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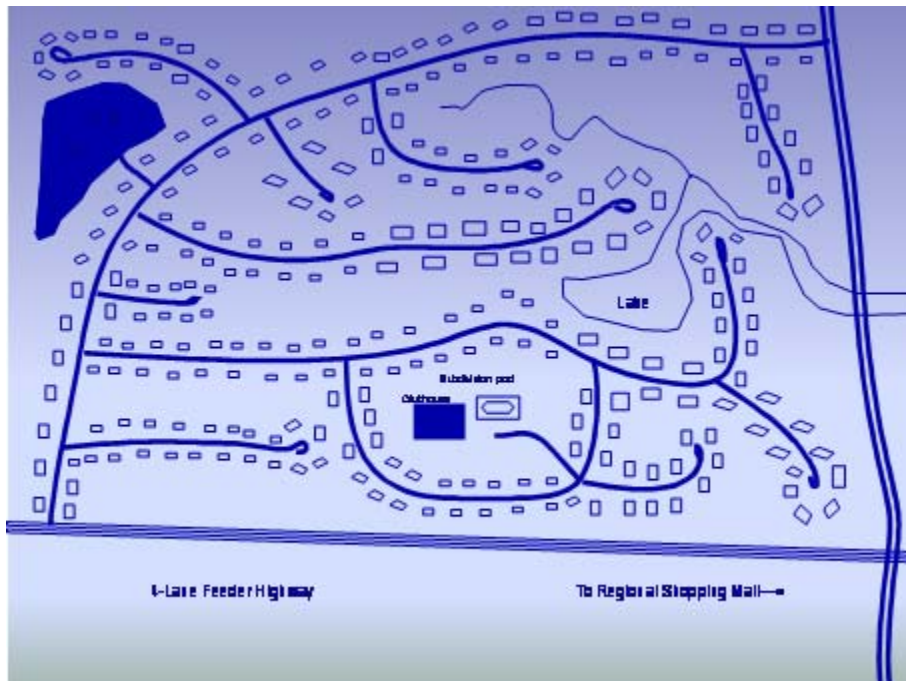
by

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Social Capital Formation in Rural, Urban and Suburban Communities

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Social Capital Formation in Rural, Suburban and Urban Communities

Abstract

In this paper, we define social capital from different perspectives and show how it is linked to the concept of a community. Based on these definitions, a conceptual framework for analyzing and measuring social capital and its indicators is developed. A typology for analyzing social capital is then created based on different types of communities. The characteristics of three prototype communities—a small rural community, a modern city suburb, and a community located in the core of a central city are outlined. For each prototype community, social capital formation strategies and indicators suggesting evidence of social capital are identified. Implications for future research efforts dealing with social capital are discussed.

Key Words:

social capital

community

rural community

suburban community

Social Capital Formation in Rural, Suburban and Urban Communities

Introduction

Social capital refers to the "...stocks of social trust, norms and networks that people can draw upon in order to solve common problems" (Sirianni and Friedland 1997). These networks involve activities of "civic engagement" such as volunteerism and participation in neighborhood associations, service clubs and charitable groups. A rapidly expanding literature exists on social capital and its importance to rural and urban areas.¹ In both rural and urban areas, social capital refers to the institutions and mechanisms whereby residents relate to and interact with each other to solve problems for the common good (Ostrom 1994).

In this article, we first provide basic definitions of social capital and how social capital is linked to the concept of a community. We then develop a conceptual framework for analyzing and measuring social capital and its indicators. A typology for analyzing social capital is created based on different types of communities. Social capital formation strategies and social capital indicators are examined for rural, suburban and urban communities.

Communities and Social Capital: Definitions

Coleman (1988) used the term social capital to refer to all human relationships and described social capital in functional terms as "the value of those aspects of social structure to actors as resources that they can use to achieve their interests" (S101). Schmid and Robison (1995, p.58) see social capital as embodying obligations, expectations and trustworthiness of structures, information channels, norms and sanctions. The concept of a community and social capital are intertwined.² In rural development, community frequently describes residents of a small town and its surrounding area (Salamon 1995).³ Presumably, those living in such a rural

¹We use the terms metro and non-metro and urban and rural interchangeably in this paper (see also footnote 3). According to the U.S. Department of Agriculture, counties with no places containing more than 2,500 people are considered *rural*; counties with places containing urban populations of 2,500 to 20,000 residents are considered to be *non-metropolitan* (and non-rural), while all other counties are considered to be *metropolitan* (Hady and Ross 1990).

²Webster provides two definitions for the term community—one tied to geography ("a group of people residing in the same locale and under the same government")—but the other is not geography-based ("a group or class sharing common interests"). In a similar manner, Flora (1997, p.113) refers to "communities of place" and of "interest." Like the definition of social capital, the definition of community that is appropriate depends on the context in which it is used (Bender 1978).

³The terms rural and urban have specific meanings within government agencies such as the U.S. Bureau of the Census. Castle (1995, p.9), however, notes that the term "rural" can have many meanings, and that even the National Rural Studies Committee struggled to define the term. Castle emphasizes that the various authors in his book are sometimes vague and inconsistent in the use of the term. Lewis, in an essay from Castle's reader, discusses how the rural and the urban are merging in what he calls "the Galactic City".

community share many common interests and values and thus the geographic and non-geographic definitions may overlap in rural areas (see also Broom and Selznik 1963 pp.19-22).

Social capital formation is the development of networks in which community residents can identify problems, share information, and implement strategies designed to solve problems for the benefit of all. This invariably leads to the questions of how social capital is formed, how its formation can be fostered, and what makes some rural and urban communities have high social capital and others have low social capital (Fine, 2001, Mesch 1996; Newton 1997).

The conceptual framework we propose here examines the social ends (y) to be achieved in a given setting as being a function of social capital stocks (s) and other exogenous factors (w) that detract from or facilitate accomplishing the social ends. That is,

$$y = f(s, w)$$

Here the function f captures the efficiency with which s and w are translated into y ⁴. A key challenge is to separate the definition of social capital from the indicators that are used to measure it. Unlike physical capital (infrastructure) and human capital (education), social capital is difficult to measure. At best, we can propose proxy indicators for social capital, and discuss how the indicators vary with the social ends to be achieved and with the definition or size of the community being analyzed.

A *social capital indicator* is any quantifiable measure thought to vary with levels of social capital. Commonly used social capital indicators include membership in civic (Jaycees, Lion's Club, Kiwanis, Chambers of Commerce, Neighborhood Watch Associations) and fraternal (Fraternal Order of Police) organizations; measures of citizen participation including voter turnout rates; various measures of volunteerism; participation in parent-teacher associations, religious groups and the like (see the discussion on social capital measures in Putnam 1993a). The President's Council on Sustainable Development (1995) highlights the importance of civic engagement as a social capital indicator.

Social capital can be analyzed in a number of dimensions, including in terms of the ends to be achieved by social action, the type of community under consideration, and the degree of demographic or socioeconomic diversity that exists among the relevant actors within the community. This is illustrated using a cube in Figure 1, with appropriate x -, y - and z -axes. Distinguishing among these dimensions is important because the type, meaning and efficacy of social capital depend on the area of the cube in which one is conducting the analysis.

