# Continuity and Change in the Restless Urban Landscape* 

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#### Abstract

Recent inquiry in urban studies highlights the dynamic restructuring of urban areas, with new elements of the landscape taken as reflections of sweeping economic and sociocultural change. American cities are portrayed as "galactic" and "restless" manifestations of global and national industrial restructuring, widening income inequality, demographic shifts, and the cultural sensibilities of new class formations. Yet the persistence of residential segregation and suburban development processes provide reminders of the historical continuity of American urban form. This paper critically evaluates continuity and change in the urban landscape, drawing on feminist urban research and theories of residential differentiation to analyze changes in spatial segregation among families and households. I apply the methods of the classical factorial ecology literature to a special census tabulation that controls for tract boundary changes between 1980 and 1990. The analysis focuses on Minneapolis-St. Paul, which exemplifies processes of industrial restructuring and suburban development and an unusually high rate of female labor force participation. Results indicate that urban demographic trends have inscribed increasingly complex patterns of neighborhood segregation. The delayed childbearing increased employment, and high household incomes of married women of the baby boom generation have altered the 1960s "family status" construct. I offer a theory of the "public household" to illuminate this transformation, which entails an erosion of the boundaries between markets and family life as households confront the contradictions of suburban built ensironments. The foundations of residential differentiation display remarkable continuity, and the public household is rooted in long-term demographic trends, widening inequality, and increasing consumption standards driven by postwar suburbanization and housing policy. Ultimately, restlessness in the urban landscape is a story of dynamic stability, as turbulent social and institutional change reflects the struggles of workers and families adjusting to the imperatives of life in a low-density urban environment.


Key words: residential structure, urban spatial structure, gender, factorial ecology.

> La plus şa change . . .

The American city has lost its neat social patches of the 1950 s and . . . witnessed a resorting that is reminiscent of the period of ecological competition in the first decades of this century. Kirby 1989, 16 (cited in Knox 1991)

[^0]La plus c'est la même chose. . .

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What would a non-sexist city be like?
(Hayden 1981)
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The link between social change and the dynamic spatial restructuring of the urban environment has been one of the central foundations of research in urban geography and allied fields (Harris 1995; Scott and Soja 1996; Knox 1993). As metropoli$\tan$ America continues to shift toward an increasingly complex postindustrial structure, however, the urban theory that was developed in the context of the midcentury industrial metropolis increasingly has been seen as irrelevant to an understanding of
contemporary urban processes. The infusion of critical social theory into urban studies during the 1970s and 1980s initiated a widespread shift in conceptualizations of the links between social and spatial structure. A paradigm in which spatial factors were seen as contributing to or constraining social processes has been replaced by a narrative in which social dynamics and spatial form are mutually constitutive.
Yet geographic research provides a cautionary reminder of the durability of the spatial forms associated with American urbanization processes. Despite the elimination of formal segregation and the growth of an African American middle class, the spatial realities of racial segregation in urban housing markets are virtually identical to those prompting the Kerner Commission's warnings a generation ago (National Advisory Commission on Civil Disorders 1968; Kain 1968: Boger and Wegner 1996; Massey and Denton 1993; Wilson 1987, 1997). Despite an enormous body of academic and policy research documenting fiscal disparities, energy dependence, and negative consequences for neighborhood vitality and family life, the prevalent mode of urban growth and development continues unabated: each year, a larger fraction of the American population lives in low-density suburban environments comprised of detached, single-family homes on private lots, surrounded by relatively homogeneous residential areas, accessible only by private automobile (Adams 1970; Johnston 1984; Downs 1994; Burchell et al. 1998). The transformation of urban theory notwithstanding, the spatial realities of American urbanization have remained remarkably consistent for half a century (Harris 1995).

This paradox lends urgency to the task of documenting and describing the changing form, structure, and implications of the residential structure of American cities. The current literature offers a variety of theories to explain the processes taking
place in the urban environment, but no consensus on the relative importance of persistence and change. The literature is dichotomized between analyses emphasizing fundamental restructuring of the spatial correlates of fin-de-siècle industrial transformation, class formation, and social inequality and more cautious studies confirming the durability of long-standing divisions-simply at an expanded spatial scale.

In this paper I present an empirical evaluation of continuity and change in neighborhood differentiation, focusing on one metropolitan area that exemplifies many features of conventional urban models as well as contemporary trends of urban restructuring and social change. I draw on recent reconceptualizations of the interdependencies between households and labor markets and use multivariate statistical techniques to gauge the significance of changes in urban residential patterns, with a special focus on family and household structure. The results suggest significant change in urban social segregation among different family types, but also demonstrate the long-term stability of residential differentiation.

## Continuity and Change in the Urban Landscape

Many theories have emerged to explain changes in urban form in the context of global, national, and regional economic transformation. Two literatures have been especially influential in shaping geographers' perceptions of contemporary urban change. In the global cities literature, authors emphasize how the rise of rapidly mobile transnational capital investment networks fuels changes in national and regional urban systems (Friedmann 1995; Sassen 1994; Knox and Taylor 1995). At an interurban scale, accelerated capital mobility and industrial change have ushered in repeated rounds of restructuring since the early 1970s. Many theorists also point to widening inequalities within cities, as
growth in financial services inscribes an increasingly polarized occupational distribution atop eroding Fordist job structures rooted in unionized manufacturing. In a second literature, geographers concerned with a postmodern urbanism have sought to provide an alternative to still-hegemonic theories derived from the Chicago School (Scott and Soja 1996; Knox 1991, 1993; Dear and Flusty 1998). Adopting an explicit focus on the internal urban expression of larger-scale postindustrial shifts, these analysts posit that the relations among industrial restructuring, sociocultural change, and the built environment have fundamentally altered the processes, patterns, and meanings of residential differentiation. These changes are held to be most pronounced in the emergence of new middle classes (Wright 1989). The aesthetic sensibilities and consumption norms of these new classes demand new types of housing and amenities, as well as new retail, entertainment, and office spaces (Knox 1991). Concomitant changes in the role of financial institutions, the state, and developers in providing these new elements of the urban landscape are said to undermine theories of residential mobility and neighborhood change (such as those presented in Clark and Dieleman (1996) and Myers (1990)) that are rooted in ecological frameworks.
The emergence and growth of these literatures on global cities and postmodern urbanism signify the culmination of two broader disciplinary trends (for an excellent review of many of these debates, see Livingstone (1992, 304-46)). First, the prevailing view of the relationship between socioeconomic process and spatial form has changed in urban geography over the last 40 years. Through the 1950 s, research in the tradition of the Chicago School portrayed the spatial form of the city as a reflection of societal change in the context of dynamic regional and international migration streams and rapid urban industrialization. By the mid-1960s, however, many urbanists had embraced the theories, methods, and foundational assumptions of
neoclassical economics, which reduced geography to the status of a passive backdrop on which economic behavior inscribed an efficient spatial organization. Partially in response to this trend, the late 1960s saw a countervailing emphasis on the role of spatial factors in containing, guiding, or constraining economic and social processes. Spatial interaction modeling and time-geographic and behavioral studies all influenced theories of residential differentiation.

During this period, conceptual shifts in the link between social process and spatial form were especially important in the subfield of factorial ecology, in which sophisticated multivariate methods were applied to large secondary datasets in order to derive generalized statements on the residential structure of urban areas. Factorial ecology initially relied on Chicago School theories to explain the underlying processes and was especially indebted to Sherky and Bell's (1955) social area analysis. Shevky and Bell proposed that the spatial imprint of urban industrialization could be understood in terms of three essential constructs: economic status variations were rooted in changes in the division of labor; urbanization or family status variations emerged with new forms of household arrangements; and segregation or ethnic status variations were attributed to immigration and racial conflicts. The contribution of the empirical studies inspired by these ideas was to show how social divisions took spatial form as tramsportation innovations allowed the city to expand outward in successive waves of metropolitan growth. Factorial ecology replaced the strict deductive reasoning of social area analysis with a more extensive, inductive search for commonalities in spatial organization among various characteristics of neighborhoods. As a consequence, much of the research in factorial ecology began to focus on technical and empirical questions of spatial pat-tern-obscuring the underlying societal dynamics responsible for observed urban geographies (Pratt and Hanson 1988; Gottdiener 1985).

