RESIDENTIAL MOBILITY AND SOCIAL SORTING : Preliminary Paper

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Abstract

This research examines residential change across urban neighborhoods in Los Angeles. I examine the selections that households make when they change residences and in particular the relationship between their choices and their socioeconomic status. The research examines residential selections across neighborhoods in Los Angeles where neighborhoods are grouped into deciles of advantage/disadvantage. We find that income and education as expected play important roles in the neighborhood selection process. In addition the research shows that where you begin has an important impact on your ability to move up, or conversely the likelihood of moving down the socio-spatial scale. While ethnicity and race do structure the outcomes they seem to be of lesser importance in determining the outcomes than socioeconomic status per se.

Introduction

There is increasing interest in the role of places in the outcomes for families and individuals. It seems reasonable to expect that where you live will influence a wide variety of life course outcomes hence the interest in places generally and communities more specifically. However, up until recently most of the research on mobility has been focused on low income and poverty neighborhoods. There has been considerable concern to understand who moves into such neighborhoods and whether households in poor neighborhoods can escape those environments. There is a substantial research literature on poverty neighborhoods and residential mobility but much less of that research has looked at the distribution of moves across a broad spectrum of neighborhoods. The focus in this research is to broaden the interest from deprived neighborhoods to the whole range of socioeconomic statuses within the urban fabric.

People make choices about where to live and the aggregation of those choices leads to changes in the structure and composition of neighborhoods and communities. While we know a good deal about what influences the decision to change locations (age, income, marital status and specific life course "triggers") we know much less about the geographic choices of places that individuals and households make. Thus we can say a good deal about who will move and when but much less about where they will move and the particular places that they choose. Cities are structured by socio-economic status. Marketers have long recognized community differences and used them to market their products to specific groups. Neighborhoods and communities are central to the organization of our cities and to our lives within them. We are often defined by where we live and marketing groups are adept at using demographic characteristics of particular areas to target their advertising. Web sites have introduced "catchy" terminology to reflect neighborhood differences, descriptions which are more sophisticated interpretations of the old identities of "little Italy", Koreatown and little Saigon. Our cities are divided by socio-economic status and that division has a spatial pattern. It is that pattern which is summarized in neighborhoods and the question is how people sort themselves onto these spatial units.

The research in this paper is about that sorting process – who ends up where when they move residences. There are three parts to the larger investigation. In the first question and the focus of the majority of this paper, I ask about changes that individuals make – do they improve their living condition or are they largely confined in their choices to contexts in which they find themselves? The exploration of this question asks both about individual changes and about whether movement on average is from areas of high deprivation to low deprivation or the opposite. A second question asks about the aggregate outcomes, whether areas are receiving disproportionate numbers of deprived households while other areas receive only the affluent. In effect what is the scale and type of neighborhood change? The third question asks about those who do not move and who they are and "how sticky" these stayers are? Do they make residential changes but stay in the same socio economic status or do they not move at all?

Previous studies of neighborhood mobility

The previous research can be usefully organized into three sections – studies of mobility in general, studies of leaving deprived neighborhoods and experimental research on moving from poor to non-poor neighborhoods. Much of this research has asked are their neighborhood effects and how large are they in household outcomes.

Mobility in the urban mosaic

The creation of neighborhoods is not a random process but is embedded in the preferences people reveal in their wish to live near similar households, in terms of income, composition (presence of children for example) and ethnicity. A set of analytic and simulation studies have established the relevance of these sorting mechanisms and the grouping of like individuals into spatially defined areas (neighborhoods) from which we observe similar behaviors and common outcomes (Clark, 1991,1992, Clark and Fossett, 2009; Fossett, Schelling, 1971). If the residential sorting process leads to a widening of differences between neighborhoods, some places will experience a more rapid descent socio-economically than others and generate characteristics which may

initiate threshold effects on social behavior of the associated residents (Meen 2006). At the same time other neighborhoods may experience increases in socio-economic status or at the least the maintenance of present levels of high socio economic status. In this sense, neighborhood outcomes (both positive and negative) can result directly from residential sorting as extensive reviews of the literature have shown (Dietz, 2002; Durlauf, 2004)

