

# SUBURBANIZATION AND DISPERSION: A CASE STUDY OF CINCINNATI'S JEWISH POPULATION\*

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## INTRODUCTION

The spatial distribution of the Jewish population in American cities has changed drastically during this century. During the early 1900's the immigrant population was concentrated in one or a few identifiably Jewish ghetto areas. Today the Jewish population in these cities is distributed over a variety of communities: suburban Jewish enclaves (which cannot be considered ghettos since Jews usually comprise less than a majority in these areas), apartment house districts in the central city, "gentrifying" neighborhoods in the inner city, residential areas near universities and medical complexes and sparsely settled semi-rural communities at the edge of the metropolitan area.

These changes reflect the impact of socio-economic mobility and assimilation (Sklare, 1971). Rising incomes and educational levels have enabled successive generations of Jews to attain better housing in higher status neighborhoods. As a result of assimilation, a decreasing proportion of Jewish families need to live in identifiable Jewish communities. Orthodox Jews are an exception to this latter trend. As a result of the need to remain within walking distance of synagogues, and the need to be close to Jewish stores and other Jewish institutions, they have remained residentially concentrated. The Orthodox comprise, however, only a small proportion of the total Jewish population.

Jewish communal leaders perceive this increased spatial dispersion as a problem. Unless a critical mass of Jews remains in contiguous areas of the city and/or suburbs it is difficult and expensive to maintain viable communal and religious facilities.

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Although there has been a need for accurate information on changes in the degree of dispersion of the Jewish population in different cities, up to now, this type of information has not been available. The federal census is of little value because questions on religion are not included. The National Jewish Population Survey (Massarik and Chenkin, 1973) carried out in 1971 provides little information on the spatial distribution of the Jewish populations in specific cities. The Jewish community surveys which have been carried out in a number of cities are a potentially valuable source of information about this subject. Unfortunately, most of these surveys have been carried out for only one point in time and therefore cannot be used to describe changes in the spatial distribution of the population over time. Moreover, these studies have either lacked statistical measures of dispersion or have used imprecise measures. For example, Goldstein's research on the Jewish community of Providence showed an increasing degree of dispersion in the suburbs.

Within the central cities of the (Greater Providence) area, 90 percent of all Jews were concentrated within one fourth of the census tracts. By contrast, 40 percent of the census tracts must be cumulated to encompass 90 percent of all suburban Jews. . . (Goldstein, 1971)

Calculating dispersion in this manner is inadequate because the size of city and suburban census tracts vary considerably. Consequently, results obtained from this measure could be deceiving (i.e., there could be much more dispersion than would be apparent from the results).

This paper focuses on the above noted limitations in existing research. Using Cincinnati as a case study, it seeks to measure in more precise fashion than has been possible in previous research the impact of suburbanization on the spatial distribution of the Jewish population. More specifically, we will attempt to answer the following three sets of questions. First, what has been the pace of Jewish suburbanization? Has Jewish suburbanization occurred within a clearly defined sector of the metropolitan area? Second, what have been the patterns of movements within the metropolitan area? Has there been a tendency for Jewish families moving from identifiably Jewish communities within the city to recluster in particular suburban communities? Third, to what extent has there been a shift in the mean center of the Jewish population since 1973? To what extent has suburbanization of the Jewish population been accompanied by an increase in its spatial dispersion and a decrease in the density of Jews?

This paper combines centrographic techniques (e.g., center of gravity, dispersion) with the more traditional methods (changes in proportions living in specific communities) in order to describe population shifts. Up to now centrographic techniques have been used to identify the catchment areas for public facilities (Schneider, 1968), to measure shifts in the center of the Jewish population of Israel (Schachar, 1970), and to compare the spatial patterns of different ethnic groups over time (Lee, 1966; Matwijw, 1979). To our knowledge this paper represents one of the first attempts to apply these techniques to study residential shifts by Jews in American cities.

## METHODOLOGY

The data sources for this study were the 1970, 1973, 1976, 1977, 1978 (July—December), and 1979 (January—June) lists of donors and prospective donors to the Jewish Welfare Fund (JWF) of Cincinnati. While these lists do not

include the entire Jewish population of metropolitan Cincinnati, there is no evidence that their use would produce geographically biased results (see Varady, 1973).