Political economy brought a strong reaction against the descriptive, empiricist turn of spatial science (Harvey 1973). Structuralists sought to replace sophisticated quantitative descriptions of urban structure with analyses rooted in theories of class formation and class conflict. Thus for Harvey (1973, 1985) and others, the particular form of residential differentiation at any historical moment was to be understood as conducive to the continued reproduction of capitalist social relations (see also Badcock 1994; Harris 1984: Scott 1988). Residential geographies emerged from workplace-based relations of production, thereby reproducing class relations (through intergenerational inequalities in education. income and wealth) and fragmenting class consciousness (as in fights over school busing or affordable housing) (Harvey 1985). By the mid-1980s, urban geography had engaged theories of the interdependence and mutual constitution of urban society and urban space in a "sociospatial dialectic" (Soja 1980; Knox 1991, 1993). Feminist urban research during the past two decades has further transformed the study of residential differentiation: societal struggles over gender relations are manifest in the built entironment, but the resulting urban spaces and places also shape the possibilities for different ways of living (Domosh 1998; Hayden 1984; Rose and Villeneuve 1998).
While the first trend has dealt with the relationship between society and space, the second trend has been methodological. Economic and social geography have witnessed a relative (if not absolute) decline in quantitative and positivist approaches. In studies of urban residential structure, the dominant quantitative methods of the 1960s and 1970s have been largely supplanted by qualitative and case study approaches. With few exceptions (Davies and Murdie 1991; Perle 1981, 1982, 1998), there has been little attempt systematically to evaluate changes in patterns of residential differentiation since the high-water mark of ecological research in the late 1960s. Consequently, most of the findings
and methods of the factorial ecology literature now seem to be viewed as part of the conventional wisdom of introductory textbooks, or as irrelevant to any understanding of contemporary metropolitan regions in postindustrial Western societies. Most such studies were based on data for central cities in 1960 or 1970, thus providing little insight on increasingly variegated suburban neighborhoods during the 1980s (Baldassare 1994). Most importantly, much of the factorial ecology literature was implicitly based on theories of the behavior of individuals and households in connecting "social space" to "housing space" (Berry and Kasarda 1977). As such, this literature lent itself to a view of residential differentiation as a natural by-product of competition in a modern, efficient urban society. This line of reasoning has come under severe and sustained attack (Timms 1971; Davies 1984; Berry and Kasarda 1977; cf. Harvey 1973, 1985). By the mid-1980s, the expanding array of conflicting paradigms in urban research seemed to have rendered factorial ecology research doubly irrelevant: it appeared methodologically primitive when viewed from the standpoint of contemporary spatial statistics and geographic information systems (Anselin 1988; Belsky, Can, and Megbolugbe 1998; Thrall 1998), and it was seen as substantively and theoretically constrained when viewed from the vantage point of structuralist and poststructuralist approaches. Ironically, the eclipse of the factorial ecology tradition in basic theoretical inquiry coincides with a growing popularity of factorial methods in specialized private sector and policyoriented research, much of it enabled by the diffusion of desktop Geographic Information Systems (GIS) and proprietary databases. A thriving "geodemographic marketing" industry has been built on the use of quantitative-revolution techniques to classify consumer markets according to individual or neighborhood demographic characteristics and spending behavior and to target these markets with telemarketing or automated direct mail advertising campaigns (Weiss 1988; Goss 1992; see also

Curry 1997).' Similar approaches are increasingly in vogue in the real estate industry (Birkin and Clarke 1998), in efforts to regulate financial services (Belsky, Can, and Megbolugbe 1998; Journal of Housing Research 1998; Thrall 1998), and even to identify "suburban urbanites" who may be lured back to city living (Lang, Hughes, and Danielsen 1997).

These two facets of the reorientation of urban economic and social research-the problematized link between social and spatial structure and the critique of spatialanalytic methods-have greatly advanced our understanding of contemporary processes of urban restructuring and social change. For three reasons, however, I believe a quantitative reevaluation of residential differentiation is justified. First, the heavy infusion of social theory into postmodern urbanism and other urban literatures has been quick to emphasize contemporary sociocultural change while obscuring any long-term stability that might be present in urban land use patterns (see Damielson and Wolpert 1994). As observers of a nascent postmodern urbanism (e.g. Knox 1991; Dear and Flusty 1998) readily acknowledge, analysis of new elements of the urban landscape must be balanced with a recognition of the long-term stability of the structural imperatives and individual preferences associated with the midcentury industrial metropolis. Indeed, even as urban theory has sought to escape the spatial determinism of earlier generations, urban policy and urban development seem to be going in precisely the opposite direction. The familiar litany of contradictions of metropolitan growth-municipal fragmentation, exchu-

[^1]sionary zoning, distorted infrastructural funding, endemic fiscal disparitiesremain firmly in place, along with the twin pillars of American urban spatial structure: the automobile and the detached, singlefamily suburban house. Current efforts to disperse low-income populations and to increase the homeownership rate-now at its highest level ever-must also be interpreted in this light, given the structured financial incentives of homeownership in suburbia (Stegman et al. 1991; Stegman 1997). ${ }^{2}$ And while postindustrial supplyand demand-side forces may have altered facets of residential development at the high end of the housing market, for example, urban processes associated with the industrial city-ecological filtering as well as segregation and social reproduction of class relations-prevail throughout much of the remainder of the urban landscape (Rondinelli, Johnson, and Kasarda 1998; Berry and Kasarda 1977; Harvey 1985; Adams 1988; Pratt and Hanson 1988).
A quantitative reevaluation of residential differentiation is justified for a second reason. Most analysts writing in the postmodern urbanist and global cities literatures draw broad generalizations from arguably distinctive cases of urban restructuring. This contextual sensitivity lends a sort of

[^2]historical continuity to much of the literature in urban geography. If the legacy of the Chicago School forged American urban geography in the image of the midcontinental industrial city, recent decades have brought a decisive shift to equally distinctive settings for the Los Angeles School and the World City Hypothesis (Scott and Soja 1996; Sassen 1994; Friedmann 1995; Knox and Taylor 1995).

Finally, the postmodern urbanist and global cities literatures are particularly vulnerable to misinterpretations with regard to the magnitude of seemingly new phenomena. Postmodern urbanists, for example, portray the appearance of new elements of the residential landscape as a reflection of the distinctive "habitus" of new social classes. While the attention devoted to these groups might suggest that they comprise a large and growing share of the national work force, empirical evidence is more ambiguous. The occupations Knox (1991) takes as representative of the new bourgeoisie and new petite bourgeoisie comprise 15.1 percent of the national civilian work force, but this figure drops to 8.1 percent if school teachers, secretaries, and typists are excluded (U.S. Bureau of the Census 1997, 405). The projected leading occupations in terms of absolute job growth between 1994 and 2005 are cashiers, retail salespersons, janitors, and cleaners (including maids and housekeepers) (U.S. Bureau of the Census 1997, 408). To be sure, the polarization associated with the growth of secondary sector service workers alongside an expanding class of white-collar elites is a central theme in much of this literature. In a lucid and incisive synthesis of influential globalization theories, however, Storper (1997) highlights numerous weaknesses in the ways globalization has been conceptualized and in the ways it has been purported to alter the foundations of urban growth and urban inequality. Storper is highly critical, for example, of the "global-dual city" hypothesis advanced by Sassen, Castells, and others: evidence on occupational restructuring and wage rates is "hardly the catastrophic
picture painted by the global-dual city theory," and "The 'yuppie plus servant classes' analysis of inequality does not work" (Storper 1997, 232; see also Tickell 1998). Storper's critique is only partly empirical; more broadly, he argues that occupational restructuring is occurring everywhere, and is not limited to world cities or even large cities. I would add that if there is nothing uniquely urban about occupational polarization, then there is little reason to believe that globalization-driven labor market changes have produced completely new residential structures. The evidence marshaled so far seems insufficient to justify the conclusion that the American city has "lost its neat social patches of the 1950s" (Kirby 1989, cited in Knox 1991), to be replaced by a restless, "glocalized" postindustrial landscape.

## Conceptualizing and Measuring Urban Residential Structure

In this paper, I adopt an alternative approach to evaluate the relative importance of continuity and change in residential differentiation in American cities. Drawing on hypotheses rooted in feminist geography and using multivariate statistical techniques from the classical factorial ecology literature, I assess the degree to which industrial restructuring and sociocultural change have altered the form, significance, and implications of urban residential structure. While some of the methods used in this study have often been regarded as more descriptive than rigorously analytical, examination of a selection of variables from a unique dataset provides an unusually sharp image of changes in sociospatial structure that has until recently been difficult or impossible. Moreover, as Pratt and Hanson (1988) have argued, altered theoretical perspectives have eroded the validity even of descriptive studies conducted during the 1960s and 1970s, yet the patterns from factorial ecology go unchallenged. Despite the shift from social area analysis and factorial ecology to political
economy and poststructuralist analyses of urban processes, "the patterns themselves seem no longer to be questioned but now merely to be taken for granted" (Pratt and Hanson 1988, 15). Consequently, important questions regarding the extent, magnitude, and significance of change in residential structure have been ignored. I seek to evaluate the scope and extent of these changes by focusing on changing household and family structure, trends that are bound up with a wide set of social and economic transformations in Western societies. The decline of "traditional" nuclear families, for example, is rooted in societal shifts in gender roles and carries implications for the interdependence of urban economic restructuring (firm location and industrial structure, labor market segmentation) as well as the emergence of new urban social geographies (Hanson and Pratt 1995; Gilbert 1997; Domosh 1998).

## New Ecological Structures and the "Public Household"

Pattems of residential differentiation in the American city are the outcome of a complex web of interdependent processes. On the one hand, individuals and families choose among different housing units, neighborhoods, and municipalities in accordance with individual needs at various stages of their lives. On the other hand, the actions of home builders, lenders, investors, and governments at all levels, from local to federal, shape the array of choices open to individual households. The historical legacy of decisions and policies undertaken during previous rounds of urban development further restricts the choice set for an individual household. That is, the present form of urban residential structure is the outcome of individual choice and broader structural forces.

