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PROPENSITY FOR INTERACTION IN A SPATIAL AND RACIAL CONTEXT

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ABSTRACT

Ghettoization is a major factor influencing the movement behavior of Afro-Americans. A comparison of black and white social trips in South Miami, Florida indicates that blacks visit more frequently, travel shorter distances, spend less time traveling, and use different forms of transportation. Ghettoization is a unique phenomenon in the United States and should be treated as a significant independent variable influencing social travel behavior.

Propensity for interaction can be illustrated in terms of distance of contacts from an origin and frequency of contacts at particular distances from an origin [1, p. 133]. Studies of interaction have tended to concentrate on activity-to-activity and person-to-activity ties, with little emphasis on person-to-person contacts [2, p. 371]. One type of people-to-people interaction is the social trip, a trip made to residences for the purpose of visiting friends, neighbors, or relatives. Social trips are but one kind of social interaction, but an analysis of them will contribute to a greater understanding of the broader notion of social relations.

Generally, researchers seeking to explain the dimensions and dynamics of social trips have not emphasized relative location or contiquity [2, p. 373]. In a study of social trips in Lansing, Michigan, Wheeler and Stutz noted:

> . . . considering the consistency of findings of the relative strength of the distance variable and the interdependency of spatial factors in the

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> social interaction process, the spatial dimension may be a dependent as well as an independent variable. Thus, social contacts, friendship ties, and even personality variables have strong influences on spatial relations. It follows that spatial interaction is interdependent with social interaction [2].

The authors also indicate that interaction is constrained by one's perception of social and spatial barriers in relation to a communications network associated with personality, occupation, social status, sex, race, and life cycle. These characteristics influence residential clustering of similar socioeconomic groups and encourage some degree of neighborhood social interaction [2, p. 372].

Wheeler and Stutz clearly suggest that distance and status are important in interpersonal social relations. In an examination of social trips in two Lansing, Michigan neighborhoods of different socioeconomic makeup — upper income Indian Hills and middle-to-low income Torrance — the following empirical evidence was obtained:

1. a given occupational group had more social ties with the same or similar status group;
2. the lower income neighborhood's households generated over twice as many social trips per unit as did the upper income one;
3. both neighborhoods had strong distance-decay rates when the frequency of social trips was plotted by distance;
4. 28 per cent of the upper income neighborhood and 33 per cent of the lower income neighborhood's social trip ends were within two blocks of the origin, 50 per cent of the destinations in both areas were within one mile, and 17 per cent of Torrance's trips and 15 per cent of Indian Hills' trips were over eight miles; and
5. no single neighborhood was strongly linked to Torrance, whereas Indian Hills had ties with high income areas in Okemos (Tacoma Hills) and East Lansing (Glencairn) [2, pp. 382-385].

Wheeler and Stutz have made a significant contribution towards a greater understanding of social relations by presenting empirical data supporting two specific hypotheses related to social trips — distance decay[1] and social prestige (or status). However, an important variable

[1] Distance-decay has long been a major structural theme for many types of geographic hypotheses. Essentially, it deals with the decreasing occurrence of events, activities and effects with increasing "distance" from the location from which these things emanate or from which they exert influence. These ideas have provided the structure for many hypotheses dealing with spatial contagion effects, declining degrees of optimality and/or attraction from some location or place, and spatial diffusions. Distance-decay also serves as structural support for geographic hypotheses investigating the nature of neighborhood effects, information fields, and/or action spaces [3].

implied in their *status* factor — race — deserves greater attention. The influence of race on the broader question of social relations and the more specific one of social trips is particularly salient with respect to black Americans because of their unique experience of forced confinement (de jure and de facto) resulting in large ghettos in American cities.

