiple eviction filings		10–17 Multiple eviction filings					
	95% Wald CI		95% Wald CI		95% Wald CI		95% Wald CI					
	Exp(B)	Upper	Exp(B)	Upper	Exp(B)	Upper	Exp(B)	Upper				
Continuously extremely high risk	5.42***	3.8	7.7	5.86***	4.0	8.7	5.97***	3.9	9.2	7.28***	3.7	14.4
Continuously high risk	1.05	0.6	1.7	0.96	0.6	1.7	0.96	0.5	1.7	0.81	0.3	2.2
Continuously medium risk	0.49*	0.3	0.9	0.49*	0.3	0.9	0.50	0.2	1.0	0.22*	0.1	0.8
Continuously low risk	0.27***	0.2	0.5	0.25***	0.1	0.5	0.23***	0.1	0.5	0.16***	0.0	0.6
Continuously extremely low risk	0.15***	0.1	0.2	0.16***	0.1	0.3	0.16***	0.1	0.3	0.21**	0.1	0.5
Risk-increasing high to extremely high	1.44	0.6	3.5	1.59	0.6	4.2	1.64	0.6	4.8	1.32	0.2	7.5
Risk-increasing medium to extremely high	0.92	0.3	2.5	0.84	0.3	2.6	0.85	0.2	2.9	0.21	0.0	2.0
Risk-increasing medium to high	0.93	0.5	1.7	0.94	0.5	1.9	0.88	0.4	1.9	0.86	0.3	3.0
Risk-increasing low to high	0.28*	0.1	0.8	0.28*	0.1	0.9	0.29	0.1	1.0	0.14	0.0	1.5
Risk-increasing low to medium	0.38**	0.2	0.7	0.31**	0.2	0.6	0.30**	0.1	0.6	0.35	0.1	1.2
Risk-reducing extremely high to high	2.06	0.9	4.9	2.04	0.8	5.4	2.20	0.8	6.4	2.25	0.4	12.5
Risk-reducing extremely high to medium	1.77	0.5	6.0	1.46	0.4	5.8	1.07	0.2	4.9	1.31	0.1	15.2
Risk-reducing extremely high to low	0.46	0.1	2.6	0.64	0.1	4.5	0.71	0.1	6.1	1.09	0.0	35.0
Risk-reducing high to medium	0.91	0.5	1.7	0.84	0.4	1.7	0.71	0.3	1.6	0.48	0.1	1.8
Risk-reducing high to low	0.83	0.3	2.1	0.93	0.3	2.7	1.19	0.4	3.8	1.51	0.2	9.6

Note. CI = confidence interval.

* $p < .05$. ** $p < .01$. *** $p < .001$.

example, they are not gentrifying—but at the same time are relatively more impoverished, more highly renter occupied, more racialized as Black and Latinx, and less educationally and occupationally advantaged.

Neighborhood Displacement and the Likelihood of Post-eviction Moves

To get a sense of post-eviction moves (and also repeated displacement) that may be more strongly associated with a concept of chain displacement, we also tested the relationship between our neighborhood typology schema and the degree of multiple eviction filings where defendants were listed more than three times. Overall, the results from this analysis were generally consistent with findings from the previous analysis of all eviction filings. Save three exceptions—that is, continuously extremely high-risk, continuously medium-risk, and risk-increasing neighborhoods from low to high—models showed similar improvements over their respective null hypotheses and coefficients were generally equivalent, showing strong associations with neighborhoods of continually elevated risk rather than the alternative trajectories of increasing or decreasing risk. Neighborhoods characterized as continuously extremely high risk were a notable exception in that while the multiple eviction models showed similar improvements, the strength of the relationships increased as the severity of multiple eviction also increased. For example, the results not only indicate that this neighborhood type is the only type with positive associations with eviction filings, but that the strength of this relationship increases to almost six times (5.97) the predicted value the number of eviction filings in all other neighborhoods when we consider multiple eviction filings where defendants were listed between four and nine times. And when the most extreme cases of repeated eviction filings against tenants—that is, those where tenants were listed between 10 and 17 times—the incidence of these eviction filings is 7.28 the predicted value of all other neighborhoods.