Basic studies of residential change have documented the relationship of mobility to the life course and the role of age, income, marital status and tenure in the likelihood of moving (Clark and Dieleman, 1996). Specific studies of mobility across neighborhoods have shown that as expected that resources matter in the mobility behavior of urban residents (Clark and Dieleman, 1996, Clark and Rivers, 2012). Education, being in a professional occupation and ownership are important variables in choosing a higher status neighborhood. Also, as expected, whites are more likely to choose largely white tracts but it is notable that more than a fifth (21%) of black households, 51% of Asian households and 23% of Hispanic households move to tracts which are 70% or more white. Clearly there is considerable fluidity in the choice processes and outcomes in terms of racial and ethnic composition for these groups.

Mobility and selectivity

When there is differential migration of the poor and non-poor (or more properly less poor) poverty rates are driven up by much higher net out-migration of the non-poor. Both the poor and the non-poor move in response to real economic opportunity but the differential pattern of such opportunities for these groups means that the pattern of spatial poverty persists in association with long term spatial unevenness in economic development and opportunity (Nord, 1998). In summary, it is the overall level of neighborhood inequality which sets the scene and is a major incentive for the very out-migration of the non-poor which renders poor areas even more disadvantaged. Mobility and migration tend to reinforce the relative ranking of neighborhoods, perpetuate the socio-economic separation of neighborhoods and the more so the greater the differences between them. There is evidence that, "net migration flows act to maintain the gap between deprived areas and the average and, as a result, work to undermine efforts to regenerate deprived neighborhoods" (Bailey and Livingston 2008 p. 948).

Recent research also documents that sorting continues even in communities where there is a strong policy interest in mixing (the Dutch for example); people leaving some neighborhoods and choosing others (Van Ham and Feijten, 2008) with the mobility decision often being triggered by the presence of minority populations (Bolt, et al 2008). What the literature refers to as neighborhood effects therefore contributes as an active mechanism to the residential sorting process, however rather than being something apart, neighborhood effects are an integral feature of the residential sorting process itself.

Leaving and staying in poor neighborhoods

A small important literature looks at the propensity to enter and to leave areas ranked by models of deprivation. People based programs which focus on health, education, employment and training have the potential to stimulate mobility out of deprived areas and, to the extent that they are successful 'those who get on, get out' is a response which tends to lower rather than raises the average level of deprivation in the area being assisted (Cheshire, et al. 2003). Several studies have identified factors (mostly measures of income and socio-economic status) which are associated with movements in and out of deprived neighborhoods (South, Crowder et al. 2005; Bolt, van Kempen et al. 2008). Additionally, studies of movement into and out of 'problem housing estates' have also been conducted using register based data sets (Graversen, Hummelgaard et al. 1997; Andersson and Brama 2004). In each case net migration flows were observed to have contributed to residential sorting and thereby reinforced deprivation in such areas regardless of the macro- economic context. This outcome is one of the thorny issues of trying to intervene in places to create more acceptable living situations (Partridge and Rickman 2006).

With some exceptions the literature on movements into and out of deprived neighborhoods tends to minimize or more often to use broad aggregated groupings of places (South and Crowder 1997, South, Crowder and Pais, 2011). In addition, the emphasis until now has been more focused on the impacts on individuals and less on whether the moves contribute to residential sorting and the associated area outcomes. At the same time residential mobility studies clearly show that individuals do adjust their neighborhood location to fit with changes in income as well as changing preferences over the life-course. However neither approach tells us the size of the effect of the migration differentials on the concentration of poverty. With some exceptions they do not usually address factors that influence duration of residence in poor neighborhoods (Quillian 2003).