This paper utilizes two separate samples. The first sample was composed of several randomly selected subsamples, the composition of which is shown in Table 1. This sample was used to describe the spatial distribution of the Jewish population in 1970, 1973, and 1979.

Data on four characteristics of the families contained in the JWF lists were coded: (1) migration status, i.e., mover/non-mover, and mover to/from city/suburbs; (2) previous location (if the family had moved); (3) current location; and (4) synagogue affiliation.

**Table 1: Types of families selected from the Jewish Federation lists of donors\***

Type of family	1970	1973	1976	1977	1978	1979
New Prospects	29%	11%	59%	26%	26%	8%
Movers within Cincinnati area	31	15	33	57	56	11
Movers out of Cincinnati area	10	8	8	17	18	6
Non-movers	30	66	--	--	--	75
Sample size	(1764)	(829)	(1448)	(778)	(413)	(862)

\* The reader should note that there were striking differences in the number and types of families coded between the four lists. These differences reflect: (1) the fact that the procedures used to update the donor lists changed each year; (2) no attempt was made to code non-movers from the 1976—78 lists; and, (3) the fact that only the July—December, 1978, and January—June, 1979 lists were available, whereas lists for all of 1970, 1973, 1976 and 1977 were utilized.

The current address, and previous address if different from the current one, were coded into census tracts. The census tracts were then recoded into communities. In order to answer the questions listed above, family characteristics were compared for different communities.

The second sample, containing 500 families randomly selected from the 1973 list and 500 families from the 1979 list, was used to conduct a centographic analysis of the Jewish population. The purpose of this analysis was to measure changes in the center of gravity of the Jewish population during this period and to measure changes in the dispersion of the population around its center.

A square grid was overlayed on a metropolitan Cincinnati street map (1:30,000). This allowed each family address to be located by a set of x, y coordinates which could be subject to computer analysis. This process allowed computation of four statistics, the mean center of gravity, the standard radius, the coefficient of circularity, and the standard ellipse (Tobler, 1970).

The mean center of gravity is equivalent to the mean (average) in univariate statistics. The standard radius is a measure of the degree of dispersion of the population around its mean center of gravity and is comparable to the standard deviation of a univariate distribution. The standard ellipse shows the direction,

shape, and amount of population despersion. Approximately 40 percent of the population under study lies within the area of the standard ellipse. Finally, the coefficient of circularity describes the degree to which the population lies along the major axis of the standard ellipse (that is, is distributed linearly) or is split between the major and minor axes of the ellipse (that is, is circular).

## FINDINGS

### Changes in Settlement Patterns

Social scientists have devoted relatively little attention to changes in the location of Jewish residential areas. The sectoral theory, which was developed to explain the movement of land use in general, has been found helpful in understanding residential shifts of different ethnic groups including Jews. Sector theory states that:

growth takes place along mass transportation routes or along lines of least resistance . . . that growth along a particular axis of transportation usually consists of similar types of land use . . . Thus, a high rent residential area in the eastern quadrant of the city would tend to migrate outward, keeping always in the eastern quadrant (Harris and Ullman, 1957:243).

For example, Gelman (1973), for Boston and Rubinstein (1980), for Cleveland found that outward shifts were in conformance with sector theory. The residential shifts of Cincinnati's Jewish population are also in conformance with this theory. These shifts can be described in terms of four stages (see Figure 1).

The first area of settlement of Cincinnati's Eastern European Jewish population was in the West End community, adjacent to the C.B.D. Rising incomes during the 1920's permitted many Jews to relocate from the West End to Avondale, Cincinnati's second generation Jewish ghetto. This shift conformed to sector theory in that it was confined to one sector (the northeastern one) defined by a major transportation artery (Reading Road). Between 1930 and 1950 Avondale was an identifiable Jewish enclave with a large number of synagogues, religious schools, kosher butchers, bakeries, and other stores serving a Jewish clientele. Racial change began in the late 1940's and by 1960 the community was predominantly black.