Discussion

The findings of this research suggest that eviction in Madison and Dane County is strongly associated with a particular type of neighborhood displacement. Not only are eviction filings positively associated with neighborhoods that exhibit continuously extremely high risk between the two periods of our study, but that this relationship becomes stronger when we operationalize forms of repeated eviction. The results suggest that certain neighborhoods of relative negative stability—in that they are neither decreasing nor increasing in risk, but are *continuously the riskiest*—are also neighborhoods

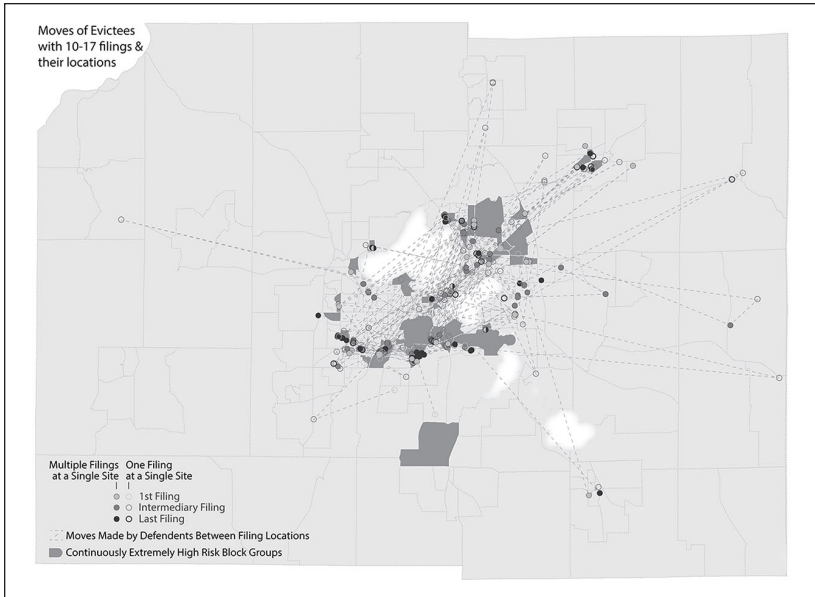


Figure 2. Multiple eviction geography.

of concentrated housing insecurity where tenants are more likely to experience threats to shelter through eviction. Indeed, these continuously extremely high-risk neighborhoods are layered progressively on top of each other in such a way that some are also sites of repeated displacement in the form of multiple eviction filings.

The two results demonstrate that, rather than exclusionary displacement or displacement pressure that force tenants out of particular places and into other locations in the region or beyond, eviction in Dane County tends to manifest as a form of chain displacement where neighborhoods of little demographic change or revalorization experience the majority of eviction cases. Furthermore, while Marcuse's notion of chain displacement was not specifically spatial in that it was considered to arise in undefined locations that may sometimes juxtapose gentrifying spaces, this research shows that there may be several sites of eviction-based urban displacement and that tenants with eviction records often move among and within these concentrated eviction neighborhoods (Figure 2). In this way, the findings contribute to a new, spatial understanding of chain displacement by showing how repeated eviction often occurs in similar, but sometimes noncontiguous, spaces possibly exposing the existence of particular housing submarkets where eviction may become a desirable strategy for property owners.

Finally, while it is tempting to make conclusions about the relationship between gentrification and eviction filings in Dane County, we believe that our measure for gentrification is insufficiently precise to make sound estimates regarding this relationship. For example, our index was unable to adequately distinguish mobility-based gentrification from incumbent upgrading and therefore we believe that conclusions about gentrification-induced displacement in Dane County are not fully supported in this work. However, rather than contradicting previous research on the relationship between gentrification and eviction-based displacement, we believe that our findings support the view that eviction may take different forms—sometimes simultaneously—depending on regional housing market dynamics. For example, in certain contexts like supergentrification (Lees 2003) in San Francisco, eviction has become crucial to gentrification strategies due to the particular policy environment created to regulate local housing markets through rent control. Accompanying tenure protections that make displacement more difficult in this context have instigated rental property owner trade associations to employ regulatory countermoves such as the Ellis Act that require formal eviction proceedings to replace tenants. In Dane County where rent control is prohibited and community-based efforts to regulate local housing markets have been significantly curtailed through state preemption (Ahrendt 2014; Sims et al. 2016), an alternate chain displacement eviction dynamic has emerged that resembles a type of class- and race-based exclusion that possibly engenders exploitative practices similar to Harvey's class-monopoly rent and a version of the so-called "Black tax" that Desmond and Wilmers (2019) showed in their recent work.