The focus on deprived neighborhoods has been on the extent to which social networks and place attachment in such situations shape young people's attitudes towards education and work opportunities. To what extent, the literature asks, do deprived areas serve as conditioning communities in creating an "underclass" population? As we have observed however, it has been very difficult to disentangle the impact of "place" (the neighborhood) from other factors (e.g. the family) which create also create contexts for economic and social exclusion. It may be that we need to position the study of neighborhood effects within the wider problem of residential sorting and to see selection effects and spill-over effects as intimately related. There is a need, we suggest, to move beyond the focus on deprived neighborhoods alone to the broader residential mosaic as a whole and to better understand the dynamics and central variables involved in creating and sustaining residential sorting per se.

Hypotheses, Data and Methods

The research with the LAFANS data has two specific aims: (a) To compare the outcomes for movers in the context of neighborhoods and their recent moves; (b) To estimate a model which will predict the likelihood of poor and immigrant households leaving inner city ethnic concentrations.

The research to be carried out with the LAFANS data will continue an earlier investigation of the role of income in neighborhood choice. That research (Clark and Ledwith, 2007) showed that both white and minority households translate resources into whiter and usually higher status neighborhoods. The research in the previous study emphasized the possibilities and outcomes of residential change and like many studies did not pay specific attention to the households and families who did not move. There is increasing concern with the "stickiness" of mobility that it is harder to move and make the associated gains in household outcomes. Past research emphasized the way in which mobility provided a ladder for households to move out and often up from inner city neighborhoods. Stayers will be folded into the present research as it develops.

The variables include: (a) measures of the household (age, size- including ages of children, race/ethnicity and income (b), measures of the housing unit, including value/rent, size, and tenure, (c) measures of migration and mobility including year of arrival for foreign born, and year and month of move, and (d) data on current work status, and current work place for head and other household members. These variables will be selected from the Modules which examine household composition, housing structure, and event history.

While mostly anecdotal evidence suggests that immigrant households are often successful in leaving the poor neighborhoods that they initially occupy. While it would require truly longitudinal data to test all the nuances of migrant upward mobility it is possible to provide some preliminary tests of immigrant mobility outcomes in Southern California. And, with the second wave of the LAFANS data it will be possible to investigate the "successes and failures" of earlier moves.

The data from the Los Angeles Family and Neighborhood Study will be used to examine the mobility behavior of families and individuals in total and by race and ethnicity. The specific methods include the construction of matrices of advantage/disadvantage from census tract factor scores grouped into deciles and quintiles.¹ The movements through this matrix of advantage/disadvantage deprivation is modeled with multinomial logit models of choice on the diagonal, above the diagonal (more advantaged) or below the diagonal (less advantaged).

¹ The variables in the factor score index are % single family, % linguistically isolated, % high school, % unemployed, % public assistance, % below poverty, % high density occupation, % no vehicle, % median household income.

The analysis is built around three questions:

- (1) What are the matrices of movement across neighborhood deciles and quintiles
- (2) What is the intersection of income, education and tenure for movers across quintiles
- (3) What explains the choices of movers across deciles and quintiles

Preliminary Findings

(a) Matrices of choice

The distribution of choices for the total sample reflects the oversampling of poor and near poor households in the LAFANS sample selection. There are more cases in the less advantaged deciles than the more advantaged deciles and that pattern is even more noticeable by race and ethnicity. Approximately 51 percent of Hispanics and 57 of African Americans select into the two lowest deciles. In contrast nearly two-thirds of whites select into the highest deciles (Table 1). There are no surprises in these outcomes; they reflect the substantial disparity in resources and incomes of the groups. However, the major focus in this analysis is the potential for movement out of deciles of origin.

As expected there is strong selection along the diagonal which reflects our understanding of mobility, that moves are localized and or short distance by and large. However, unlike other analyses, in the Los Angeles data there is considerably more movement on the diagonal (Figure 1). In the lowest and highest deciles 70 percent of the origins and destinations are coincident. It is as if the two populations (white and minority) are functioning in two different worlds in Los Angeles. If we include movement on the diagonal and in the categories immediately adjacent to the diagonal there is substantial evidence which further emphasizes the tendency to reinforce current patterns in the residential mosaic. About three quarters of all moves are on the diagonal or in the adjacent deciles (Table 2). There is simply much less change across the socio – economic structure than in national analyses (Clark and Rivers, forthcoming).