As Jews moved away from Avondale, they reclustered in five city and suburban communities along the northern edge of the city, the "Roselawn Cluster." The shift from Avondale to the Roselawn cluster also was within the northeast sector, along Reading Road. By 1970, nearly two third (62 percent) of the Jewish families in the Cincinnati area lived in the Roselawn Cluster. Furthermore, the Roselawn community, Cincinnati's third generation Jewish ghetto, alone contained more than one fifth (21 percent) of all Jewish families in the Cincinnati area. Roselawn's population was approximately one half Jewish.

During the 1970's the pace of Jewish suburbanization increased with the proportion of Jewish families living in the suburbs increasing from 40 percent in 1970 to 55 percent in 1979. Because the average size of a suburban family is larger — more children — than a city family, the total shift is greater than the family shift would indicate (see Varady and Mantel, 1980). Although this shift to

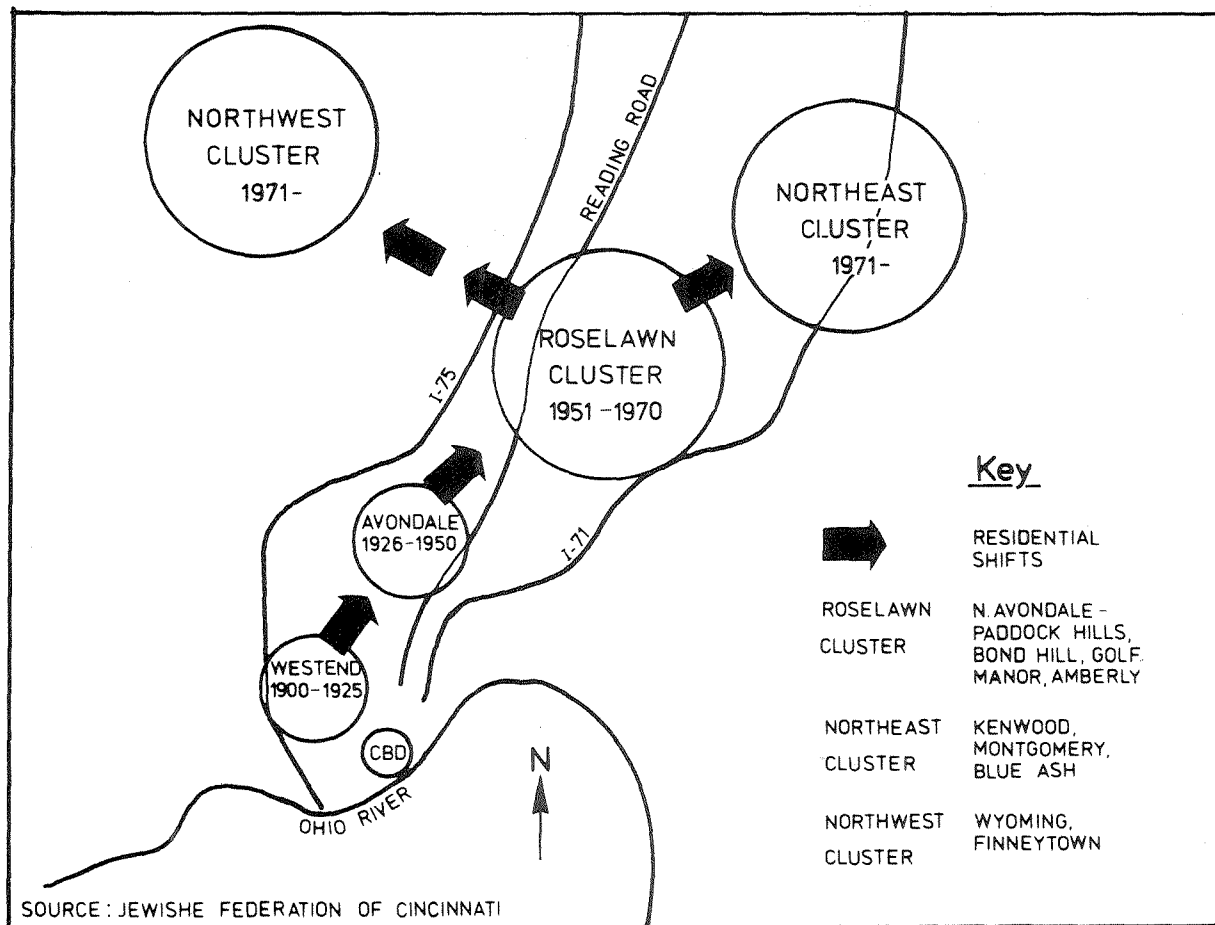


Fig.1: RESIDENTIAL SHIFTS

the suburbs seems dramatic, it should be noted that the pace was far more rapid in such cities as Boston, Cleveland, and Detroit where by 1970 only a miniscule proportion of the Jewish population remained within the central city.