⁴Arguably, the function f could itself also depend on the level of social capital in a community. Moreover, y , s and w differ depending on the type of community being studied.

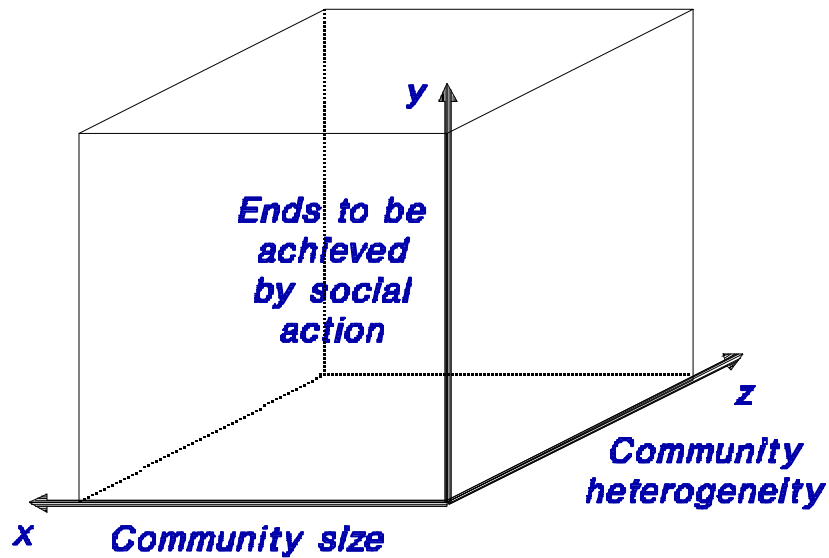


Figure 1. Community Size, Community Heterogeneity and Social Action

For example, a community (x) might be a nuclear family, an urban or a suburban neighborhood, a rural community, a region within a state, a national region, or even an entire nation. The type and effectiveness of social capital to achieve social ends will vary depending on the size of the community. Similarly, the degree of community heterogeneity (z) can vary from completely homogenous to highly diverse, as measured by race, class, income or occupation. Analyses of the effect of ethnic heterogeneity are relevant within families (mixed-race marriages), neighborhoods or nations.

However, we do not suggest that homogeneity, *per se*, promotes social capital within a community such as a neighborhood. There are many examples of subdivisions with homogeneous populations and little social capital, on the one hand, and lifestyle enclaves such as Bohemian urban neighborhoods with diverse populations that exhibit a high degree of social capital, on the other hand. Even so, we believe it is useful to include heterogeneity of the population as one of the factors driving social capital formation, if only to highlight this dimension and the need for research to determine why social capital forms in some environments but not in others, with populations that otherwise of the same degree of heterogeneity.

The ends achieved by social action (y) may range from social and economic goals (reducing poverty, protecting home property values and preventing teenage pregnancy) to moral ends (desegregation or eliminating racist complicity). To illustrate, reduction of poverty is a social goal that can be addressed at the level of individual families, urban and suburban neighborhoods, rural communities, or even entire nations. In contrast, the goals of reducing teenage pregnancy and dropping out of high school are perhaps best dealt with using capital at the level of families or through neighborhood effects (Katz 1992, Goetz 1993, others; also see Clinton's (1996) *It Takes a Village*); it is questionable whether national-level or federal policies can effectively

reduce teenage pregnancy, while state-wide minimum age school attendance legislation may, at least superficially, reduce high school dropout rates. Depending on the issue in question, the social capital analyst will focus attention on one particular part of the cube shown in Figure 1. Some parts of the cube, that is, combinations of (y, x, z) are studied more frequently and intensively than others.

Social Ends and Indicators of Social Capital in Different Communities

Table 1 shows different units of analysis or types of communities in which social capital has been studied, examples of social goals to be achieved in each community, and illustrative examples of indicators of both productive and unproductive forms of social capital under each unit, as they affect the achievement of the social goal. The fact that a particular indicator of social capital appears in only one cell of the table does not mean that the type of social capital arises only in that community. For example, Kiwanis club membership is listed under the City/Urban Core because it is one indicator of social capital potentially relevant to the problem of preventing urban decay (Hornburg 1998). Obviously, Kiwanis club members can also live in suburban neighborhoods, but membership in such a club in all likelihood has limited relevance to the problem of protecting property values. While we also briefly review social capital issues related to nations or regions, our main interest is in discussing city and suburban neighborhoods and rural communities, as they are most germane to questions of housing policy and real estate values.⁵

Rural Communities

Many rural communities have experienced economic decline—often in tandem with the inner core of urban areas—as a result of agricultural industrialization and globalization, combined with increasing skills demands associated with technological change (Goetz and Debertin, 1995). As a result, these communities face challenges such as creating employment opportunities, stimulating growth and development, and reversing the outflow of people. Net population losses, of course, have implications for housing values. Recently, Americans have started to move into rural areas in search of amenities not available in suburbs.

⁵Of course, neighborhoods are made up of families, and so the functioning of families has immediate relevance for the quality of neighborhoods and the value of homes therein.

Table 1. Analyzing Social Capital: Ends, Indicators and Units of Analysis

	<i>Unit of Analysis</i>			
	Rural community	Suburban Neighborhood	City/Urban Core	Nation/Region
Examples of ends to be Achieved by social action	Stimulate employment, and economic growth and development	Protect property value	Prevent urban decay	Achieve long-term economic growth
	Preserve farmland	Prevent crime	Long-term revitalization of downtown	Improve quality of life for all residents
	Encourage population in-migration	Avoid change (LULU)	Reduce population flight to the suburbs	Eliminate racist complicity
	Improve local schools		Desegregate schools	
Examples of Indicators of Productive Social Capital	Church attendance 4H, County Fairs Traditional youth organizations (Youniss, McLellan and Yates 1997)	Neighborhood associations ^a (Mesch 1996) Residential mobility 911 Calls to police ^b Ethnic homogeneity (Hirschfield and Bowers 1997; Ray et al. 1997)	Church attendance Kiwanis club membership rates Bowling leagues (Putnam 1993)	Trust, norms of civic cooperation* (Knack and Kiefer 1997)
Examples of Indicators of Unproductive Social Capital	Xenophobia (Debertin 1993) Bedroom communities (Flora 1997)	"Gated" communities? ^c (Wilson 1997; also see Lang and Danielson, 1997)	Gentrification (Flora 1997) Street gangs	Rent seeking, criminal behavior (Acemoglu 1995; Rubio 1997)

^a These are functions of other measurable indicators (see text).

^b Fewer calls, all else equal, indicate higher levels of social capital.