This unique experience has been illustrated in many research efforts; some examples are Dubois' *The Philadelphia Negro* [4], Weaver's *The Negro Ghetto* [5], Osofsky's *Harlem: The Making of a Ghetto* [6], Spear's *Black Chicago: The Making of a Negro Ghetto, 1890-1920* [7], and Rose's *The Black Ghetto* [8]. These and many other investigations provide descriptions and explanations of ghetto formation, maintenance, and growth. Particularly important is the role of residential segregation. For example, Weaver, speaking about the movement of blacks into northern urban areas prior to World War I and in the 1940's, captures the process of such racial discrimination:

> The two periods can . . . be compared in relation to the extent of residential segregation. Such comparison clearly indicated a marked increase. Nor is that all. Today, as contrasted to the situation in 1915, the Negro resident is *forced* to stay in a segregated area regardless of his income or ability to pay for housing. It is the widespread existence of this involuntary separation in shelter that makes the problem a pressing one [5, p. 7].

And Rose comments on the behavior of blacks in ghettos:

> Black culture, which was nurtured in the rural South . . . has spread from that hearth to every major ghetto center in this country but has been modified in the process . . . . Many elements of today's life style repertoire were learned in an urban milieu and thus reflect those patterns of behavior designed to provide support in an environment that is in many ways different from that of the rural South [8, p. 11].

Thus, when one is looking for spatial factors influencing social travel, ghettoization, a manifestation of black behavior, should not be aggregated with other variables, but singled out as a major variable in the social interaction process.

Ghettoization and Spatial Interaction

Ghettoization is defined as "the residential allocation process which limits on other than economic grounds one's choice of places to live." [8, p. 9] The territory or social place resulting from the process of ghettoization is the black ghetto, today the home of some fifteen million black Americans [9]. This territorial notion of

restricted residential space for black Americans implies spatial confinement of black behavior. As Rose puts it, "the ghetto presently constitutes the territorial base within which black culture is learned, transmitted, and preserved." [8, p. 5] Therefore, the position taken in this study is that black social travel is a manifestation of the process of ghettoization in a way very similar to that of residential mobility [10, pp. 622-651], work trips [11, pp. 107-111], and other kinds of permanent or temporary movements. Blacks have been excluded from the normative games of the larger society through racism, of which residential segregation is but one overt example; therefore, substitute games have been developed, games that "are learned and played out in the ghetto" because "this is the place where blacks have had the freedom to engage in expressive behavior without interference." [8, p. 9] Social interaction is but one substitute game played out in the ghetto.

Purpose of this Study

Blacks have developed a repertoire of domestic units for coping with the everyday demands of ghetto life. According to Stack, blacks visit relatives frequently because relatives tend to cluster in the same areas during periods of migration, and the most frequent and consistent alignment and cooperation takes place between siblings [12, p. 306]. Since whites have never been subjected to the ghettoization process and its consequences, it seems logical to suggest that social travel, such as that indicated by Stack, will differ when compared to blacks. Therefore, the purpose of this paper is to compare black and white social trips to determine if differences exist. The overriding hypothesis is that differences do exist because blacks have been subjected to ghettoization whereas whites have not.

Techniques of Analysis

A home interview survey of ninety-four households (33 blacks and 61 whites)[2] in the city of South Miami, Florida provided data for the analysis. Probability sampling involved the following reasoning and methods:

1. South Miami was selected because of its accessibility, size, and

[2] This sample represented an attempt to include 5 per cent of the households in each block. In 1971 there were 4,013 housing units in the city; the black population totaled about 23 per cent. The data represent almost 50 per cent of the households sampled.

the presence of a well established black ghetto — the Lee Park Community;
2. the sampling frame consisted of the selection of a specified percentage of households in each city block;
3. the sample design was simply a proportional stratified random selection of individual housing units within each block; and
4. information was collected with respect to five measures of social travel: persons visited most often, distance to most frequently visited person, length of time of travel to most frequently visited person, number of visits to most frequently visited person, and mode of transportation to most frequently visited person.