Suburbanization was accompanied by some striking changes in the distribution of the Jewish population among particular types of city and suburban communities. Specifically, during the 1970's suburbanization was accompanied by a decline in the proportion of the total Jewish population living in the Roselawn Cluster (from 62 percent to 45 percent of the total). These declines were related to the existence of racial change in this cluster of communities. (By 1979 the two other city communities in the cluster to the south of Roselawn were predominantly black as were the public schools serving Roselawn).

The decline in the proportion of Jews in these communities is not attributable to "white flight." There has been no widespread blockbusting in these areas in recent years. The area has suffered from attrition rather than flight, the decline being caused by a sharp drop-off in demand for homes in the "area" by young Jewish families. This decline in Jewish demand for housing in these areas is probably related to perceived decline in the quality of the schools (which in turn is partly a function of the increasing proportions of black students) and to the fact that the older homes in the area (many of which are fairly small) are not viewed as attractive by young growing families.

As the Jewish population has shifted northward within Hamilton County, it has branched off in two directions from the Reading Road corridor (see Figure 1). Up to now no massive relocation has occurred from the Roselawn cluster to these two areas. As of 1979 these two newer clusters contained less than a third of all Jewish families in the Cincinnati area.

At the height of Jewish settlement, approximately half of Roselawn's population was Jewish. That proportion dropped to about two fifths of the total by 1979. But if Roselawn could be called a ghetto in the 60's, certainly the Northeastern and Northwestern clusters could not be termed ghettos in the 80's. The Northeastern cluster of about 4000 Jews is about 10 percent of the total population of the area, and the Northwestern cluster holds about 3200 Jews, about 15 percent of the cluster's total.

### **Mobility and Migration Patterns**

It is usually assumed that the shift to the suburbs consists mainly of families fleeing the city. Our results cast doubt on this contention, at least for Cincinnati. Of the city families who moved, more than half (55 percent, 780) relocated within the city. Similarly, suburban movers tended to remain in the suburbs (78 percent, 540). This supports our earlier assertion that the older Jewish area (the Roselawn cluster) has declined more from attrition than flight.

In order to obtain a better understanding of the pattern of movement of Jews within the Cincinnati metropolitan area we cross-tabulated the sources and destinations of intra-metropolitan moves for the 1976—79 period. The detailed results, not presented here, support three generalizations based on previous geographical research.

First, there was a strong tendency to move within the same community (Moore, 1972). This point is illustrated by the results for Roselawn. About two fifths (42 percent) of the Roselawn movers relocated within this community.



Second, when families moved away from their original community, they tended to relocate to adjoining areas (see Figure 2). For example, nearly two fifths (38 percent) of the Bond Hill movers relocated just to the north in Roselawn.

Third, there was a tendency for intra-metropolitan movers to relocate within clearly defined sectors of the metropolitan area; that is, either the eastern or the western sector of Cincinnati (Moore, 1972; see Figure 2). For example, of the 136 outmigrants from Roselawn, approximately three quarters moved to suburbs in the eastern sector of the county.

Simmons (1968) has asserted that when older Jewish communities decline they are reconstituted in the suburbs implying that people move together forming suburban ghettos. Our findings refute this contention. Roselawn families did not move together (see Figure 2). Second, when families did move to or settle in the suburbs, they did not "ghettoize." As noted above, the proportion of Jews in the newer areas is relatively low, between 10 and 15 percent Jewish. Figure 2 shows that although outmigrants from Roselawn did tend to relocate in the northeastern suburbs, they were fairly evenly distributed there among four areas, including one, the "Other Eastern Suburbs," which is actually an agglomeration of a fairly large number of separate communities.