^c See discussion on gated communities in text

Rural communities are widely believed to have high levels of social capital, which can sometimes work to prevent undesired changes from occurring. Beggs, Haines and Hurlbert (1996, p.316) conclude that "personal networks of non-metropolitan residents contain a larger proportion of long-term relations ... tend to be more multiplex ... contain higher proportions of kin, neighbors, and kin-neighbors ... are significantly smaller and ... dense ... [and] exhibit significantly higher religious heterogeneity" than do networks involving metropolitan residents. Petee and Kowalski (1993, p.88) find that rural areas with greater residential mobility, racial heterogeneity and shares of single-parent households have higher violent crime rates, suggesting that stocks of social capital (as reflected in violent crime rates) are not uniformly high in all rural communities.

If the rural community is sufficiently small, nearly the entire community may function as a single social capital network (see the discussion on community network building in Ayres 1996, p.21-36). This feature makes rural communities inherently different from urban settings, where housing is usually segregated by income, education, race and type of employment (Massey and Denton 1993). Green (1996, p.7) maintains that the close-knit nature of rural communities may impede economic development, because of a reluctance of residents to form links with new groups both within and outside their communities. With economic development comes change: For example, a new industrial plant locating in a rural community may bring with it workers of lower or higher incomes and different cultures (Debertin 1993; Debertin, Infanger and Goetz 1991).⁶ Thus, depending on one's perspective, unproductive forms of social capital in rural areas include a general apprehension of those who did not grow up within the same community. In addition, Flora (1997, p.115) derides "[b]edroom communities [and] rural communities that become a low-rent haven for jobless urbanites" as lacking interaction among residents that results from a lack of trust (Table 1).

Suburban (and Urban) Neighborhoods

"Neighborhoods were created within cities to enable people to live in a smaller-more community-like-environment" (Moore 1991, p.355), and home buyers search for homes in locales described by others as "good" or "nice" neighborhoods. Weiss (1989, p.32) describes the changing motivations of individuals over their life cycles in selecting neighborhoods:

To those in their 20s, the prime consideration in selecting a home is its suitability for raising young children. Those in their 30s are more concerned with the quality of local schools. From 40 to 55, ease in commuting is important. Older folks want safety from crime.

Residents living in a particular location within an urban or suburban community often form geography-based linkages with their neighbors.

⁶ This occurred recently in rural Clinton county, Kentucky, when a chicken processor made plans to locate a processing plant. Local residents objected to the possibility that low-wage workers might be recruited from outside the area, fearing that these workers would possess different values and place new demands on scarce local social services.

In urban communities, the location within the city often reveals something about a resident's economic and social class, the type of occupation (white collar, blue collar) and perhaps even religion (residents following a particular religion perhaps locating in neighborhoods surrounding a parochial school). In a typical urban setting, highly-paid business executives, successful entrepreneurs, doctors and lawyers likely live in certain subdivisions or neighborhoods--those with comparatively high-priced homes and well-manicured lawns. Those lower on the economic and social ladder, say teachers, or those engaged in "medium-income" white-collar occupations, live in less upscale, though still "good" neighborhoods.

Traditional blue-collar neighborhoods are inhabited by individuals with high school educations or less, again with networks of shared interests and values. These also can be "good" neighborhoods with high social capital (Broom and Selznik 1963, p.190-201).⁷ Indeed, some of the best examples of social capital networks evolve from situations whereby residents of modest means work to improve the community for the common good. Examples of these include small-scale urban gardens located in areas adjacent to public housing projects, neighborhood beautification projects that involve planting street trees, efforts to build bicycle and hiking paths, and efforts aimed at converting a vacant lot into a park or playground area.

Since housing is for most individuals the single largest expenditure they incur, home owners have a strong interest in preserving if not increasing the value of their property over time (Table 1; e.g., Laird 1996, p.24; also Ray, Halseth and Johnson 1997, p.96). One of the most influential writers on neighborhood dynamics is Grigsby (1963), whose contributions are enumerated in Megbolugbe, Hoek-Smit and Linneman (1996). Grigsby argued that "[t]he best and newest housing is built for higher-income groups but eventually passes down to successively lower-income groups until it reaches groups so low that they cannot afford to cover maintenance costs. Once a neighborhood reaches this stage ... public intervention is necessary either to restore the neighborhood to health or to clear it for reinvestment in new structures" (Megbolugbe et al. 1996, p.1782). Grigsby's dynamic model for analyzing neighborhood change can be summarized as (*ibid.* 1785, quoting Grigsby et al. 1987, p.33):

Changes in social and economic variables (1) cause households acting directly or through a system of housing suppliers and market intermediaries (2) to make different decisions regarding level of maintenance, upgrading, conversion, whether to move, new construction, boarding-up, and demolition (3), producing changes in dwelling and neighborhood characteristics. A key challenge for researchers is to discern whether and how different levels and types of social capital can attenuate any negative consequences of such changes, to achieve social goals.

Threats to property value in a neighborhood community include externally-imposed locally undesirable land uses (LULUs), pressure to develop land, physical deterioration, change

⁷For more recent discussions in the urban ecology literature of residential segregation by socio-economic characteristics see, *inter alia*, Warren 1996 or Massey and Denton 1993.

in population, rising crime rates, and different exogenous influences have different impacts in different types of communities (Mesch 1996, p.346; O'Looney 1993; Freeman, Grogger and Sonstelie 1996; Megbolugbe et al. 1996, p.1790). Whether or not social capital is one means of protecting property over time is a researchable question. Hirschfield and Bowers find that "[t]he more that an area that is at a disadvantage economically pulls together as a community [i.e., is socially cohesive], the greater its capacity to combat crime."

Racial or ethnic heterogeneity is an important factor often mentioned in the literature as influencing social capital levels. While examples exist of how racial diversity can lead to greater stability and resiliency to external forces within a community (as discussed at the beginning of this section), a sizeable literature suggests that racial heterogeneity is associated with low levels of social capital. For example, Hirschfield and Bowers (1997, p.1290) find that "juvenile disturbances, single-parent families and social heterogeneity" and "high levels of migration and ethnic heterogeneity," as measures of a lack of social cohesion, are associated significantly with higher crime rates in low-income areas (and thus reduced property values). Neighborhood associations are key institutions for coping with external or internal influences on property value. According to Mesch (1996, p.346-7), neighborhood associations

...are civic associations whose goals are to maintain and improve the quality of neighborhood life and to protect the common and social interests. ... Neighborhoods that lack organizations are slower and ineffective in their responses [to external threats...while those] with preexisting organizations respond faster and are more effective in rejecting or making important changes to development plans.

Factors such as neighborhood stability (percent of residents who had lived in the neighborhood for more than five years) and home ownership (percent of residents who own rather rent their homes) were associated with a greater likelihood that a neighborhood association existed, according to one study in Columbus, Ohio. Also, threats of undesired change as well as the ability of residents to bear the costs of involvement in the association affected the probability that an association was formed (Mesch 1996, p.363). The same study suggests that neighborhood associations in wealthier areas are less active, largely because they face fewer environmental threats (356).