In addition, economic and sociocultural realms are intertwined in an intricate network of incentives, subsidies, and socially constructed preferences for different ways of organizing household and neighborhood life. In economic terms, the traditional sub-
urban trajectory households follow as they move through different life stages may be thought of as a transition from choices made to maximize the use value of the neighborhood (an active, diverse, and entertaining experience of urban life) to choices undertaken to maximize the exchange value of the house (such as enduring high debt loads and commuting costs in order to accumulate home equity). In sociocultural terms, the detached, suburban house on a private lot has always occupied a privileged place in the "American Dream," corresponding to nearly a century of declining population densities and upward social mobility linked with outward spatial mobility. Prior to the Second World War, many of these preferences were codified in federal housing policy, lending industry practices, and de facto and de jure standards among developers, appraisers, regulators, and real estate agents. As a consequence, the experiences of individual households in the environments produced by these broader forces often highlight tensions and contradictions that are easily masked by the dichotomies of mainstream urban research.
Two interrelated problems are particularly important, and constitute the central hypotheses of the present study. First, sweeping changes in household and family organization exacerbate the contradictions between individual choice and the implicit assumptions embodied in the built environment. During the initial waves of postwar suburbanization in the United States, housing design, land use policy, and transportation planning were premised upon the socially constructed norm of the patriarchal nuclear family, in which the male breadwinner journeyed to work downtown, while the wife took care of home and children in suburbia. It is certainly debatable whether this image accurately portrays the complex demographic realities of the 1950)s. By the mid-1970s, however, the suburbs were clearly in crisis, as dualearner households in patriarchal bedroom communities attempted to cope with rising house and energy prices and stagnating real
earnings. Household and family arrangements have continued to evolve in the last two decades. By the mid-1990s, nonfamily households ${ }^{3}$ outnumbered married-couple families with children, and married couples in which the wife did not work accounted for only 19 percent of all households (U.S. Bureau of the Census 1997, 59, 469). The question is whether different kinds of families have sought out (or been confined to) different kinds of neighborhoods. If so, then increasing diversity in household and family structure should have parallel spatial dimensions, such that the classical "family status" constructs of social area analysis and factorial ecology will splinter into multiple axes of demographic structure and lifecourse variations. Similar instability in the relations among constituent demographic indicators should also be evident: Pratt and Hanson (1988), for example, demonstrate that the increase in female labor force participation across all segments of the class structure renders this variable a less reliable discriminator among neighborhoods, even as it inscribes a new dimension of difference rooted in the gender division of labor in households as well as in the labor market.

The second hypothesis concerns the dynamic links among demographic change, income inequality, and neighborhood change. Between 1970 and 1994, inflationadjusted median earnings for dual-earner. married-couple families increased 22 percent, while such earnings declined for all other family types (U.S. Bureau of the Census 1997, 469). As increasing inequality intersects with shifting locational preferences and housing filtering processes, it is reason-
${ }^{3}$ The Burean of the Census distinguishes between households (a group of people sharing a housing unit) and families (two or more persons sharing a housing unit who are related by birth, marriage, or adoption). Nonfamily households include single-person households and all households with two or more unrelated individuals. For the first time, the 1990 census also included a category for "ummarried partner" households, comprised of unrelated individuals of the same or opposite sex.
able to expect that the ecological structure of the metropolis will change accordingly, such that aspects of the traditional socioeconomic status dimension will be incorporated into a new factor associated with affluent, dualearner professional couples.

Both of these hypotheses rely on feminist reconceptualizations of the relationship between households and urban spatial structure. Feminist geographic analyses examine the interrelations between public and private space and economic (waged) and social (unpaid) activities (Hayden 1981, 1984: Hanson and Pratt 1988, 1992, 1995; Markusen 1980). By reinforcing the dichotomy between these realms, suburban housing design and development patterns help to sustain patriarchal gender relations both in residential neighborhoods and in the workplace. While the consequences are deleterious for many groups of women, the intersection of seemingly disparate phenomena-residential structure, gender relations within families, economic growth-is most strikingly evident among (mostly white) middle- and upper-middleclass women. Hayden's (1981) "What would a non-sexist city be like?" remains perhaps the clearest elaboration of these relations: "Currently, more affluent women's problems as workers have been considered 'private' problems-the lack of good day care, their lack of time. The aids to overcome an environment without child care, public transportation, or food service have been 'private,' commercially profitable solutions: maids and baby-sitters by the hour; franchise day care or extended television viewing; fast food service; easier credit for purchasing an automobile, a washer, or a microwave oven" (1981, 173).

Although conceptualizations such as this are central to feminist geographic research (Domosh 1998; McDowell 1993; Gilbert 1997), most mainstream urban research continues to perpetuate the dichotomy between economic and social realms, despite the fact that empirical trends have amplified the relevance of these theoretical arguments (Hanson and Pratt 1988). Increasing diversity among households,
widening income inequality, and continued increases in female labor force participation magnify the contradictions of American housing policy that were (partially) concealed by women's unpaid domestic labor in the patriarchal nuclear family. The continued expansion of suburbs dominated by single-family homes propells aggregate demand for time- and labor-saving innovations that blur the boundaries between households and markets. The results are evident in widening intraurban variations in neighborhood social life, fine-grained central-place networks for goods and services formerly provided within the household, localized spatial and skills mismatches, and (under conditions of municipal fragmentation) local fiscal disparities manifest in inequalities in collective consumption. In short, the continued dominance of suburban singlefamily residential growth alters the implications of residential differentiation if not its geometry.

I use the notion of the "public household" to refer to the interdependency of markets and family life--the relationships among the suburban built environment, consumption patterns, and widening contrasts in urban social space. This definition is a stark and intentional departure from Bell (1976), who coined the phrase to describe an expanding welfare state that assumed responsibility for a progressively wider array of social and cultural functions in Western industrialized societies. In the context of public sector retrenchment, federal devolution, and widespread privatization, a focus on household-level adjustments to the broader forces implicated in the making of the suburban landscape is essential to understanding the contemporary geography of economic and social inequality.

## The Case of MinneapolisSt. Paul

The setting for the study is a set of seven counties at the core of the Minneapolis-St.

Paul metropolitan area, with a 1990 population of 2.3 million. ${ }^{4}$ Studies have documented that the social and spatial structure of the Twin Cities exemplified many features of classical models of urban spatial structure (Harris 1995; Hartshorne 1932; Adams 1970, 1991). Since the 1970s, the Twin Cities have experienced comparatively vibrant growth amid rapid industrial restructuring and associated occupational shifts. These changes have created a setting that is appropriate for analyzing variations among the suburban middle classes. While the region has relatively little of the stark social and spatial polarization highlighted by research on cities at the peak of the urban hierarchy, local sociodemographic changes are broadly emblematic of national trends. Mapping three simple indicators between 1970 and 1990 serves to illustrate both persistence and change in observed patterns of residential differentiation in this metropolitan setting.

## Female Labor Force Participation

The increase of women in paid employment represents one of the most profound transformations of labor markets and family life in the past three generations (Hanson and Pratt 1995; Goldin 1990). The Upper Midwest leads the nation in these trends. In Minnesota, 68.7 percent of all women over age 15 are in the labor force, second only to Wisconsin ( 69.6 percent) (U. S. Bureau of the Census 1997, 401). In the Twin Cities, female labor force participation jumped from 39.8 percent in 1960 to 67.3 percent in 1990; for women with children under age six the rate mushroomed from 17.6 percent to 68.9 percent.

Given its role in the transformation of labor markets, rising female work force participation has prompted wide-ranging critiques of theories of occupational mobil-

[^3]ity, workplace organization, and the labor process itself (Strom 1992; Walby 1986, 1990; Goldin 1990). In the housing market, the increase in female waged work has eroded the validity of established theories of residential structure. The historical geography of the Twin Cities presents an unusual setting, with a highly feminized work force in the context of a classical urban spatial structure. In the early postwar years, the geography of women's employment presented a textbook case of social area analysis (Fig. 1). Young, unmarried women worked in downtown office and service jobs and lived with their families or in apartment districts along streetcar corridors stretching outward from both downtown cores. Sweeping economic and cultural change over four decades, however, steadily inverted this pattern: metropolitan decentralization intersected with the entry of suburban women into the work force in response to stagnating family incomes, increasing consumption standards, rising educational attainment, and the increase in suburban job opportunities. By 1990, the highest rates of fenale labor force participation were in second- and third-ring middle-class suburbs (see Fig. 1).

## Nonfamily Households

In contrast to the dynamic changes associated with increasing female employment, the distribution of nonfamily households suggests a remarkable stability of urban sociospatial structure (Fig. 2). In urban housing demography, the concentration of singles and unrelated individuals in the inner city is explained with reference to some combination of individual preferences and structural constraints in the housing market (Myers 1990). In recent years emphasis on the latter has displaced that on the former, such that there is a greater hesitancy to portray the high incidence of nonfamily living arrangements in urban neighborhoods as deviations from a "norm" of suburban familism. Yet the persistence of the centralized spatial pattern itself-rooted in the distribution of afford-
able housing and high-density urban envi-ronments-is remarkable. Neighborhoods where nonfamily households predominate remain clustered in the urban cores and along major concentrations of apartment construction during the 1970s and 1980s. Consequently, changes in the spatial imprint of this aspect of residential differentiation are simply geometric, as metropolitan spatial expansion extends the "family status" frontier farther outward to newer suburbs on the urban fringe.

## Childless Couples

A third indicator suggests a more ambiguous interpretation. Nationally, childless married-couple families comprised 28.9 percent of all households in 1995, down only slightly from 29.9 percent in 1980 (U.S. Bureau of the Census 1997, 59). In the Twin Cities, the comparable figure for 1990 is 27.1 percent. The intraurban distribution of these households, however, reflects the complexity of neighborhood change and changing lifecourse circumstances. Childless marriedcouple families represent an unusually heterogeneous group with corresponding differences in wealth and housing needs. Younger families in the years before childbirth have lower earnings and are just beginning to move from renting to owning; empty nesters with higher levels of wealth may continue to trade up to more expensive housing, or they may seek out smaller housing to match their reduced space requirements (Adams 1988; Clark and Dieleman 1996).