### *Changes in the Center of Gravity and Degree of Dispersion of the Jewish Population*

The results of the centrographic analysis indicate a northeasterly shift of Cincinnati's Jewish population. In both 1973 and 1979, the center of gravity was in Roselawn. During this time period, the mean center shifted three-eighths of mile to the northeast but still remained within the community (see Figure 3).

While a center of population shift of three-eighths of a mile may not seem significant, it is a direct reflection of the flow of Cincinnati's Jewish population from the city into the suburbs. This has resulted in an increased dispersion, that is, an increased distance between families.

Because the coefficient of circularity shows the dispersion pattern of the Jewish population to be approximately circular, the standard radius can be used to determine the degree to which the population had dispersed between 1973 and 1979. In 1973 the standard radius was 2.4 miles. The center of population was noted above, and 95 percent of Cincinnati's Jews lived within 4.7 miles of that point, a circle of approximately 69 square miles (see Figure 3). By 1979, the standard radius had increased 25 percent to 3.0 miles; the center of population has moved three-eighths of a mile to the northeast; and, the circle containing 95 percent of area Jews had radius of approximately 5.9 miles with an area of almost 110 square miles — an increase of almost 60 percent.

Using 21,000 as an estimate of the Greater Cincinnati Jewish population (Varady and Mantel, 1980), the density of Jewish population fell from 304 per square mile in 1973 to only 191 per square mile in 1979. While Cincinnati Jews are not spread evenly through this area, the decline in population density (increase in dispersion) is significant and is a typical result of suburbanization.