A central contribution of Mesch's work is to highlight the importance of separating the formation of a neighborhood association from the actions of a neighborhood association once it is in existence. Furthermore, it points to certain social capital-type proxies that can be used to predict whether or not an association is likely to form in a neighborhood to preserve property values. Portney and Berry (1997, p.642) argue that

If sense of community is an essential building block for creating a participatory democracy and transforming the way people behave in the political process, then the cities with citywide systems of neighborhood associations have a valuable resource. These neighborhood associations are more effective than other

types of organizations *in nurturing feelings of identity and shared purpose with one's neighbors.* [emphasis added]

In terms of participation in civic activities by different racial groups, Portney and Berry (643) conclude that "[a]lthough neighborhood associations do not increase the overall number of people who participate in city politics, minority participation rates tend to increase as their percentage of the neighborhood population increases."

Another important institution directly or indirectly governing property values in a neighborhood is that of covenants or deed restrictions. These are "credible commitment(s) by unknown future neighbors to utilize their own property within the defined bounds, thereby reducing the uncertainty or riskiness of future externality effects" on property values (Hughes and Turnbull 1996, p.160). Whether these covenants are associated with high or low levels of social capital is an interesting but unanswered question. Less uncertainty exists about the effect of such covenants on property values. In a study of 37 Baton Rouge, LA neighborhoods and 1,314 property transactions, Hughes and Turnbull find "housing price capitalization patterns consistent with our risk abatement theory, with the value of a given set of deed restrictions diminishing as the neighborhood matures" (171).

Gated communities represent an increasingly common type of development in suburban areas, particularly in the Sun Belt.⁸ Wilson (1997, p.747) dismisses gated communities as "manifestations of an increasingly polarized global economy" and concludes that these communities reflect a negative form of social capital in suburban societies. Lang and Danielson (1997) argue, however, that social capital relationships within gated communities are far more complex. Brick walls, high fences, iron gates and other natural or man-made architectural barriers seem designed to provide privacy from those living outside the gated community and at the same time encourage social interaction and cohesiveness for those within. They further suggest that while residents believe the gates and fences offer protection from vandalism and burglaries, the barriers are usually more psychological than real (1997, p.876). Within a gated community, residents may form cohesive social bonds for ensuring that property is properly maintained and the welfare of residents is protected. Third parties are often used to resolve disputes among neighbors (Lang and Danielson, 1997, p.873).

City/Urban Core

If protecting property values and avoiding change are the major social ends to be achieved in suburban and urban neighborhoods, effecting change to revitalize downtown areas has become the main objective of many American metropolitan areas (Table 1). While much of the discussion in the previous sections also pertains to residential neighborhoods in the core areas

⁸ Blakely and Snyder (1997) estimate that there are almost 19,000 gated communities providing homes to nearly 8.5 million inhabitants.

of cities, the twin extremes of urban flight and gentrification separate urban from suburban neighborhood problems. Flora (1997, p.115) also characterizes communities "undergoing gentrification" as lacking trust and interaction among residents.

Of equal importance for the analytical framework we are proposing here, the types of social capital that arise or fail to arise to meet social ends also differ in city as opposed to suburban neighborhoods. Church attendance and Kiwanis Club, Chamber of Commerce or bowling league membership rates may be important indicators of social capital that can be mobilized to revitalize a downtown area, but these indicators most likely reveal little about the ability of a suburban neighborhood to prevent a LULU.

Region and Nation

Only relatively limited work has been carried out on the effect of social capital on the economic growth of regions and countries. The seminal works are those of Putnam (1993*b*, 1995, 2000) and Helliwell and Putnam (1995, Table 1). (See a critique of Putnam's 2000 book in Wills.) More recently, Knack and Keefer (1997) used data on trust and adherence to civic norms from the World Values Surveys found both of these indicators of social capital to significantly affect economic growth between 1980 and 1992 in a sample of 29 countries. Greater income equality and ethnic homogeneity were found to be associated with higher levels of trust and civic cooperation in a society, while the percent of students pursuing a law degree is associated only with lower levels of trust in a society (1282). This confirms their argument (1252) that

much of the economic backwardness in the world can be explained by the lack of mutual confidence ... [since] [i]ndividuals in higher-trust societies spend less to protect themselves from being exploited in economic transactions. Written contracts are less likely to be needed, and they do not have to specify every possible contingency. Litigation may be less frequent.

Knack and Keefer (1284) also found that "...horizontal networks—as measured by membership in groups [as proposed by Putnam, 1995]—are unrelated to trust and civic norms ... and to economic performance; Kenworthy (1997) arrives at a similar conclusion. Thus, it is clearly critical to be sensitive to the different types of social capital, and ways of measuring them, in these kinds of analyses.

Unproductive social capital has also been found at the level of nations or regions. Rubio (1997) develops the thesis that social capital which fosters criminal activity leads eventually to economic decline. Using data from Columbia, he fails to reject his thesis. Thus, clearly not all forms of social capital lead to higher general economic and social well-being.

DeFilippis, (2001) Offers an excellent critique of Putnam's work. He compares Putnam's work with that of French sociologist Pierre Bourdieu (1985) and notes that Putnam usually measures social capital simply by counting individuals who participate. Putnam believes

that social capital is a resource that people or groups either possess or do not possess, and is not something that can be measured on a continuous scale. Putnam emphasizes the positive not the negative components.

In contrast, Bourdeiu sees social capital as embedded in social relationships and is realized by individuals. He is much less inclined to measure social capital simply by counting members of societies and community organizations. He is much more concerned about the phenomenon of negative social capital and notes that organizations such as terrorist “cells,” the Mafia and the KKK have social capital of sorts, but this is not positive.

Social Capital in Three Idealized Prototype Communities

In this section we describe and analyze how the physical layout of the community may affect social capital formation in three idealized prototype communities as illustrated in Figure 2. These illustrations of idealized communities are adapted from ideas discussed in Lewis (1995, p.41). Each map illustrates the key characteristics of a geographic area that provides housing to perhaps 500 to 600 residents. The top panel represents characteristic features often found in small, self-contained rural communities common to rural areas in the Midwest that were settled in the late 19th and early 20th Century. The middle panel illustrates features likely to be found in late 20th century suburban developments. The bottom panel shows patterns of city-core urban residential development.

The Small Rural Community

In the idealized map of the prototype *small rural community* illustrated in Figure 2, storefront businesses surround a public park, or town square. This park or town square provides a focus for community-wide gatherings and a place for children to play while parents shop as well as a place for residents to meet and interact. Businesses are within easy walking distances from most homes. Homes built prior to World War II--frequently one and one-half (Cape Cod or Craftsman style) two-story (Colonial) structures--are located on narrow lots that line the streets directly adjacent to the business and the central square. Homes constructed after World War II--frequently of a single-story or "ranch" style--occupy wider lots slightly more distant from the town square, but still within walking distance.

The street pattern--even within these newer sections--is still a grid, with all streets carrying similar amounts of traffic. The light industrial area--usually involving agriculturally-related businesses--is located adjacent to the railroad tracks on the outskirts. Other agriculturally-related businesses often line the streets leading to this light industrial area. Churches often are located on corner lots of blocks, with residential housing on the same block. Modern school buildings constructed in the 60s and 70s (not shown in this illustration) are frequently single-story structures built on expansive locations at a half mile or more away from the town itself.