This complexity is reflected in the changing map of childless married couples (Fig. 3). In 1970, areas where these families comprised more than 3.5 percent of all households etched out a clear ring of neighborhoods straddling the boundaries of the central cities of Minneapolis and St. Paul. These first-tier suburbs were marked by homogeneous housing stock and demographic composition and were particularly attractive to young families moving out of the central cities in the 1950s and 1960s

| Female Labor Force Participation, 1950-1990. |  |
| :---: | :---: |
| $\begin{aligned} & 80 \% \text { or more } \\ & 65 \%-79 \% \\ & 50 \%-64 \% \\ & 35 \%-49 \% \\ & \text { less than } 35 \% \end{aligned}$ | For 1950, percentage of women aped 14 agn women aged 14 and over; for $1990-1990$, percentage of wome aged 16 and over. |

Figure 1. Female labor force participation, Minneapolis-St. Paul, 1950-1990. Source: U.S. Bureau of the Census (1952); Tobin (1993).

Figure 2. Nonfamily households, Minneapolis-St. Paul, 1970-1990. Source: Tobin (1993).

(Adams 1970; Adams and VanDrasek 1993). By the end of the 1980s, however, the spatial distribution of this group had changed dramatically: childless married couples still comprised a large share of all households in the inner tier of early postwar suburbs, but many outlying areas also cross the 35 percent threshold (see Fig. 3). Some of these latter neighborhoods are growing middle-income suburbs attracting young families, but others include the region's wealthiest enclaves (southwest of Minneapolis) and resort settlements along the St. Croix waterway that have attracted empty nesters and retirees (at the eastern edge of the map) (Adams and VanDrasek 1993; Borchert 1987).

## A New Urban Ecology?

These three indicators highlight the demographic transformations underway since the late 1960s. Sorting out the relative importance of continuity and change in urban residential structure, however, requires a multivariate approach to measure the temporal stability of fine-grained neighborhood patterns. I use factor analysis to isolate changes in a selected set of neighborhood demographic indicators chosen to highlight variations in household and family organization. The data are tractlevel measures for the seven-county Twin Cities area in 1980 and 1990 (see Figs. $1-3$ ). These indicators are drawn from the Urban Institute's Under Class Database (UDB) (Tobin 1993), which provides a selection of variables drawn from the small-area files of the decennial Census of Population and Housing for 1970, 1980, and 1990. The Urban Institute collaborated with the Census Bureau to adjust data from the 1970 and 1990 enumerations to the boundaries of census tracts defined for 1980 , thereby yielding an exceedingly rich array of comparable measures of neighborhood change across two decades."

[^4]This unique database permits a finegrained analysis that was difficult or impossible for earlier census years. Important changes in the design of the census implemented in 1980, however, make the files for 1980 and 1990 more comparable in measures of family composition. The present analysis is therefore restricted to changes observed during the 1980s.

This study focuses on neighborhood changes associated with increasing heterogeneity among households and families. Have urban demographic trends fundamentally altered the ecology of the American city? Consequently, the variables included in the multivariate models-a critical consideration in drawing broader theoretical interpretations from any ecological research-are restricted to indicators that highlight the links among household organization, demographic composition, and labor market restructuring (see Table 1). To disentangle these relations from the effects of racial divisions in both housing and labor markets, where possible I have calculated variables for white persons only. This approach provides a limited and partial view of residential differentiation, but in the context of the Twin Cities it allows for an unusually close portrait of the middle class. In 1990 the study area was 91.7 percent white, 3.9 percent African American, and 2.8 percent Asian, while only 1.5 percent of respondents were of Hispanic origin.

A few additional measures are included to facilitate interpretation. Separate measures for early- and late-middle-age cohorts (45-54 and 55-64, respectively) and baby boomers (born 1946-60) allow an assessment of the degree to which these groups have moved in response to life-
orous evaluation of the spatial dimensions of socioeconomic change. While the interpretation of spatial patterns in any single year is subject to the modifiable areal unit problem, analysis of changes over time are far less susceptible to this limitation than are similar studies of unadjusted databases.
Table 1
Variables Used in Factor Models

|  |  |  |  |
| :--- | :--- | :--- | :--- | Males never married MNVMAR

Table 1, Continued

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Mean of |
| Tract Values |  |  |  |

[^5]course changes. ${ }^{6}$ Variables denoting separate housing construction eras capture the increasing diversity of homogeneous, earlypostwar suburbs (Adams 1970; cf. Davies and Murdie 1991). Mobility and housing turnover measures allow a characterization of neighborhoods undergoing rapid change or pronounced growth. Finally, income and poverty measures, along with educational and occupational variables, distinguish class variations among neighborhoods and the consequences of labor market restructuring.
Principal axis factor analysis is applied to the final datasets for 1980 and 1990 , yielding two cross-sectional models, and I undertook a separate analysis of a dataset comprised of absolute changes in each of the constituent variables. Untransformed variables are used for all of the factor models: transformations can spuriously increase intercorrelations in the data matrix, and the assumption of multivariate normality is crucial only in confirmatory analyses, models based on small samples, or analyses requiring tests of statistical significance of individual factors (Gorsuch 1983; Nesselroade 1994; Rummel 1970). To maintan comparability with previous studies, I used orthogonal Varimax rotation. Based on significant slope breaks in the cumulative eigenvalue distribution, I selected an eight-factor solution for each cross-sectional model and the dynamic analysis.

## Cross-Sectional Model Results

If the underlying structures of residential differentiation changed during the 1980 s, then the cross-sectional models should reveal substantial instability. Change should be apparent in (I) the explanatory power of the factor models, (2) the degree to which the factor models

[^6]explain the variance in individual variables, and (3) the pattern of factor loadings.

Overall, diagnostic measures suggest particularly robust specifications for these models. The eight-factor solution accounts for 87 percent of total variance in 1980, and 89 percent in 1990. Communalities, which measure the proportion of variance explained by the eight-factor solution for each variable, exceed 0.70 for three-fifths of all variables included in the analysis. Only one-fifth register communalities of less than 0.50. This latter group includes the variables for housing constructed during the 1950s and 1960s; unemployment (both male and female); single-parent families; service occupations; and interrupted labor force participation (for women). Given the heavy reliance of the crosssectional models on variables depicting the white middle class, and in light of the increased heterogeneity of many postwar suburbs, the low communalities for these variables are not surprising.

Communalities for 1990 generally parallel those observed in 1980, confirming the stability of prevailing differences among neighborhoods. For several variables, however, declining communalities are indicative of progressively less systematic intraurban variation. Communalities for the 1946-60 birth cohort, for example, fell from 0.86 to 0.67 ; this decline is not unexpected and almost certainly reflects a spatial dispersion in line with changing lifecourse trajectories. A similar decline for persons with some college (WCOL, 0.74 to 0.67 ) implies that broader access to higher education among middle-income whites renders this measure a less reliable discriminator of neighborhoods. Finally, communalities declined for female labor force participation (WFEMP, 0.94 to 0.85 ) and interrupted labor force attachment (FNOPART, 0.71 to 0.21); this result amplifies Pratt and Hanson's (1988) argument that the entry of women into the paid labor force from neighborhoods of all social classes has eroded traditional social area analysis constructs of family status. With the exception of these significant changes,
however, family status distinctions appear to be stable or widening: only one-quarter of all variables register declining communalities, and two-fifths (18 of 43) had substantially higher communalities (by at least 5 points) in 1990.
The first four factors account for nearly three-quarters of total variance, and thus the loading patterns on these components are crucial in evaluating the hypotheses of changing ecological structure. The first factor captures the majority of demographic and life-course differences across neighborhoods, inscribing contemporary variations on the classical family status construct. This factor has a well-defined bipolar structure, distinguishing areas with high poverty, short-term housing turnover, and unmarried and divorced persons from higher-income areas dominated by married couples and children. Notably, transitional low-income areas are associated with a high incidence of part-time employment among men, but not among women. This dimension of residential structure remained remarkably stable between 1980 and 1990. Only two significant changes occurred. First, the loading for the baby boom cohort weakened, while that for the early-middle-age cohort strengthened. As their earnings and life-course circumstances changed, baby boomers moved into middle- and upper-middle-income, familyoriented suburbs. The second notable change, however, points to a spatial dimension of the postponed childbirth among many boomer families: the factor loading for the variable for white childless marriedcouple families strengthened dramatically between 1980 and 1990 (from an insignificant -0.13 to -0.81 ). By the end of the 1980s, the growing number of childless couples, and their locational choices, appear to have redefined important elements of neighborhood housing demography.
The second factor delineates a clear intraurban division of labor, with significant loadings for cocupational and educational measures. This bipolar dimension separates affluent white-collar neighbor-
hoods with higher educational attainment from areas with greater concentrations of children and teens, and with a greater reliance on blue-collar and unskilled occupations. While the basic structure of this dimension remained stable during the 1980s, two important changes are apparent. First, the loading for residents with some college (WCOL) weakened (from 0.47 to -0.02). This implies an erosion of college education as a discriminator of occupational class across urban neighborhoods. Second, loadings strengthened for female-headed households with children (from -0.32 to -0.52 ) and for workers employed in administrative support occupations ( -0.23 to -0.41 ). The contrast between these variables and high-income neighborhoods thus widened, suggesting a close association between the gender dimensions of occupational restructuring and the expansion of poverty into lower-middle-class suburbs (Nelson 1986; England 1993; Hanson and Pratt 1994).