City-suburban differences in the population's standard radius provide



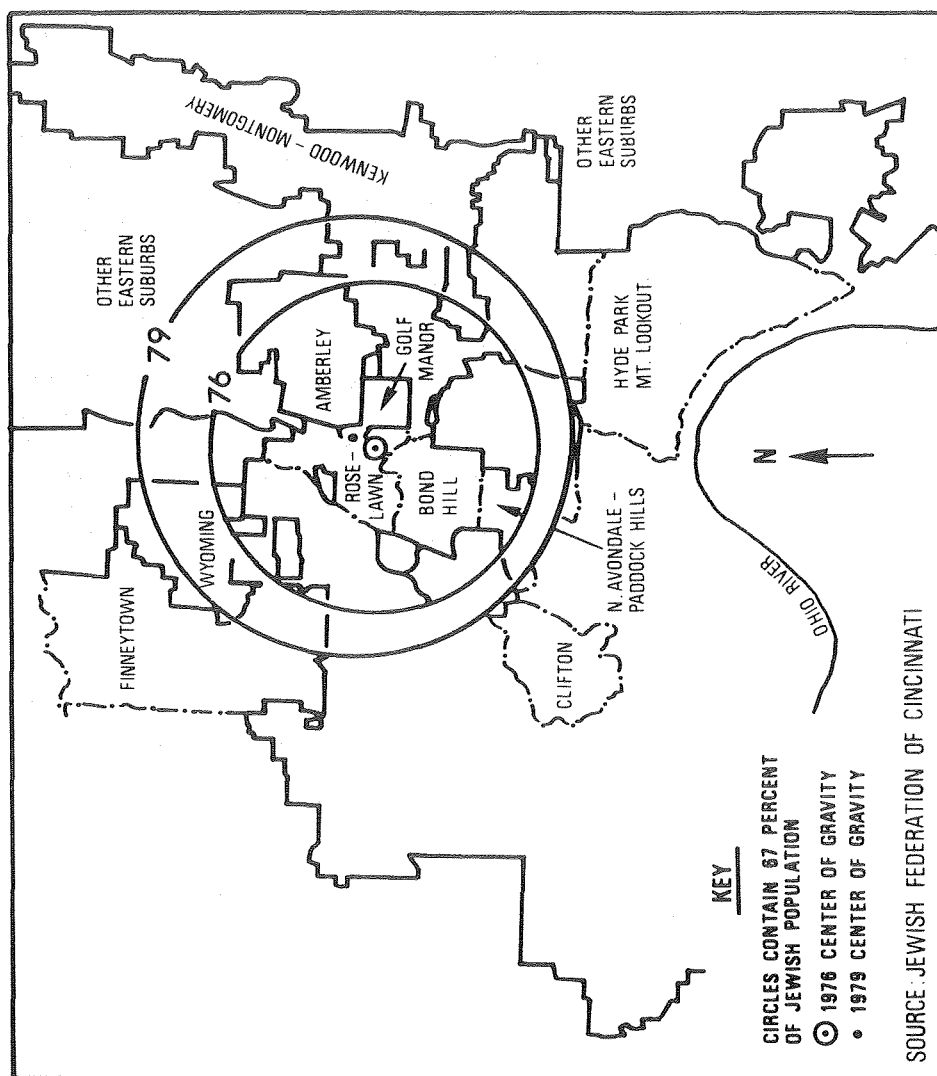


Fig. 3: Changes in the center of gravity and dispersion 1976-1979

additional evidence of the impact of suburbanization on dispersion. In 1979 the standard radius for suburban Jews (i.e., exclusive of the City of Cincinnati) was 3.1 miles, which is significantly greater than the standard radius for city Jews, 2.0 miles. Further, while there was a marked increase in the standard radius for suburban Jews between 1973 and 1979 (2.5 to 3.1 miles), the standard radius of the city Jewish population was virtually unchanged (1.8 to 2.0 miles).

## CONCLUSIONS

This paper has sought to improve understanding of changing settlement patterns of Jews in American metropolitan areas through a case study of the Jewish population in Cincinnati. Both centrographic techniques and more traditional methods (changes in the proportions living in specific communities)

have been utilized to analyze data from the files of the Jewish Welfare Fund of Cincinnati for the 1970 to 1979 period.

The traditional wisdom has been that as older Jewish ghettos in the central city decline these populations shift outward and recluster in newer middle-income suburban areas. This was not the pattern that occurred in Cincinnati during the 1970s. First, the older Jewish ghetto (Roselawn) was declining as a result of attrition (i.e., the unwillingness of younger families to move into the area) rather than flight. Many of the families within this cluster who moved did so within the cluster. Second, the outward shift of the Jewish population was no longer confined to a narrow transportation corridor within northern Hamilton County as had been the case earlier during the century. Instead, the outward shift branched off in two directions. As a result of the fact that the Jewish population was spread over an increasingly wide band of communities in northern Hamilton County, the degree of spatial dispersion of the Jewish population increased markedly during the late 1970s. Finally, the northeastern and northwestern clusters, which were experiencing Jewish immigration were only 10—15 percent Jewish. It appears unlikely that the proportion Jewish in these clusters will ever increase to the point that either or both will be considered Jewish ghettos.

The increasing dispersion of the Jewish population in cities like Cincinnati poses a dilemma for Jewish communal planners. The increasing proportions of families in newer suburban fringe areas (like the northeastern and northwestern clusters) seems to suggest the desirability of relocating existing communal facilities further outward into the suburbs. In Cincinnati (and by implication, other cities), such a relocation strategy would be inappropriate. Because Cincinnati's suburban Jewish population is so dispersed, it would be difficult, if not impossible, to identify any singly suburban location that would prove convenient to all suburban areas. Moreover, if Jewish social services were relocated to the suburbs, they would be less accessible to the large Jewish population remaining in the city, a particularly burdensome problem for the Jewish elderly who have by and large not shared in suburbanization. Finally, such a relocation strategy might accelerate the process of decline in the Roselawn area.

One possible solution to this dilemma is to establish satellite facilities while maintaining the main facilities in the Roselawn area. In fact, the Jewish Community Center of Cincinnati has begun to implement such a strategy by establishing a branch in a Jewish day school building in one of the northeastern suburbs. Centographic techniques could be used to locate these satellite facilities by identifying the centers of Jewish population in particular parts of the city and the suburbs and by identifying the centers of gravity for subgroup within the Jewish population (e.g., families with school age children). The latter type of analysis would require more detailed information of families than was available from the Jewish Welfare Fund files.

Another possible solution would be for Jewish Federations and other Jewish agencies to encourage Jewish families to reside in existing Jewish ghettos such as Roselawn (see Varady, 1979). Whether such a strategy is feasible given the overall trend toward assimilation within the Jewish population is uncertain. Additional information is needed on the attitudes of Jews toward living in Jewish

neighborhoods of varying concentrations as well as their support for policies aimed at stabilizing existing Jewish neighborhoods.

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