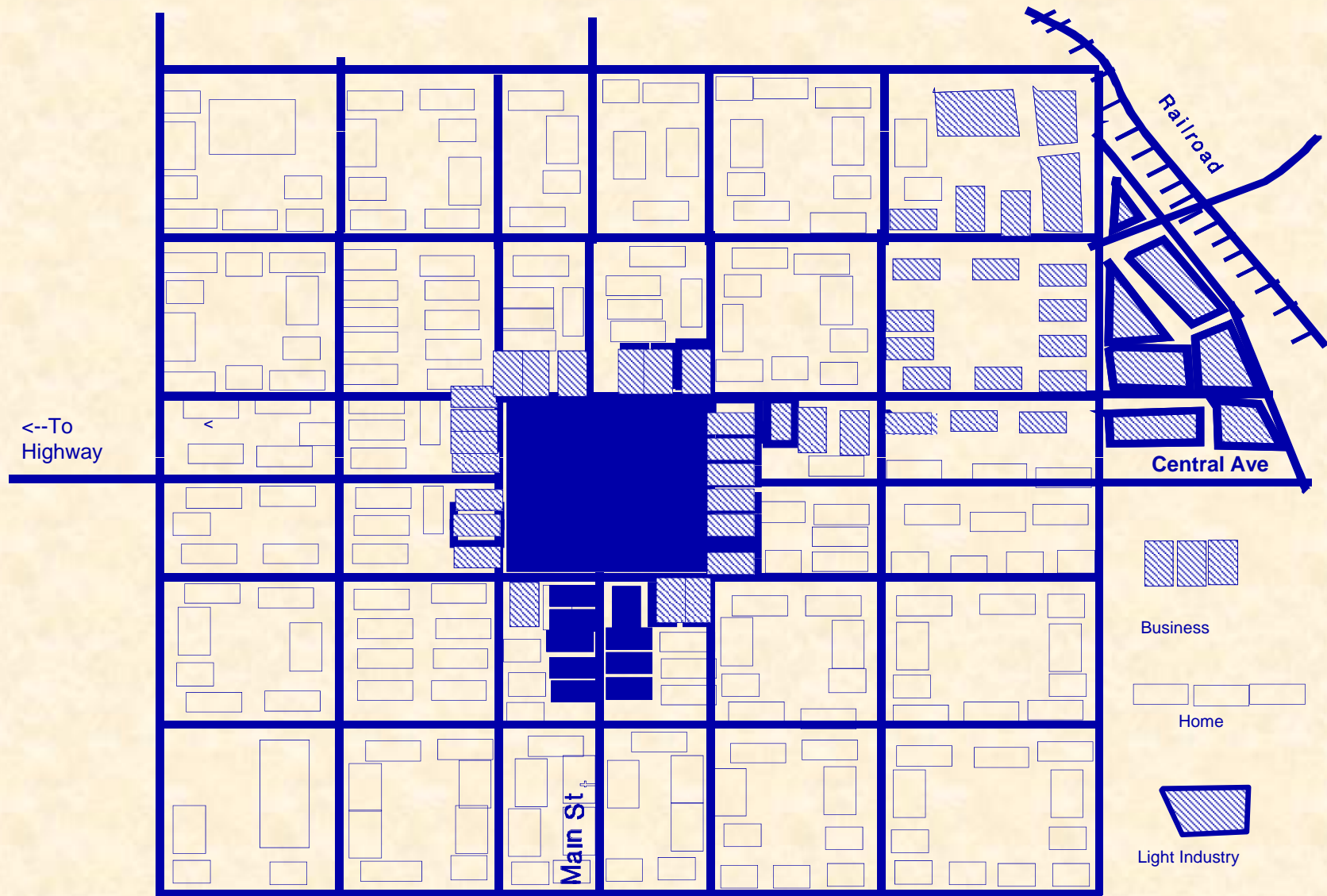


Figure 2. Three Idealized Communities Panel A. Small Rural Community

Figure 2. Three Idealized Prototype Communities: *Small Rural Community*

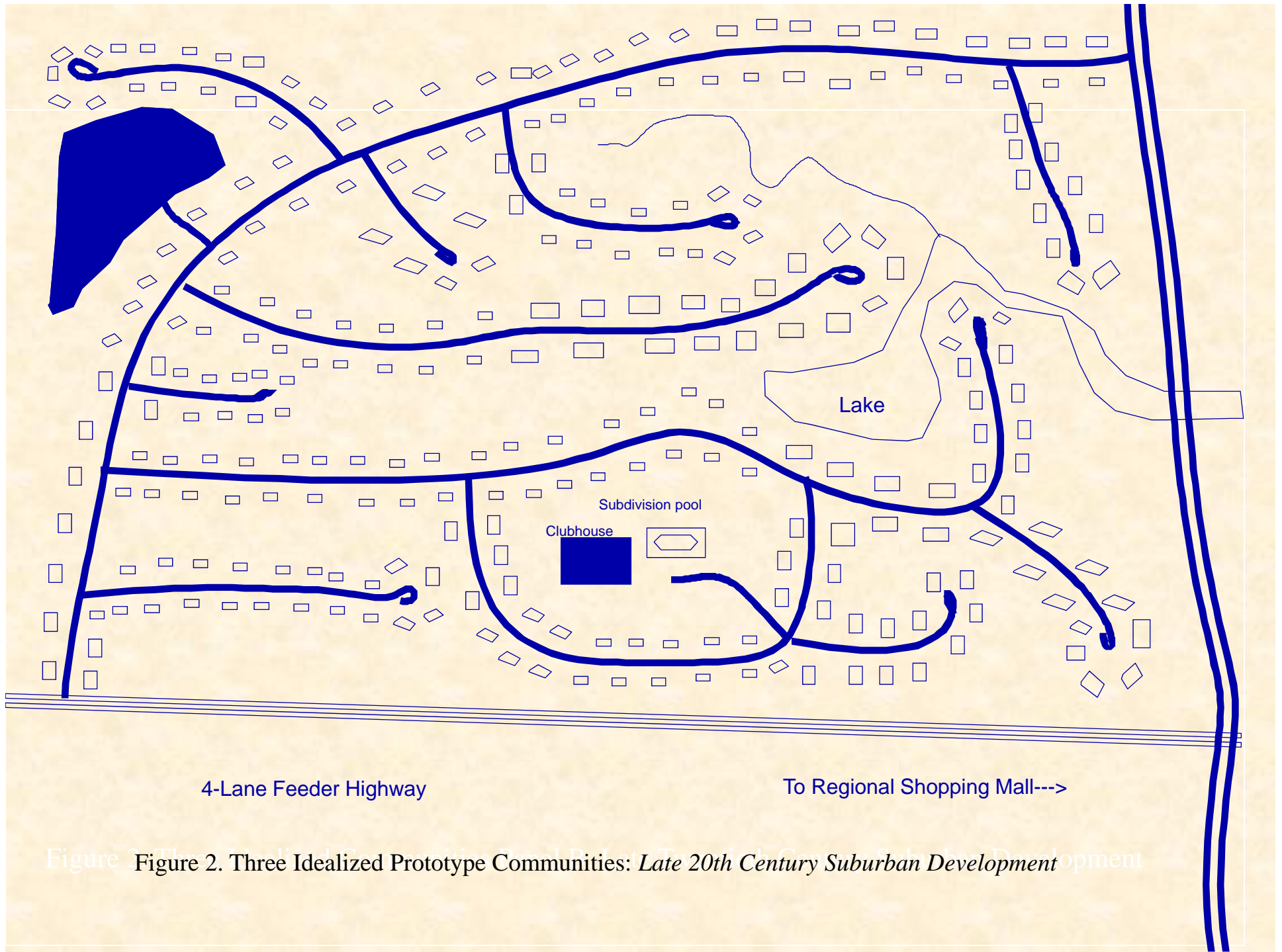


Figure 2. Three Idealized Prototype Communities: *Late 20th Century Suburban Development*

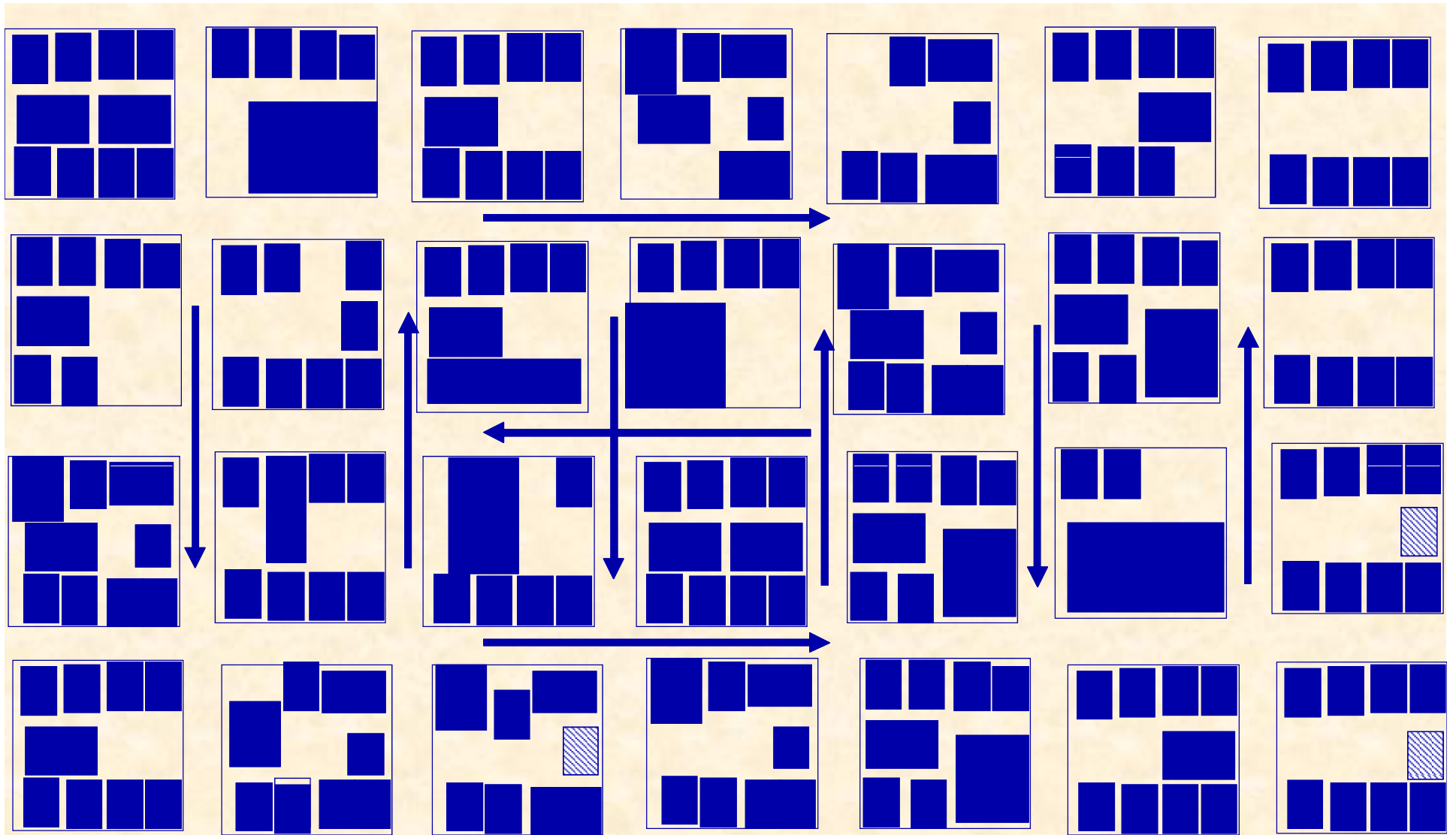


Figure 2. Three Idealized Prototype Communities: *Urban Core*

Figure 2. Three Idealized Communities Panel C. Urban Core

The geographic and non-geographic social capital networks overlap in small rural communities such as the one illustrated here, making it difficult to distinguish between the two. In fact, usually only a single social capital network exists in small, isolated rural communities, which is generally considered to be a strength or asset of such communities (Green 1996, p.7). Many rural communities similar to the one illustrated here were originally planned with a design intent on fostering social interaction. For example, county seat towns in many states were built around a plan in which the county courthouse is positioned on a central square (replacing the park), with major shopping areas facing the square on each side.

Rural communities of the size illustrated here are usually not of sufficient size to attract discount stores and other threats to main street businesses, and these main street businesses remain at the center of community social interaction. Often, the major state highway route was along main street—the planning idea being to attract travelers to main street businesses. As rural highways have been refurbished in the past few decades, they are often rerouted away from main street routes and businesses in an effort to speed traffic flow (the "by-pass" phenomenon), which can lead to business closings along main street.

Because homes of varying values in rural communities such as the one illustrated in Figure 2 are often located in comparatively close proximity to each other, the potential for social interaction among people of (moderately) varying income classes increases, as does *trust* across economic lines. As communities become larger, homes in a similar price range are more likely grouped together, increasing the likelihood that individuals of similar economic backgrounds will interact, but potentially reducing interaction among those of different income levels (Massey and Denton 1993).

A Newsweek article reported that some small rural towns near Chicago and elsewhere were being invaded by wealthy of the city (Adler et al. 1995). Wealthy city residents find relatively inexpensive land and houses, clean air and a commute that is acceptably short; they buy land or old housing cheaply in the rural community, and often demolish existing homes to build three-story neo-Victorian homes in their place. This forever changes the character of the rural community, and not always for the better, at least according to long-time residents.