Remaining elements of the cross-sectional models add complexity to the symmetrical pattern evident in the family status and division of labor dimensions. Factors emerge for variations between aging inner-ring suburbs and newer development patterns, and for contrasts in labor force attachment. Significant changes in both of these factors hint at gradual shifts in residential structure. First, subtle changes appear in the link between neighborhood aging and demographic composition (see the third pair of columns in Table 2). This factor separates two distinct characteristics: (1) areas with relatively high percentages of middle-aged residents and early-postwar housing, and (2) newer neighborhoods with higher rates of mobility and younger populations. Several changes in the loading matrices between 1980 and 1990 are not surprising. For example, by decade's end the association between middle-aged residents and aging (postwar) housing includes both 1950s and 1960s construction eras, while 1970s-era suburbs have become more variegated. By contrast, other results suggest more impor-

Table 2
Cross-Sectional Models: Varimax Loadings for Factor Analysis of Minneapolis-St. Paul Census Tracts in 1980 and 1990

|  | Household Structure |  | Division of Labor |  | Aging Suburbs |  | Work Force Attachment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | 1980 | 1990 | 1980 | 1990 | 1980 | 1990 |
|  | 1 | I | II | II | III | IV | IV | III |
| Income/poverty |  |  |  |  |  |  |  |  |
| FINCRAT | -49 | -45 | 63 | 71 |  |  |  |  |
| WHTPR | 74 | 74 |  |  |  |  | (01) | -43 |
| Demographic |  |  |  |  |  |  |  |  |
| KIDS |  |  | -44 | -49 | 67 | -48 |  |  |
| OLD |  |  |  |  |  |  | (-15) | -62 |
| Youth | -62 | 42 | (-30) | -49 | 45 | (-35) |  |  |
| воом | 66 | (-22) |  |  | -32 | -58 | (12) | 42 |
| MAGE1 | (-03) | -48 |  |  | -62 | 45 |  |  |
| MAGE2 |  |  |  |  | $-68$ | 71 |  |  |
| Housing structure/turnover |  |  |  |  |  |  |  |  |
| RGRWTHI | 74 | 86 |  |  |  |  |  |  |
| RGRWTH2 |  |  |  |  | 75 | -52 |  |  |
| RGRWTH3 | 84 | 92 |  |  |  |  |  |  |
| RGRWTH4 | 82 | 80 |  |  |  |  |  |  |
| HSG70 |  |  |  |  | 75 | (02) |  |  |
| HSG60 |  |  |  |  | (02) | 55 |  |  |
| HSG50 |  |  |  |  | -61 | 50 |  |  |
| Family structure |  |  |  |  |  |  |  |  |
| FNVMAR | 80 | 92 |  |  |  |  |  |  |
| FMRSPP | -89 | -90 |  |  |  |  |  |  |
| WFHNK |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| WFHWK |  |  | (-32) | -52 |  |  |  |  |
| MNVMAR | 81 | 93 |  |  |  |  |  |  |
| MMRSPP | -93 | -93 |  |  |  |  |  |  |
| MDIVOR | 74 | 56 |  |  |  |  |  |  |
| WMHNK |  |  |  |  |  |  |  |  |
| WMHWK |  |  |  |  |  |  |  |  |
| WMCNK | (-13) | -81 |  |  | (-29) | 42 |  |  |
| WMCWK | -56 | -72 |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |  |  |
| WHSG |  |  | -47 | -85 |  |  | 73 | (05) |
| WCOL |  |  | 47 | (-02) |  |  | 70 | 50 |
| WCGR |  |  | 83 | 94 |  |  |  |  |
| Labor force participation |  |  |  |  |  |  |  |  |
| WFEMP |  |  |  |  |  |  | 91 | 88 |
| WFUEMP |  |  |  |  |  |  |  |  |
| FNOPART |  |  |  |  |  |  | (-22) | -41 |
| WMEMP WMUEMP |  |  |  |  |  |  | 94 | 73 |
| WMUEMP MNOPART | 63 | 50 |  |  |  |  | (-21) | -69 |
| Occupation |  |  |  |  |  |  |  |  |
| PROF |  |  | 79 | 82 |  |  |  |  |
| MGRS |  |  | 74 | 79 |  |  |  |  |
| SALE |  |  | 64 | 63 |  |  |  | (cont'd) |

Table 2, Continued

|  | Household Structure |  | Division of Labor |  | Aging Suburbs |  | Work Force Attachment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | 1980 | 1990 | 1980 | 1990 | 1980 | 1990 |
|  | I | I | II | II | III | IV | IV | III |
| ADMN |  |  | (-23) | -41 |  |  |  |  |
| CRFT |  |  | -68 | -68 |  |  |  |  |
| OPER |  |  | -83 | -83 |  |  |  |  |
| SERV |  |  | -59 | -62 |  |  |  |  |
| Proportion of total variance (\%) | 30.3 | 34.8 | 17.1 | 20.4 | 13.9 | 6.3 | 9.7 | 12.9 |

Source: Tobin (1993).
Note: Decimals not shown; loadings shown only where $\geq 0.40$. Figures in parentheses shown to facilitate interpretation.
tant shifts: the strengthened link between aging suburbs and childless married couples may reflect a growing concentration of empty nesters in inner-ring suburbs (Fig. 3 ), while the baby boom cohort is more heavily concentrated in neighborhoods with higher rates of turnover. This result suggests an overall stability in the processes by which neighborhood aging and filtering are associated with demographic change; but it also points to the increasing importance of a wider array of household types and population cohorts now moving through the urban housing stock.

Increasing polarization in the urban labor market has inscribed a second notable change. In 1980, a work force attachment dimension identifies a link between educational attainment and labor force participation, but no contrast with concentrations of poverty (see the fourth pair of columns in Table 2). By 1990, the baby boom cohort began to enter the career-oriented and higher-earning years of middle age, strengthening the intercorrelations among this age group and work force attachment. Neighborhoods with higher rates of part-time employment, however, became increasingly associated with higher rates of poverty. This result provides strong multivariate evidence that well-documented inequalities in the labor market have been associated with longterm changes in residential structure.
These findings confirm that residential structure changed in line with the demo-
graphic and economic shifts of the 1980s, but considerable stability is also apparent in the urban landscape. Only by setting these results in historical context can we appreciate the full magnitude of change through several rounds of metropolitan expansion since the Second World War. In the heyday of factorial ecology, neighborhood patterns were invariably viewed through a lens that combined the ideas of Shevky and Bell, Burgess, Park, and Hoyt. Berry and Horton's (1970) analysis of metropolitan Chicago is particularly revealing. They factor analyzed an all-encompassing set of 57 population and housing measures for 1960, and labeled their three leading factors socioeconomic status, stage in the life cycle, and "race and resources." The life-cycle factor identified neighborhoods with large families, large shares of persons under 18, and high rates of homeownership, single-family homes, and houses constructed between 1950 and 1960. At the opposite end of this bipolar factor were eight variables, among them pre-1940 housing and female labor force participation. This latter indicator signals the historical specificity of the family status construct that became an implicit assumption of so much urban research. Berry and Horton had captured the initial wave of young families buying homes in the suburban subdivisions that spread across the landscape as the national economy satisfied a housing shortage dating to the end of the 1920s. Wives dropped out of the work force as
couples married and moved to their new homes to start families. These nuclear family-oriented suburbs may have inscribed neat social patches when viewed in isolation, but they grew out of a broader restlessness as (federally subsidized) market forces transformed the built environment of the metropolis.

Three decades later, the choices and constraints facing the children born in early-postwar suburbs inscribe a different ecological structure. The dip in women's waged employment after World War II was a brief departure from a secular upward trend throughout the twentieth century, and by 1980 most women from most class backgrounds and neighborhoods worked at least part time. Female labor force participation thus became irrelevant to neighborhood family status, which in any event was becoming more a function of the locational preferences of higher-income childless married couples. And the clear separation of socioeconomic status from family status eroded as inequality widened among different types of families. In retrospect, the sharp distinction between women's employment and "family-oriented" suburbs was a historical aberration, a product of massive city-to-suburb migration, increased marriage and fertility rates, and the sudden expansion of suburban homeownership opportunities. ${ }^{7}$

In the aftermath of the transformations of the 1960s and 1970s, however, the 1980s simply brought the continuation of long-

[^7]term trends. To be sure, the delayed or foregone childbearing of many baby boomer families coupled with inequality in earnings among many of these households have played important roles in some neighborhoods. Nevertheless, the central outlines of urban residential structure remain firmly in place. Consider, for example, the remarkable stability of neighborhood patterns through the supposedly turbulent decade of the 1980s. Figures 4 and 5 portray tract scores, shaded by quartile, for the leading cross-sectional factors in Table 2: household structure, division of labor, and aging suburbs. These maps are evocative reflections of the regional geography of social change, but what is most striking is the persistence of broad divisions within the metropolis. To be sure, careful inspection of the intricate patterns reveals the subtle contours of change in the urban demographic landscape. First-ring suburbs, for example, have been transformed as a large cohort of residents entered middle age (45-54) and saw their children depart to the cities, other metropolitan areas, or outlying suburbs. Initially settled by waves of young families in the 1950 s , these neighborhoods are now dominated by childless couples (compare the bottom panel of Fig. 4 with Fig. 3). Some of these middle-aged parents, however, appear to have been lured back to downtown living by the aggressive redevelopment efforts of the 1980s, especially in Minneapolis. Similarly, there have been perceptible changes in the distribution of workers pushed to the margins of the labor market: part-time workers have become increasingly concentrated in areas with large proportions of poor and elderly residents. The simultaneous expansion of poorly paid part-time work along with intensified poverty and a graying population is a distinguishing mark of distressed inner-ring suburbs; but Figure 5 demonstrates that these changes are underway in a broad ring of modest suburbs.

With these notable exceptions, the evidence suggests a remarkable durability to prevailing divisions in the metropolis.


Figure 4. Tract scores for cross-sectional Factors 1-3, 1980-1990. Tracts shaded by quartile. Shading progression for aging suburbs reversed in 1990 to correspond with loading pattern shown in Table 2. Source: Factor analysis of data from Tobin (1993).