Substantive Findings

Based on the information obtained in the interviews, both blacks and whites visited friends more frequently than relatives; however, whites visited them more often and blacks visited relatives more often than whites (see Table 1).[3] In terms of distance to the most often visited person, more black trips took place closer to home than did white ones. Twenty-nine per cent and about 23 per cent of the black and white trips respectively took place within one mile of home; while only 67.5 per cent of the white trips took place within five miles from home, more than 80 per cent of the black ones found their destinations within this distance (see Table 2). Both black and white trips conformed to the distance decay concept, that is, decreasing frequency of trips with increasing distance from home. Time of travel to the most frequently visited person supported the information contained in Table 2. Blacks spent less time in reaching their destinations than did whites — suggesting shorter trips. Almost 52 per cent of the black trips took place in less than eleven minutes, whereas only 44 per cent of the white ones took place in this span of time (see Table 3). Blacks visited the most frequently visited person more often than did whites. While more than 83 per cent of the white trips were less than three times a week, only about 65 per cent of the black trips were in this category (see Table 4). Blacks traveled by automobile less frequently than did whites — 51.5 and 91.5 per cent respectively. Blacks walked more often than whites — 36.4 per cent compared to only 6.8 per cent for whites; and blacks

[3] Some degree of caution should be exercised in the acceptance of this conclusion since a chi-square test to determine if there were significant differences in blacks and whites with respect to "persons visited" could not be ascertained ($X^2 = .0698$ with 1 degree of freedom).

Table 1. Persons Visited by Race (%)

	Friends	*Relatives*	*Total*
	%	%	
Blacks	18 (54.5)	15 (45.5)	33
Whites	35 (57.4)	26 (42.6)	61
Total	53	41	94

Source: Author's survey, 1972.

Table 2. Trip Distance by Race (%)

	Blacks		*Whites*	
Miles	%	*Cumulative %*	%	*Cumulative %*
0 - 1	29.3	29.3	22.5	22.5
2 - 5	51.2	80.5	45.0	67.5
6 - 10	9.8	90.2	17.5	85.0
11 - 20	4.9	95.1	10.0	95.0
> 20	4.8	100.0	5.0	100.0

Source: Author's survey, 1972.

Table 3. Time of Travel by Race (%)

	Blacks		*Whites*	
Minutes	%	*Cumulative %*	%	*Cumulative %*
0 - 5	44.8	44.8	18.5	18.5
6 - 10	6.9	51.7	25.9	44.4
11 - 30	37.9	89.6	44.4	88.8
31 - 60	6.9	96.5	7.4	96.2
61 - 90	0.0	96.5	0.0	96.2
> 90	3.5	100.0	3.8	100.0

Source: Author's survey, 1972.

Table 4. Frequency of Visits by Race (%)

	Blacks		*Whites*	
Times Per Week	*%*	*Cumulative %*	*%*	*Cumulative %*
1	54.8	54.8	66.7	66.7
2	9.7	64.5	16.7	83.4
3	12.9	77.4	11.7	95.1
4	3.2	80.6	0.0	95.1
5	0.0	80.6	1.7	96.8
6	0.0	80.6	0.0	96.7
7+	19.4	100.0	3.3	100.0

Source: Author's survey, 1972.

Table 5. Type of Transportation by Race (%)

	Blacks		*Whites*	
Type of Transport	*%*	*Cumulative %*	*%*	*Cumulative %*
Auto	51.5	91.5	91.5	91.5
Walk	36.4	87.9	6.8	98.3
Bike	3.0	90.0	1.7	100.0
Bus	9.1	100.0	0.0	100.0

Source: Author's survey, 1972.

used public transportation (bus) in 9.1 per cent of their trips whereas whites did not indicate that the bus was used at all (see Table 5).