The breakout of the moves by ethnicity are presented for actual moves rather than proportions which emphasizes the contrasting patterns of whites who move largely in the upper quintiles and minorities who move in the lower quintiles. I use quintiles as the sample sizes by ethnicity are small. Still, there are minorities who move within and into the higher advantaged quintiles and it is this group which provides the basis for examining socio-economic effects on mobility and changing status.

Overall, white households had two thirds of the choices above the diagonal while Hispanics were about as equally likely to move up or down, that is above or below the matrix. African Americans were more likely to move down (Figure 2-4). Again, there are contrasts with national data and it seems as if there is less flexibility in the Los Angeles residential context. But the interest is in who moves up and down and their associated socio-economic characteristics.

(b) The intersection of race and socio economic status for mobility

We can provide greater detail on the intersection of race and resources by examining the choices of households in the initial highest and lowest status socioeconomic areas and their choices of new locations. The analysis examines the income, education levels and ownership status for white, Hispanic and Black households who move within the highest and lowest status areas and the moves of those who move up from the lowest quintile and the second to highest quintile. Are their socio-economic levels a significant contributor to their ability to access areas with high advantage levels? Does socio-economic status matter in the choices especially by minority households?

Plainly income matters. Overall, incomes are 3 times higher for movers in the most advantaged quintiles and they increase steadily for movers across the distribution. This pattern holds fairly well across all race/ethnic groups (Table 3). Even more notable is the difference in education levels, specifically the proportion with some college or college education. The outcomes in ownership reflect of course the differences in income. While there are some differences across the race and ethnic categories they are not especially large. The differences are much more striking over the distribution of quintiles than they are over the differences in race/ethnicity. It is important to note that the sample sizes are small but this does not negate the overall conclusion that socio-economic status is so closely associated with residence and movement into more advantaged areas. Overall, owners prevail in high status areas and renters in lower status areas. Clearly income and ownership are related but they do define the most advantaged areas in the residential fabric.

A test of the relevance of economic status is the possibility of "moving up" across the quintiles. As a first test of the relevance of income, education and ownership I examine the changes in income, educational level and ownership status as households move from the lowest status areas to the next level and from the next to the highest status areas to the highest status areas. For the moves from the lowest status areas the defining measure in comparison with households who are moving within the initial status areas is not income or education but ownership, Hispanics moving up are slightly more likely to be college educated but they are considerably more likely to be owners. More research is needed to know whether they are trading in equity to make these changes. For African American households too it is ownership which matters in distinguishing the possibility of moving up from the lowest status levels.

For moves in the highest status areas whites who make the transition to the highest quintile are in general more likely to be owners, have high levels of college

education and significantly higher incomes. The same story is broadly true for the small number of Hispanics and African Americans who make these transitions (Table 4).

(c) Models of choice

To explore the variable associations with the choice and sorting that we observe in the matrices, we construct a series of multinomial logit models. I examine moves above and below the diagonal with the diagonal as the reference category. In addition to examining the choices by whites, African-Americans and Hispanics separately we also examine total moves and introduce race as an explanatory variable.

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	Least Advantage Status I			tus Dest	Destination decile wave				Most			
		1	2	3	4	5	6	7	8	9	10	Total
	1	75.9	12.0	5.5	1.6	1.1	1.6	1.1	0	2.0	0	100
	2	16.8	64.1	9.2	2.3	1.5	1.5	.8	.8	.8	2.3	100
	3	7.0	15.7	57.4	.9	.9	5.2	4.4	2.6	3.5	2.6	100
e	4	12.8	2.6	15.4	38.5	3.9	6.4	2.6	6.4	6.4	5.1	100
leci	5	4.0	9.2	14.5	7.9	39.5	4.0	7.9	6.6	4.0	2.6	100
in c	6	5.2	5.2	10.4	9.1	1.3	31.2	6.5	13.0	18.2	0	100
)rig	7	1.3	1.3	1.3	5.2	6.5	3.9	39.0	16.9	15.6	9.1	100
\cup	8	1.2	2.3	1.2	1.2	2.3	3.5	12.8	52.3	9.3	14.0	100
	9	1.7	0	0	0	3.5	3.5	1.7	8.6	60.3	20.7	100
	10	0	0	1.8	1.8	1.8	1.8	1.8	14.0	7.0	70.2	100
	Total	20.2	14.9	13.0	6.0	5.2	5.5	6.8	10.1	9.4	8.9	100