Figure 5. Tract scores for cross-sectional Factor 4, 1980-1990. Tracts shaded by quartile. Source: Factor analysis of data from Tobin (1993).

Contemporary residential structure contrasts sharply with the classical ecologies of the 1950s and 1960s, but the new patterns represent the culmination of long-term demographic trends. After the transformations of previous decades, the 1980s brought a comparatively tranquil solidification of established patterns. Indeed, the two leading dimensions of residential dif-ferentiation-household structure and division of labor-are virtually unchanged. In 1990, the division between low-housingturnover, married-couple enclaves and high-turnover singles neighborhoods mirrored that observed in 1980 (see the top panel of Fig. 4). Moreover, there is a surprising persistence in the division of labor within the metropolitan housing market (shown in the middle panel of Fig. 4). A number of analysts (Rose and Villeneuve 1998; Pratt and Hanson 1988; White 1987) have shown how women's upward mobility in the job market has undermined the homogeneity of occupational class within many neighborhoods. These changes have also rendered the broad occupational categories reported in standard census tabulations (such as those used here) less useful and reliable. Yet the geographic division
between white-collar and blue-collar neighborhoods remains deeply entrenched in the midst of change in the urban industrial base. The prominent southwest corridor of white-collar affluence, with a smaller counterpart mirrored on the north side of St. Paul, has remained the central axis of local inequality and political conflict for much of this century (Adams 1970; Borchert 1987: Hartshorne 1932; Orfield 1997). The only significant change during the 1980s was the downgrading of clerical work, which, as noted earlier, has become increasingly linked with a reliance on vanishing blue-collar jobs and a higher incidence of single mothers and workers without college educations (see the loadings in Table 2).

## The Public Household

Thus far, the analysis provides evidence of both continuity and change in the spatial patterns inscribed by successive eras of suburban growth, residential mobility, and demographic shifts. The main outlines of spatial segregation among diverse family and household types remain firmly in place. "Family-oriented" suburbs remain
distinct and prominent features of the urban landscape. Yet the growing complexity of individual life-course decisions and housing careers has rendered obsolete any theory premised solely on the patriarchal nuclear family. Housing design, suburban growth, and social policy have been slow to respond to these new realities. Low-density suburban development forms are still predicated on a full-time homemaker, and thus the contemporary variant of the patriarchal family remains the site of conflicts and struggles over the boundaries between market and household, public and private, waged and unwaged labor (Appleton 1995; Domosh 1998; Gilbert 1997; Hayden 1984; Hanson and Pratt 1995). These contradictions are most starkly defined among dualearner, married-couple families, where the time binds of demanding careers and socially mandated standards of domestic life can only be addressed through costly, intricate (and deeply gendered) market solutions now dubbed "domestic outsourcing," or, even more painfully, "dial-a-wife" (Talbot 1997).

My conceptualization of the public household suggests a hypothesis focusing on the dynamic links between social and spatial inequality. In particular, the locational choices of childless couples, aging baby boomers, and affluent, educated professionals should be key to neighborhood change and income inequality. To test this hypothesis, I factor analyzed a dataset of absolute change variables measured between 1980 and 1990 (Table 3). This dynamic factor model incorporates the same indicators as those used in the crosssectional analyses, with one additional variable measuring the percentage change in tract population.

The dynamic factor models reveal a complex portrait of social and spatial change. The distinctive life-course trajectories of boomers appear to have magnified neighborhood contrasts in age and household composition. The leading factor may best be described as a "family polarization" dimension that captures increasing inequality among different types of
households. This factor distinguishes areas of increasing poverty (which are also seeing a progressively younger age profile and rapid growth among singles) from suburbs dominated by childless married couples. These latter areas are also home to larger concentrations of boomers, residents in late middle age, and retirees. The second factor also highlights important changes. This dimension captures the general increase in educational attainment throughout the work force. Note that educational requirements have ratcheted up expectations across the board: increases in educational attainment are independent of neighborhood income and occupational category. The third factor is somewhat ambiguous, but appears to reflect growth in nontraditional household arrangements (single fathers) among boomers in highturnover neighborhoods. Finally, the fourth factor reveals the marginalization of unskilled and part-time workers from the labor market. This dimension separates high-income areas with concentrations of college graduates and managers in middle age from poor neighborhoods with large shares of children, the elderly, and parttime workers.

These findings are generally consistent with the theory of the public household, as an influx of career-oriented baby boomers transforms neighborhood social life and the relationship between household and market. In a parallel analysis of income and spending behavior among the white middle classes, I have found that childless married couples have reaped windfall income gains since the 1970s ( 45 percent in real terms between 1980 and 1994), a result, in part, of longer work weeks and the entry of wives into the work force. A growing number of people are living in dual-earner households in which time demands require heavy reliance on local market solutions to replace unpaid domestic labor: childless married-couple families spend 31 percent of the food budget outside the home, for example, compared to the 20 percent spent by "traditional" fami-

## Table 3

Dynamic Factor Models: Varimax Loadings for Factor Analysis of Minneapolis-St. Paul

|  | I Family Polarization | II <br> Educational Upgrading | Nontraditional Households | $\begin{gathered} \text { IV } \\ \text { Labor Market } \\ \text { Marginalization } \end{gathered}$ | h2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Growth |  |  |  |  |  |
| TRCTPOP ${ }^{\text {a }}$ | $(08)^{\text {b }}$ | (18) | (-03) | (34) | 31 |
| Income/poverty |  |  |  |  |  |
| FINCRAT | (13) | (-02) | (-10) | 63 | 47 |
| WHTPR | (-29) | (17) | (-02) | (-28) | 26 |
| Demographic |  |  |  |  |  |
| KIDS |  |  |  | -41 | 57 |
| OLD | 46 |  |  | -47 | 75 |
| YOUTH | -60 |  |  |  | 66 |
| BOOM | 46 |  | (39) |  | 42 |
| MAGEI |  |  | (-10) | 50 | 38 |
| MAGE2 | 43 |  | (-20) |  | 41 |
| Housing structure/turnover |  |  |  |  |  |
| RGRWTH1 |  |  | 68 |  | 62 |
| RGRWTH2 | 57 |  |  |  | 41 |
| RGRWTH3 |  |  | 64 |  | 51 |
| RGRWTH4 |  |  |  |  | 21 |
| HSG70 |  |  |  |  | 27 |
| HSG60 |  |  |  |  | 20 |
| $\xrightarrow{\text { HSG50 }}$ Family structure |  |  | $-51$ |  | 36 |
| Family structure |  |  |  |  |  |
| FMRSPP | (37) |  |  |  | 75 |
| FDIVOR |  |  |  |  | 38 |
| WFHNK |  |  | -46 |  | 32 |
| WFHWK |  |  | (09) |  | 34 |
| MNVMAR | -74 |  |  |  | 64 |
| MMRSPP | 70 |  |  |  | 70 |
| MDIVOR |  |  | (-04) |  | 39 6 |
| wMHwK |  |  | 67 |  | 51 |
| WMCNK | 42 |  |  |  | 71 |
| WMCWK | (-04) |  |  |  | 65 |
| Education |  |  |  |  |  |
| WHSG |  | 76 |  |  | 67 |
| WCOL |  | 64 |  |  | 50 |
| WCGR |  | 50 |  | 43 | 65 |
| Labor force participation |  |  |  |  |  |
| WFEMP |  | 86 |  |  | 89 |
| WFUEMP |  |  |  |  | 15 |
| FNOPART WMEMP |  | 92 |  | (-15) | 3 92 |
| WMUEMP |  |  |  |  | 9 |
| MNOPART |  |  |  | -50 | 35 |
| Occupation |  |  |  |  |  |
| PROF |  |  |  |  | 44 |
| MGRS |  |  |  | 42 | 28 |
| SALE |  |  |  |  | 17 |

Table 3, Continued

|  | I <br> Family <br> Polarization | II <br> Educational <br> Upgrading | III <br> Nontraditional <br> Households | Labor Market <br> Marginalization | h2 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| ADMN |  |  |  |  | 60 |
| CRFT |  |  |  |  | 34 |
| OPER |  |  |  | 36 |  |
| SERV |  |  |  |  | 4 |
| Proportion of total variance (\%) | 15.0 | 14.7 | 10.7 | 9.6 | 4 |

Source: Tobin (1993).
${ }^{\text {a }}$ TRCTPOP measured as percentage change in population; all other variables measured as absolute difference between 1990 and 1980 values.
${ }^{\mathrm{b}}$ Only four leading factors are shown.
Note: Decimals not shown; loadings shown only where $\geq 0.40$. Figures in parentheses shown to facilitate interpretation.
lies in which wives leave the work force to raise children."

On the other hand, the dynamic factor models reveal that demographic change is surprisingly broad. Note that a substintial loading for median income does not appear until the fourth factor: family polarization, educational upgrading and related social changes have proceeded across neighborhoods of all income levels. Thus the collapse of what might be termed a "patriarchal family status" of classical urban geography has not been class-selective. Increasing diversity in household and familv organization. particularly the growth of childless married couples, has proceeded across a broad range of middle-income suburbs. This finding is consistent with the arguments of Rose and Villeneuve (1998), whose extensive analysis of Montréal has shown that increasing female labor force participation has allowed many moderate-

[^8]income families to move upward in the housing market - thereby altering the links between production-based class categories and those rooted in housing classes (cf. Badcock 1994). Further confirmation is apparent when tract scores are mapped for the family polarization dimension (the leading dynamic factor; see Fig. 6). Growth in middle-aged residents, empty nesters, and childless married couples has been pronounced throughout the suburban ring, and is not confined to the high-income enclaves of the southwest suburbs.