Demonstrating the existence of chain displacement ultimately contributes to a growing body of eviction literature because, like previous efforts to identify distinct displacement causes, the existence of non- or pregentrifying displacement geographies supports at least three contentions. First, displacement cannot be reduced to gentrification alone. In fact, one possible conclusion that we may draw from this evidence is that eviction records may actually not be the best measure of identifying gentrification-induced displacement at all and other data sources and methods may be more appropriate for capturing forced moves from gentrifying locations—especially those within jurisdictions that lack "just cause" protections. Second, the existence of geographies of chain displacement suggests, as Marcuse argued explicitly, that connections exist among different geographies of eviction-based displacement and redevelopment. Or, as Slater (2009, p. 303) put it in his summary of Marcuse's contribution: "Peter Marcuse took a knife to the soft underbelly of this false choice . . . showing how abandonment and gentrification are neither opposites nor alternatives, but tightly connected." In this sense, to capture the real meaning of geographies of chain displacement, these unique urban housing submarkets should be analyzed in relationship to the larger housing landscape in a way



Figure 3. Three highest eviction sites.

that reveals both the concentration of eviction as well as relationships with gentrifying space, similar locations without noticeable eviction patterns, or other neighborhoods where displacement may occur without eviction and the direct participation of the state. Frameworks that operationalize forms of urban exclusion such as Harvey's class-monopoly rent that describe how different opportunities for property owners are created in different neighborhoods as well as how those geographic differentials are experienced and measured seems particularly promising. Toward that end, the existence of spaces of chain displacement suggests that, rather than resulting strictly from tenant poverty, tight and exclusionary housing markets that limit the housing opportunities for groups of renters at the urban scale may provide certain monopoly powers to property owners in specific neighborhoods with particular housing types such as those in Figure 3 in a way that produces the opportunity for an "eviction economy" (Dana 2017) that is evidenced in repeated and concentrated eviction records. Forms of exclusion by race, family composition, and other factors that are known to make some tenants more housing insecure than others consequently combine with the increased availability of civil and criminal records to mark tenants in a way that produces a structure of unequal exchange and possibly even exploitation through unfair selection processes and the threat of future displacement.


Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The author(s) received financial support from the Office of the Vice Chancellor for Research and Graduate Education at the university of Wisconsin-Madison for this research.

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Notes

1. Other pre-World War II narratives of displacement were generally organized around the justification for western expansion, not intra-urban movements. For example, Frederick Jackson Turner's enduring notion of the "frontier" which was eloquently described by William Cronon (1992, p. 1352) as "the heroic encounter between pioneers and 'free land' could only become plausible by obscuring the conquest that traded one people's freedom for another's."
2. Displacement due to federal highway construction is less well documented; however, it is reasonable to suspect that the program may have had an even greater impact given not only the practice of intentionally targeting non-White, central neighborhoods (Frieden and Sagalyn 1989) but also the estimated magnitude of displacement as "at least 330,000 urban housing units were destroyed as a direct result of federal highway building between 1957 and 1968" (Mohl 2000, p. 227).
3. This second wave of urban displacement research is referred to as "first wave displacement studies" by Lance Freeman (2005).
4. It is useful to compare Freeman's argument to a similar statement in Vigdor's (2002, p. 161) essay: "While this finding does not directly address the counterfactual of what exit rates would have been in the absence of gentrification, it provides compelling evidence of the importance of considering baseline exit rates in any study of residential displacement."
5. We are aware that reducing data into quintiles will introduce a certain amount of error for those block groups that are close to percentile cutoff points.

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