Suburban Development

The middle panel is an idealized map for a prototype *late 20th century suburban development*. Lewis (1995, p.43) points out that many of these communities are carved out of farmland, leap-frogging over rural space, and thus may not be directly adjacent to an urbanized area. The majority of homes in the idealized map are on streets that lead no where, that is, courts or cul-de-sacs.⁹ Developers often take advantage of land which contains a natural feature such as a small

⁹Transportation planners calculate a "connectivity index" to numerically determine how well-connected a street system is. High values are associated with ease of use, whereas low values suggest reduced construction costs. This index is calculated at 1.5 for the prototype rural

lake or stream, as illustrated here. Often the more expensive homes are located in the most secluded areas of the subdivision (and backing to the water, in this case), and homes facing streets that feed traffic to the four-lane feeder arteries are priced lower than houses located on the dead-end streets. A mandatory fee (subdivision tax) pays for upkeep of the subdivision club, and common areas providing a pool and other recreational facilities for local residents. The subdivision club serves a function analogous to the town square in the small rural community as discussed in detail below.

The city may have required the developer to donate land for an adjacent public park for use by residents and non-residents alike, but these areas are often not centrally located and do not constitute a social capital focus for the subdivision itself. In subdivisions developed in the 60s and 70s, homes consisted of a mixture of single and multi-story designs, but in recent years, as land become more and more expensive, multi-story designs that make more efficient use of land increasingly predominate. An elementary and middle school is perhaps three miles away, but the new high school might be reached only after a 20 minute drive.

The presence or absence of social capital is indicated in very different ways in the typical suburban community. Subdivisions in communities such as the one illustrated in Figure 2 are frequently designed to contain homes only within a relatively narrow price range. Because of this, in many of these communities, the subdivision in which an individual lives thus becomes a clear indication of social and economic status and perhaps even political influence within the community. This, in turn, is reflected in public services provided at taxpayer expense. Homes in the "right" neighborhoods are served by the "best" schools, although the direction of causality is an issue here.

In upscale suburban neighborhoods much evidence exists of "shared values" among residents. These shared behaviors do not necessarily suggest that residents have a great deal of contact with their neighbors.¹⁰ Certain suburban communities across the country have been criticized for being impersonal, with even those living in close proximity often not knowing each

community illustrated here, but less than 1.0 for the illustrated suburban development, suggesting that the rural community has a greater ease of use--and presumably higher social capital formation potential than for the prototype suburban development.

¹⁰Do those residing in these neighborhoods share values more profound than in their choice of brickwork and brass coach lanterns? Conceivably, part of the satisfaction (utility) for those living in an upscale neighborhood is the ability to socialize with people similarly stationed on the economic and social ladder. Residents of upscale neighborhoods derive satisfaction from knowing they can afford to live in an area that others, by virtue of their lesser economic stations in life, cannot afford, apart from the satisfaction obtained from owning the high-priced home with all its features. While perhaps superficial or shallow, to a certain degree the shared architecture, brickwork and paint schemes imply a shared sense of values.

other well;¹¹ automatic garage door openers can significantly reduce interaction among neighbors, for example. But, since the value of one's home in such a setting is often heavily influenced by the value of neighboring homes, those living in such communities usually pay close attention to neighbors' actions that may even slightly depress neighborhood property values. This has led to elaborate covenants and deed restrictions on individual property owners with respect to what is (or is not) permitted, including restrictions prohibiting detached garages or other detached structures, regulations involving the use of residential streets for overnight parking of vehicles, and others. These are similar to, but in some respects more subtle than, the types of deed restrictions analyzed by Hughes and Turnbull (1996) in Louisiana. Modern suburbs have evolved a great deal from the idealized prototype illustrated in Figure 2. Traditionally, suburbs such as the one illustrated served as bedroom communities for those working and often shopping in the city core. Schools, churches, grocery stores and gas stations quickly were built near the suburban homes. In the 60s, with the rapid development of enclosed shopping malls¹² and the emergence of fast food restaurants, shopping patterns changed, and stores in downtown areas closed. Thus began a movement from a monocentric city with centralized economic activity to a polycentric city with economic activity of all kinds dispersed and located within a few miles of the suburban residences (Gordon and Richardson 1997; Ewing 1997, Theobald, 2001). Over the past twenty years, more and more businesses started to locate offices and other facilities closer to the suburban areas where the workers lived. Each suburb assumed a unique character—high income, low income, white collar, blue collar—depending on the employment opportunities that evolved.

This polycentric form of development, in which a central city is surrounded by many different suburbs containing not only residences but office and other business space, and including facilities such as schools, churches, shopping malls and other retail stores now characterizes many suburban areas in the US. A high proportion of suburban residents no longer commute to distant downtown areas in the city core to work, and this limits travel time.

Point-counterpoint perspectives on modern polycentric suburban sprawl can be found in papers by Ewing (1997) and by Gordon and Richardson (1997) and Theobald (2001) proposes a “sprawl index” for measuring the extent of urban sprawl. Gordon and Richardson see modern suburban sprawl as being undesirable and believe that cities should be compact and built on limited acreage with a clear demarcation between what is urban and what is rural. They see low

¹¹We do not mean to imply that the form of neighborhood necessarily "causes" a lack of interaction. Instead, major lifestyle changes that have contributed to less leisure may be the cause, including both parents working during the week in the case of families, etc.

¹²The impact of enclosed shopping malls on social capital formation relative to the type of social capital formation that takes place in a traditional main street is complex and uncertain, and is sufficiently complicated to warrant a separate paper. Enclosed shopping malls can foster social capital formation as residents meet and socialize at the shopping mall.

density housing as being wasteful of energy and other resources. The Gordon and Richardson view is consistent with current attempts by leaders in a number of cities to limit urban sprawl (Egan 1997; Williams 1997). For example, Portland, Oregon, with heavy restrictions on the availability of land for development under regulations enacted in the 1970s, represents an experiment in this regard.¹³

Ewing (1997) views contemporary polycentric sprawl with many suburban work and shopping areas that limit commute times far more favorably. He sees polycentric suburban areas as efficient and saving of energy and other resources. Modern telecommunications enable people to work in many outlying areas (suburban office buildings), without needing to commute to a central core. But, there are also impacts (perhaps negative) on social capital formation in situations where workers located at various scattered suburban sites seldom see each other face-to-face. For this reason, places such as New York's financial district or California's Silicon Valley often have a competitive advantage over suburban office parks (Lang, communication).¹⁴

A suburban development aimed at social capital formation is that of Columbia, Maryland (Christensen 1986). This development is largely consistent with Ewing's vision of polycentric suburbs. A team of behavioral scientists was asked to design a site plan that would provide each resident with a sense of membership within the community. The design created divided the community into a number of one-mile wide neighborhoods each with a population of approximately 3000 residents, and each containing facilities including a school, park, pool, playground and convenience store. Neighborhoods combine to form a village, containing additional facilities such as a middle school, bank, supermarket, pharmacy and additional recreational facilities. Christensen (1986, p.117) quotes one of the planning team consultants as wanting to "break the community down into groups small enough for people to feel an identity and involvement."