## Conclusions

Understanding the contemporary North American metropolis requires recognizing both continuity and change. On the one hand, sweeping societal change is clearly manifest in the urban landscape. Increasingly severe and violent forms of segregation have appeared, both in the inner city (Smith's (1996) recanchist class divide at the frontiers of gentrification) and on the suburban fringe (the proliferation of "privatopia" gated communities and special-purpose governments (Blakely and Snyder 1997; McKenzie 1994)). Public spaces and public functions have been redefined and privatized with the eclipse of Keynesian collective consumption, and all levels of govermment are being exposed, to varying degrees, to the fiscal discipline of


Figure 6. Tract scores for Dynamic Factor 1, 1980-1990. Tracts shaded by quartile. Source: Factor analysis of data from Tobin (1993).
the market (DeFilippis 1997; Mitchell 1995; Quercia and Galster 1996). Technological change and industrial restructuring intersect with the continued spatial expansion of metropolitan regions to inscribe more complex polycentric urban forms and widen the social and economic disparities between affluent neighborhoods, inner-city ghettos, and deteriorating inner-ring suburbs (Knox 1991; Lewis 1983; Wilson 1987, 1996). Regardless of whether the birth of postindustrial society is dated in economic terms (the collapse of Bretton Woods and the energy crisis) or in terms of failed modernist urban planning the intentional destruction of the Pruitt-Igoe housing projects in St. Louis), there can be no doubt that the urban imprint of contemporary societal change is extraordinarily complex.

On the other hand, key features of the urban landscape display remarkable durability. Recent demographic change is laid atop a regime of sociospatial segregation that has become deeply entrenched over four decades of suburban development (Downs 1997; Adams 1988; Walker 1981). In spite of dramatic and often contested redefinitions of the role of household, family, and market in postindustrial society,
the parameters of residential structure still mirror the sociodemographic distinctions first identified in the early-postwar metropolis. Suburban growth, sustained and reproduced by an intricate infrastructure of policies, local political processes, and the institution of homeownership, was initiadly premised upon the needs of white, middleclass nuclear families. Clearly, recent decades have brought substantial change in the relative ability of different groups to gain access to this archetypal consumption standard: the erosion of income among the poor of all racial groups has exacerbated social and spatial polarization along class lines, but the resurgence of immigration has also been associated with dramatic increases in homeownership in polvethnic middle-class suburbs in the nation's largest cities. For the white middle classes, however. most facets of residential structure display remarkable continuity. Ultimately, restlessness in the urban landscape is a story of dynamic stability, as turbulent social and institutional change reflects the struggles of workers and families adjusting to the imperatives of living in the low densities of America's durable urban spatial structure.

## References

Adams, J. S. 1970. Residential structure of midwestern cities. Annals of the Association of American Geographers 60:37-62.
1988. Housing America in the 1950 s. New York: Russell Sage Foundation.

- 1991. Housing submarkets in an American metropolis. In Our changing cities, ed. J. F. Hart, 108-26. Baltimore: Jolms Hopkins University Press.
Adams, J. S., and VanDrasek, B. J. 1993 Minneapolis-St. Paul: Pcople, place, and public life. Minneapolis: University of Minnesota Press.
Anselin, L. 1988. Spatial econometrics. Boston: Kluwer.
Appleton, L. M. 1995. The gender regimes of American cities. In Gender in urban research, ed. J. A. Garber and R. S. Turner, 44-59. Thousand Oaks, Calif.: Sage Publications.

Badcock, B. 1994. Urban and regional restracturing and spatial transfers of housing wealth. Progress in IIunan Geography 18:279-97.
Baldassare. M., ed. 1994. Suburban patterns: Research in community sociology. Stamford. Comn.: JaI Press.
Batey, P., and Brown, P. 1995. From human ecology to customer targeting: The evolution of geodemographics. In GIS for husiness and service plaming, ed. P. Longley and G. Clarke. Ti-103. Cambridge: Geoinformation.
Bell, D. 19-6. The cultural contradictions of capitalism. New York: Basic Books.
Belsky, E.; Can, A.; and Megbolugbe I. 1998. A primer on geographic information systems in mortgage finance. Journal of Housing Research 9:5-31.
Berry, B. T. L., and Horton, F. E. 1970. Geographic perspectives on urban systems. Englewood Cliffs, N.J.: Prentice-Hall.
Berry, B. J. L., and Kasarda. J. D. 197. Contemporary urban ecology. New York: Macmillan.
Birkin, M., and Clarke. C. 1998. GIS, geodemographics and spatial modeling in the U.K. financial service industry. Journal of Housing Research 9:57-111.
Blakely, E. J., and Snyder, M. G. 1997. Fortress America: Gatid communities in the United States. Washingtom. D.C.: Brookings Institution.
Boger, J. C., and Wegner J. W., eds. 1996 Race, poterty, and American cities. Chape! Hill: University of North Carolina Press.
Borchert, J. K. 1987. America's northern heartland. Mimeapolis: University of Minnesota Press.
Burchell, R.; Shad, N. A.: Listokin, D.: Phillips. H.; Downs, A. Seskin, S.: Davis, J. S.: Moore. T.; Helton, D.; and Gall, M. 1998. Costs of sprawl recisited. Transportation Cooperative Research Program Report 39. Washington. D.C.: National Academy Press.

Clark, W. A. V., and Dicleman. F. M. 1996. Households and housing: Choice and outcomes in the housing narket. New Bronswick, N.J.: Center for Urban Policy Research, Rutgers University.
Curry, M. R. 1997. The digital individual and the prisate realm. Annals of the Association of American Geogrophers 8:681-99.
Danielson, M. N., ant Wolpert, J. 1994. From old to new metropolis. Research in Community Sociology 4:71-96.
Davies, W. K. D. 1984. Factorial ecology. Aldershot: Cower Press.

Davies, W. K. D., and Murdie, R. A. 1991. Consistency and differential impact in urban social dimensionality: Intra-urban variation in the 24 metropolitan areas of Canada. Urban Geography 12:55-79.
Dear, M., and Flusty, S. 1998. Postmodern urbanism. Annals of the Association of American Geographers 88:50-72.
DeFilippis, J. 1997. From a public re-creation to private recreation: The transformation of public space in South Street Seaport. Joumal of Urban Affairs 19:405-17.
Domosh, M. 1998. Geography and gender: Home, again? Progress in Human Geography 22:276-82.
Downs, A. 1994. New visions for metropolitan America. Washington, D.C.: Brookings Institution.
-_ 1997. The challenge of our declining big cities. Housing Policy Debate 8:359-408.
England, K. V. L. 1993. Suburban pink collar ghettos: The spatial entrapment of women? Annal.s of the Association of American Geographers 83:225 42.
Friedmam. J. 1995 [1986]. The world city hypothesis. In World cities in a world system, ed. P. Knox and P. Taylor, 317-31. Cambridge: Canbridge University Press.
Gilbert, M. R. 1997. Feminism and difference in urban geography. Urban Geography 18:166-79.
Coldin, C. 1990. Understanding the gender gap. New York: Oxford University Press.
Gorsuch. R. L. 1983. Factor analysis. 2d ed. Hillsdale, N.J.: Erlbamm Associates.
Goss, J. 1992. "We know who you are and where you live": The instrumental rationality of geodemographic marketing systems. Economic Geography 71:171-95.
Gotediener, M. 1985. The social production of urban space Austin: University of Texas Press.
Hanson, S., and Pratt, G. 1988. Reconceptualizing the links between home and work in urban geography. Economic Geography 64:299-321.
1992. Dynamic dependencies: A geographic investigation of local labor markets. Economic Geography 68:373-405.
--_ 1994. On "Suburban pink collar ghettos: The spatial entrapment of women?" by Kim England. Annals of the Association of American Geographers 84:500-502.
—_ 1995. Gender work, and space. London: Routledge.

Harris, C. D. 1995. "The nature of cities" and urban geography in the last half century. Urban Geography 18:15-35.
Harris, R. 1984. Residential segregation and class formation in the capitalist city: A review and directions for research. Progress in Human Geography 8:26-49.
Hartshome, R. 1932. The Twin City district: A unique form of urban landscape. Geographical Review 22:431-42.
Harvey, D. 1973. Social justice and the city. Baltimore: Johns Hopkins University Press.
__ 1985. The urbanization of capital. Baltimore: Johns Hopkins University Press.
Hayden, D. 1981. What would a non-sexist city be like? Speculations on bousing, urban design, and human work. In Women and the American city, ed. C. R. Stimpson, E. Dixler, M. J. Nelson, and K. B. Yatrakis, 167-84. Chicago: University of Chicago Press.
-_. 1984. Redesigning the American dream. New York: Norton.
Johnston, R. J. 1984. City and society: An outline for urban geography. London: Hutchinson.
Journal of Housing Research. 1998. Special issue on GIS in housing and mortgage finance. Vol. 9(1). Washington, D.C.: Fannie Mae Foundation.
Kain, J. F. 1968. Housing segregation, Negro employment, and metropolitan decentralization. Quarterly Journal of Economics 82:175-98.
Kennickell, A. B.; Starr-McCher, M.: and Sundén, A. E. 1997. Family finances in the U.S.: Recent evidence from the Survey of Consumer Finances. Federal Reserve Bulletin 8:3:1-24.
Kirby, A. 1989 . Time, space, and collective action: Political spacefpolitical geography. Discussion Paper No. 89-1. Tucson: Department of Geography and Regional Development. University of Arizona.
Knox, P. L. 1991. The restless urban landscape: Economic and sociocultural change and the transformation of metropolitan Washington, D.C. Annals of the Association of American Geographers 81:181-209.
, ed. 1993. The restless urban landscape. Englewood Cliffs, N.J.: Prentice Hall.
Knox, P. L., and Taylor, P., eds. 1995. World cities in a world system. Cambridge: Cambridge University Press.
Lang, R. E.; Hughes, J. W.; and Danielsen, K. A. 1997. Targeting the suburban urbanites: Marketing central-city housing. Housing Policy Debate 8:437-71.