Conclusions

The above observations tend to support the hypothesis that black social trips (or visiting) differ from those of whites because they have been subjected to the process of ghettoization and whites have not. Stack's comments regarding a high propensity for interaction with relatives were observed among South Miami's black population. Her explanations of post-migration clustering and strong attachments to

the black family appear logical, but data are too scanty to determine if this was the case in South Miami. Blacks made up 23 per cent of the city's population in 1970, a decline from 37 per cent in 1950 [13, p. 6]; therefore, if clustering resulted after significant in-migration, it did so in an earlier time period. Most of the city's black population is concentrated in the community of Lee Park; based on this, there is reason to believe that ghetto conditions may have influenced strong person-to-person ties. Rose, for example, indicated in 1964 that substandard housing and low home ownership rates were major problems [14, p. 229]; and other reports indicate that the lowest educational accomplishments in the city and lowest per family incomes were located in Lee Park [13, p. 7]. It is probable that such severe common problems may have influenced greater social interaction between relatives.

Just as Wheeler and Stutz found the distance-decay concept applicable in Lansing, Michigan, black and white residents of South Miami also exhibited a tendency to make fewer social trips with increasing distance from the home base. However, the ghettoization factor again appears relevant since blacks made fewer trips than whites at greater distances and more trips at shorter ones. Hence, the closer proximity of black friends and relatives probably accounted for shorter trips. In addition, the shorter travel times for blacks appear to be directly related to length of trip.

The frequency of visiting by blacks is also a function of propinquity or ghettoization. It is almost an axiom that frequency of contact decreases with increasing distance [1, pp. 133-157, 3], thus accounting for the more frequent visiting by blacks.

Socioeconomic conditions and ghettoization account for the modes of transportation used in visiting by blacks and whites. Automobile ownership and the need to travel greater distances is lower among blacks — the result is one where almost all whites used a private auto and blacks were diversified in their modes of travel.

Finally, this study has attempted to increase the existing knowledge of social relations by adding another important dimension to the quest for explanation. Distance decay and social prestige were the contributions of Wheeler and Stutz; this paper has attempted to reinforce the interdependence of spatial interaction and social interaction by highlighting the notion of ghettoization. Ghettoization is a unique phenomenon in the United States because it was founded upon and has continued to be motivated by racism; therefore, it should always be treated as significant independent variable influencing social travel behavior.

REFERENCES

1. L. Moryadas, *The Geography of Movement*, Houghton Mifflin, Boston, 1975.
2. J. A. Wheeler and F. P. Stutz, Spatial Dimensions of Urban Social Travel, *Annals of the Association of American Geographers, 61:*2, 1971.
3. D. Amedeo and R. G. Golledge, *An Introduction to Scientific Reasoning in Geography*, Wiley, 1975.
4. W. E. B. DuBois, *The Philadelphia Negro*, University of Pennsylvania, 1899.
5. R. C. Weaver, *The Negro Ghetto*, Harcourt, Brace and Company, 1948.
6. G. Osofsky, *Harlem: The Making of a Ghetto*, Harper and Row, New York, 1963.
7. A. L. Spear, *Black Chicago: The Making of a Negro Ghetto: 1890-1920*, Chicago University Press, 1967.
8. H. M. Rose, *The Black Ghetto: A Spatial Behavioral Perspective*, McGraw-Hill, New York, 1971.
9. R. L. Morrill, A Geographic Perspective of the Black Ghetto, H. M. Rose (ed.), *Geography of the Ghetto: Perceptions, Problems, and Alternatives*, Perspectives in Geography 2, Northern Illinois University Press, 1972.
10. J. W. Simmons, Changing Residence in the City: A Review of Intra-Urban Mobility, *Geographical Review, 58*, 1968.
11. J. Wheeler, Worktrip Length and the Ghetto, *Land Economics, 44*, 1968.
12. C. B. Stack, The Kindred of Viola Jackson: Residence and Family Organization of an Urban Black American Family, *Afro-American Anthropology: Contemporary Perspectives*, N. E. Whitten, Jr. and John F. Szwed (eds.), Free Press, New York, 1970.
13. *South Miami: A Guide for Controlled Growth*, February 1972.
14. H. M. Rose, Miami's Changing Negro Population, 1950-1960, *Economic Geography, 40:*3, 1964.

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