Figure 1 Matrix of percentile changes in neighborhood decile with mobility, all movers



Figure 2: Distribution of White choices across quintiles (low/high)



Figure 3 : Distribution of Hispanic choices across quintiles (low/high)

Figure 4 : Distribution of African American choices across quintiles (low/high)

	1			Destination			I
		1	2	3	4	5	Total
	1	43	2	1	2	1	49
tile	2	9	7	2	0	1	19
rigin quint	3	4	3	7	0	0	14
	4	2	2	2	5	2	13
0	5	1	0	0	0	6	7
	Total	59	14	12	7	10	102

Decile	All	%	white	%	Hispanic	%	Black	%
1 (low)	189	20.2	5	1.8	147	30.9	32	31.4
2	140	14.9	10	3.6	96	20.2	27	26.5
3	122	13.0	5	1.8	105	22.1	5	.5
4	56	6.0	10	3.6	32	6.7	9	.9
5	49	5.2	22	8.0	9	1.9	12	11.8
6	52	5.5	19	6.9	28	5.9	0	0
7	64	6.8	25	9.1	18	3.8	6	.6
8	95	10.1	71	25.7	17	3.6	1	.1
9	88	9.4	47	17.0	15	3.2	8	.8
10	83	8.9	62	22.5	9	1.9	2	2.0
(high)								

Table 1: Distribution of decile destination choices	by race/ethnicity
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Table 2: Distribution of Decile Change Amount						
<pre>change_in_decile</pre>	Frequency	Percent	Cum. Frequency	Percent		
-8	1	0 11	1	0 11		
-7	2	0.11	3	0.32		
-7	2	0.21	5	0.52		
-0	4	0.45	/	0.75		
-5	8	0.85	15	1.60		
-4	18	1.92	33	3.52		
-3	42	4.48	75	8.00		
-2	60	6.40	135	14.39		
-1	111	11.83	246	26.23		
0	387	41.26	633	67.48		
1	113	12.05	746	79.53		
2	79	8.42	825	87.95		
3	47	5.01	872	92.96		
4	20	2.13	892	95.10		
5	21	2.24	913	97.33		
6	13	1.39	926	98.72		
7	6	0.64	932	99.36		
8	6	0.64	938	100.00		

Table 3: Moves within lower and upper advantage quintiles by race and ethnicity (a) All moves

Quintile	Family Income (\$)	% Some college/college	% Owner
1	21,419	27.6	23.7
2	31,969	36.3	39.0
4	75,218	79.9	70.9
5	68,313	84.0	73.9

(b) White moves

Quintile	Family Income (\$)	% Some college/college	% Owner
1	37,301	64.7	29.4
2	59,425	57.7	61.5
4	87,128	86.0	73.0
5	87,322	93.3	80.0

(c) Hispanic moves

Quintile	Family Income (\$)	% Some college/college	% Owner
1	20,787	15.7	22.5
2	29,946	26.9	38.2
4	58,748	53.6	67.9
5	54,250	42.9	71.4

(c) Black moves

Quintile	Family Income (\$)	% Some college/college	% Owner
1	13,720	60.0	22.0
2	15,588	57.9	38.9
4	41,714	99.9	63.6
5	66,000	83.3	83.3

Table 4: Moves to more Advantaged Quintiles

Quintile 1 to 2	Family Income (\$)	% Some college/college	% Owner
White	No cases		
Hispanic	17,482	17.6	38.2
Black	15,588	33.3	66.7
Quintile 4 to 5			
White	108,964	87.9	87.9
Hispanic	80,000	80.0	80.0
Black	114,500	99.9	99.9