Lewis, P. 1983. The galactic metropolis. In Beyond the urban fringe, ed. R. Platt and G. Macinko, 23-49. Minneapolis: University of Minnesota Press.
Livingstone, D. 1992. The geographical tradition. London: Blackwell.
McDowell, L. 1993. Space, place, and gender relations: Part 1. Feminist empiricism and the geography of social relations. Progress in Human Geography 17;157-79.
McKemzie, E. 1994. Privatopia: Homeowner associations and the rise of residential private government. New Haven: Yale University Press.
Markusen, A. R. 1980. City spatial structure, women's household work, and national urban policy. Signs 5(3), suppl. 1:S23-S44.
Massey, D. S., and Denton, N. A. 1993. American apartheid. Cambridge: Harvard University Press.
Mitchell, D. 1995. The end of public space? People's Park, definitions of the public, and democracy. Anmals of the Association of American Geographers 85:108-33.
Myers, D., ed. 1990. Housing demography: Linking demographic structure and housing markets. Madison: University of Wisconsin Press.
National Advisory Commission on Civil Disorders. 1968. Report of the National Advisory Commission on Civil Disorders. New York: Bantam Books.
Nelson, K. 1986. Labor demand, labor supply, and the suburbanization of low-wage office employment. In Production, work, territory, ed. A. Scott and M. Storper, 149-71. Boston: Allen and Unwin.
Nesselroade, J. R. 1994. Exploratory factor analysis with latent variables and the study of processes of development and change. In Latent variable analysis: Applications for developmental research, ed. A. Van Eye and C. Clogg, 131-54. Thousand Oaks, Calif.: Sage.
Orfield. M. 1997. Metropolitics: A regional agenda for community and stability. Washington, D.C.: Brookings Institution.
Perle, E. D. 1981. Perspectives on the changing ecological structure of suburbia. Urban Geography 2:237-54.
——. 1982. Ecology of urban social changeAn American example. Urban Ecology 7:307-24.
——_1998. Detroit urban ecology over time. Paper presented at the annual meeting of the Association of Ainerican Geographers, Boston, 26-29 March.

Pratt, G., and Hanson, S. 1988. Gender, class, and space. Enviromment and Planning D: Society and Space 6:15-35.
Quercia, R., and Galster, G. 1996. The chatlenges facing public housing authorities in a brave new world. Housing Policy Debate 8:535-69.
Rondinelli, D. A.; Johnson. J. H., Jr.: and Kasarda, J, D. 1998 . The changing forces of urban economic development: Globalization and city competitiveness in the 21st Century. Cityscape 3:71-105.
Rose, D., and Villeneave, P. 1998. Engendering class in the metropolitan city: Occupational pairings and income disparities among twoearner couples. Urban Geography 19:123-159.
Rummel, R. J. 1970. Applied factor analysis. Evanston, Ill.: Northwestern University Press.
Sassen, S. 1994. Cities in a world cconomy. Thousand Oaks, Calif.: Pine Forge Press.
Scott, A. J. 1988. Metropolis: From the division of labor to urban form. Berkelev: University of California Press
Scott, A. J., and Soja, E. W., eds. 1996. The city: Los Angeles and urban theory at the end of the twenticth century. Berkeley: University of California Press.
Shevky, E., and Bell, W. 1955. Social area analysis. Berkeley: University of California Press.
Smith, N. 1996. The now urban frontier. New York: Routledge.
Soja, E. 1980. The socio-spatial dialectic. Anmals of the Association of American Geographers 70:207-25.
Stegman, M. A. 1995. Recent U.S. urban change and policy initiatives. Urbon Studies 32:1601-07.
1997. The rationale for a national urban policy. Papers in Regional Science 76:i-vi.
Stegman, M. A.; Quercia, R.; McCarthy, Q. W.: and Rohe. W. 1991, Using the Panel Survey of Income Dynamios (PSID) to evaluate the affordability characteristics of altemative mortgage instruments and homeownership, assistance programs. Journal of Housing Research 2:161-211.
Storper, M. 1997. The regional world: Territorial development in a global economy. New York: Guilford.
Strom, S. H. 1992. Beyond the typewriter: Gender, class, and the origins of modern American office work, 1900-1930. Urbama: University of Illinois Press.
Talbot, M. 1997. The next domestic solution: Dial-a-wife. New Yorker, $20 \& 27$ October, 196-208.

Thrall, G. 1998. GIS applications in real estate and related industries. Journal of Housing Research 9:33-59.
Tickell, A. 1998. Book review essay: Questions about globalization. Geoforum 29:1-5.
Timms, D. 1971. The urban mosaic: Towards a theory of residential differentiation. Oxford: Cambridge University Press.
Tobin, M. 1993. Urban underclass database. [Machine-readable data file and technical documentation.] Washington, D.C.: Urban Institute.
U.S. Bureau of the Census. 1952. 1950 Census of population, census tracts, Minneapolis-St. Paul. Washington, D.C.: U.S. Department of Commerce.
1997. Statistical abstract of the United States, 117 th edition. Washington, D.C.: U.S. Department of Commerce.
U.S. Bureau of Labor Statistics. 1994. Consumer expenditure survey, 1980-81, recised and expanded. [Machine-readable data file and technical docimentation.] Washington, D.C.: U.S. Department of Labor.
1996. Consumer expenditure survey, 1994. [Machine-readable data file and technical documentation.] Washington, D.C.: U.S. Department of Labor.
U.S. Department of Housing and Urban Deselopment (HUD). 1996. Evaluation of the HOPE 3 Program: Final report. Report No. HUD-1623-PDR. Washington, D.C.: U.S. Department of Housing and Urban Development.
Walby, S. 1986. Patriarchy at work. Minneapolis: University of Mimesota Press.

- 1990. Theorising patriarchy. Cambridge, Mass.: Blackwell.
Walker. R. 1981. A theory of suburbanization: Capitalism and the construction of urban space in the Cnited States. In Urhanization and urban plaming in capitalist society, ed. M. Dear and A. J. Scott, 383-419. New York: Methuen.
Weiss, M. J. 1988. The clustering of America. New York: Harper and Row.
White, M. J. 1987. American neighborhoods and residential differentiation. New York: Russell Sage Foundation.
Wilson, W. J. 1987. The truly disadvantaged. Chicago: University of Chicago Press.

1997. When work disappears. New York: Knopf.
Wright, E. O., ed. 1989. The debate on classes. New York: Verso.

[^0]:    * With apologies to Knox (1991). I ann grateful to Susan Hanson and the anonymons referees for valuable comments and criticisms on earlier versions of this paper. I also thank James DeFilippis, Norman Clickman, Jason Hackworth, and Michael Lahr for feedback and suggestions for improvement on earlier drafts. I retain all responsibility for any shortcomings.

[^1]:    : The intellectual geneology from academic factorial ecology to private sector marketing is both direct and explicit, summarized in titles such as "The chustering of America" (Weiss 1988) and "From human ecology to customer targeting: The evolution of geodemographics" (Batey and Brown 1995).

[^2]:    ${ }^{2}$ Federal housing policy has been moving decisively toward devolution, privatization, and market discipline for nearly a decade, since the passage of the National Affordable Housing Act of 1990 and the imauguration of the Bush administration's Homeownership Opportumities for People Evernwhere (HOPE) initiatives. In the early 1990s, Housing and Urban Development officials stressed that "Every initiative will be designed to enhance the possibility of homeommership, even the rental assistance programs" (Stegman et al. 1991, 162). The Clinton administration has accelerated these efforts and is committed to the idea that "homeownership strengthens families and communities, and promotes economic opportunity and personal responsibility" (Stegman 1995, 1604; see also U.S. HUD 1996; Quercia and Galster 1996).

[^3]:    ${ }^{4}$ The Minneapolis-St. Paul MSA includes 13 counties; the present analysis is restricted to the 7 counties encompassing the region's densely developed urbanized area.

[^4]:    ${ }^{3}$ The boundary adjustments incorporated into the UDB therefore allow a particularly rig-

[^5]:    Source: Tobin (1993).
    ${ }^{\text {a }}$ Measured as a ratio of tract mean to MSA mean family income; values shown are MSA mean incomes in current dollars.

[^6]:    ${ }^{n}$ These variables are restricted to those over age 45 to avoid overlap with the baby boom cohort in 1990.

[^7]:    ${ }^{7}$ The sharp contrasts between the present analysis and classical studies result in part from the exclusion of racial/ethnic variables and the use of a wide variety of family composition measures. Socioeconomic status distinctions generally resemble those of the 1950s and 1960 s, although current theory merits naming this dimension "division of labor." The loading matrices indicate that socioeconomic status is no longer orthogonal to household structure: in stark contrast to Berry and Horton's (1970) findings, my analyses yield significant loadings of the family income variable on both factors (see Table 2).

[^8]:    *These figures are derived from :m extensise analysis of household budgets from the Consumer Expenditur Suney (L.S. Burean of Labor Statistics 1994. 1996; the source of the Consumer Price Index (CPI), and other common economic benchmarks. For an overview of changes in household budgets in the earls 1990s, see Kernickell, Star-McCher, and Sundén (1997). Results of the amalysis of household consumption patterns between 1950 and 1994 are avalable from the author.