Urban Core

¹³ Twenty-six separate communities formed an elected regional government called METRO to administer the designation of the urban growth boundary (Abbot 1997). The type of social capital giving rise to and reflected in this alliance of 26 communities apparently does not exist in other major cities currently struggling—with limited success—with urban sprawl consistent with the Gordon and Richardson model include Salt Lake City, UT; Boulder, CO; Seattle, WA; and Phoenix, AZ. See also the discussion of the undesirable consequences of these kinds of developments in the Florida State Transportation Policy Initiative (1994) describing the Tampa Palms area.

¹⁴The competitive advantage in this case arises from agglomeration economies, which are cost savings that result when firms in the same industry located in close proximity to one another (e.g, Goetz 1997, p.840). We hypothesize that, without social capital, agglomeration economies are reduced significantly.

As illustrated in the lower panel of Figure 2, one-way streets designed to facilitate rapid traffic flow are characteristic even of residential areas within our prototype *urban core*. Heavily-traveled one-way streets with comparatively fast-moving traffic impose a physical as well as psychological barrier to the interaction of residents from opposite sides of the street. The buildings are commonly multi-story structures built up to or very near to the sidewalk, with little "front yard" space. This arrangement also means little social interaction among residents living in separate buildings but in close geographic proximity.

Many of the housing units are rentals, some in buildings as small as three stories. These are intermingled with owner-occupied condominiums. There are also high-rise apartment and condominium complexes. Slightly farther out are streets lined with two-story townhouses sharing common walls. Some urban churches remain in operation, but many have exited to the suburbs. In cities without active downtown revitalization programs, residents must increasingly travel outside the urban core for even such basics as groceries. There may be considerable interaction among residents living in the same building, although sometimes even this is limited. Places such as city museums provide some opportunities for social interaction. Residents often have ready access to fine restaurants, a public library, live theater and the like, and these provide opportunities for "non-geographic" social capital formation. School-age children may be bussed to suburban schools located ten or more miles away.

Katz (1994) argues that it is only as recently as the 1980s that significant numbers of people started once again longing for the conveniences traditionally associated with older neighborhoods located in close proximity to central cities. In many smaller cities, this rising interest coincided with the increasing commuting times associated with the new housing developments being built ever further from central cities. These shifts may have had a significant impact on comparative appreciation rates for residential properties since the 1980s in these cities, often leading to gentrification. More specifically, commuting ease and time have long had an important impact on comparative appreciation rates for residential properties in heavily urbanized areas near urban cores in the Northeast and in southern California.¹⁵

¹⁵ In Lexington, KY, where commuting times from even new construction in outlying subdivisions remain reasonable, unpublished research by the authors shows that values of residential property in zip codes close to the urban core have over the last two decades appreciated in value by a greater percentage than have values of properties located in more recently developed subdivisions located farther from the urban center. Research in progress by the authors suggests that in Lexington, KY, for example, single family residences located within a narrow corridor close to the city center and the University have experienced an average annual appreciation of approximately 5.9 percent per year, whereas similar single family residences located outside the outer loop that circles the city have had an appreciation rate of only 3.2 percent per year, on average. It is not clear to what extent this kind of research can be generalized to other communities; in many metropolitan areas, such as Washington DC or Los Angeles, the commute may be from one suburb (or exurb) to another.

In central-city urban areas, social capital can vary significantly from one residential neighborhood to another, and in many low income, crime-ridden public housing areas, it is clear that productive social capital has completely broken down. Police in urban areas can quickly determine the locales with negative or non-existent social capital, because the bulk of police resources are allocated to those beats. The physical design of housing structures can also influence criminal behavior, which has recently given rise to the approach of "Crime Prevention Through Environmental Design" (Alberta Community Crime Prevention Association 1997).

Those of the same race or ethnic group tend naturally to form social capital networks that are stronger than the networks which cross racial and ethnic lines (Warren 1996). With some important exceptions, ethnically diverse urban neighborhoods tend to have lower social capital, since social capital necessarily involves interactions among residents in the neighborhoods; Nyden, Maly and Lukehart (1996) discuss this in the context of diverse neighborhoods being perceived as "inherently unstable". These authors (1996, p.24-6) list 14 recommendations for "strengthening diverse communities." Christensen (1986) has noted a high degree of racial integration within the neighborhoods and villages of Columbia, Maryland, whereas the degree of socioeconomic integration is not nearly as high. Green (1996, p.7) argues that understanding the role of social capital in stimulating business in rural areas, and determining how policy enhances or reduces this form of capital, will be critical as devolution progresses.

Research Issues and Questions

Despite all of the interest among researchers in defining and measuring social capital, many important questions remain unanswered. The apparently simple goal of defining social capital and describing its formation remains elusive, apart from the attempts by researchers to define social capital from the perspective of measurable social capital indicators such as measures of volunteerism, membership in civic groups and the like. A contribution of this paper is to show that there are different types of social capital, which are context-specific, and that some forms of social capital are counterproductive to achieving desired social ends. A significant continuing challenge is to distinguish activities which demonstrate "social cohesion" from those which demonstrate "social capital formation"; to separate indicators or proxies of social capital from the social capital itself and; more generally, to separate social capital as *means* from social capital as an *end*. Even so, a research agenda related to social capital and housing is beginning to emerge, as we discuss in these concluding comments.

A first issue worthy of further research is the impact of social capital formation on changes in residential property values. Social capital appears to be a major underlying factor in determining whether a neighborhood is described by its residents as "desirable" or "unsatisfactory" and, *ceteris paribus*, property values tend to rise in what are deemed desirable neighborhoods, and fall in neighborhoods considered undesirable. Mortgage lenders clearly have a stake in helping assure that property values are at least stable if not increasing. Local governments rely heavily on revenue from property taxes to fund a variety of services including

education, and a decline in property values could lead to a deterioration of these services. Owners of residential real estate are also concerned that their properties appreciate in value.

A second issue is the role of social capital formation in general economic development. Firms prefer to locate plants in areas that workers regard as desirable places in which to live (McLoughlin 1983; Knapp and Graves 1989). To the extent that local residents in an area are able to form social capital, businesses may increasingly see such an area as a desirable place in which to locate, fostering economic development.

A third issue is the question of whether rising incomes of residents lead to increased social capital formation or, instead, whether increased social capital formation ultimately causes incomes to rise. If there is a cause-and-effect relationship here, what is the direction of causality? Or, which comes first? A related question is how income distribution *within* a community affects social capital formation. For example, if the income distribution is lopsided, with wealthy residents living in closed and gated subdivisions, can social capital still form between those living inside and outside of the gates, and what difference does it make for property values over time?

Last, is an evolving sense of *permanence* to the community necessary for social capital accumulation? If so, how does this sense of permanence manifest itself? Are quantifiable indicators such as residential mobility adequate to measure this factor? Americans, particularly those living in suburban areas, traditionally move to higher-income neighborhoods as they attain additional income. Does this upward mobility that characterizes much of American society inevitably contribute to a decline in social capital formation compared with the relative stability that has at least historically existed in rural communities?

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