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# TOWARD RATIONAL LAND USE PLANNING: AN INTERDISCIPLINARY APPROACH

ALLAN D. VESTAL\* and SUE TITUS REID\*\*

## INTRODUCTION

Governmental agencies—local, county, regional, state and federal—are getting more and more involved in land use planning. Almost every city of any size has developed a scheme for controlling the use of land. Other than cities, county and regional bodies are planning and regulating the use of land in the interest of the region as a whole. Within the past few years states such as Hawaii,<sup>1</sup> Vermont<sup>2</sup> and Maine<sup>3</sup> have placed land use planning powers in the hands of state agencies. The federal government, through various agencies and the exercise of its benefactory powers, is exerting some control over land use decisions being made at lower levels. Suggestions have been made in Congress that such indirect controls are not sufficient and that the federal government should become more directly involved in land use decisions.<sup>4</sup>

Vesting power in governmental agencies, however, does not answer the question of how the power should be exercised. If the planning body has no professional assistance, the land use decisions will be based in large measure on the exertion of political pressures. Economic forces will control in most of the cases. The individual who fights for the aesthetic, the ecologically sound, will be a voice in the wilderness. When the planning body has professional assistance, this situation may improve. Certain zoning concepts may be developed, but these tend to be superficial and do not meet the real problems of land use. Granting power to a body means that the power must be exercised in a rational way. Unfortunately, planning bodies too often act irrationally or respond to subjective considerations. Even when an apparently rational approach is used, especially in larger planning units, the enormity of the problems faced is given as the reason for offering

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1. HAWAII REV. STAT. § 205-1 (1968), *as amended*, § 205-1 (Supp. 1969).

2. VT. STAT. ANN. tit. 24, § 4301; tit. 10, § 6001 (Supp. 1972).

3. ME. REV. STAT. ANN. tit. 12, §§ 681-89 (Supp. 1970).

4. *See, e.g.*, S. 3354, 91st Cong., 2d Sess. § 402(b) (1970) (introduced by Senator Henry Jackson of Washington).

answers in the broadest terms. Such responses to problems are of questionable value, for applying broad answers to specific problems produces little of value.

Although the problems of land use control are difficult, the answers given can be specific and can reflect a rational, objective approach to the matter. The specific answers given can be justified in terms of (1) recognized limitations, (2) goals identified and sought, and (3) desires and needs of the people affected. Each of these can be broken down into elements of manageable size that can be analyzed and applied to a given situation.

### I. RECOGNIZED LIMITATIONS OF LAND USE PLANNING

As a preliminary matter, it might be suggested that land use plans should reflect existing physical limitations.<sup>5</sup> A classic example of such a limitation is found in ski resorts. A developer of a ski area may look at the land available for housing and build to this limit. A wiser developer would look at the skiing area available, estimate the number of skiers who could be accommodated on the slopes and then build his housing in these terms. This would be the only reasonable way of planning such a development. Likewise, although there may not be unanimous agreement on the precise figure, there is a general feeling that in developing urban areas recognition should be given to some maximum population figure for best citizen interaction.<sup>6</sup>

These are just examples of the types of limitations that must be recognized by planners. Planning without recognizing physical limita-

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5. For example, mountainous terrain may make impossible the development of a major airport that requires hundreds of acres of level land. At least, the land use plans must recognize the costs, perhaps prohibitive, involved if an airport is put on such land. Similarly, a city, in planning for expansion, must recognize the drainage of the land. It must recognize that land lower than the sewage treatment plant can be developed only at great cost. Lift stations must be built with forced mains. In all probability, when the treatment plant was built, it was planned to handle the sewage from the basin upstream. If additional sewage is brought into the plant from outside the normal drainage area, this requires enlarging the plant.

The developer should first look to the plans for recreation. Whether it is outdoor hunting, hiking, fishing or photography, the development must be in terms which do not destroy the very assets which are the basis of the development.

6. A maximum of 50,000 might be suggested. Over this maximum, it is feared, citizen involvement falls off rapidly. This would seem to be one of the limitations which should be recognized in land use planning. Of course, it is obvious that the maximum size can be honored by fragmenting urban areas. The plan in Indianapolis to recognize neighborhoods is just such an attempt. *IND. ANN. STAT.* § 48-9137 (Supp. 1972).

Any figure is arbitrary; tentative examination suggests that a feeling of participation and effectiveness exists in communities smaller than this. Other factors obviously are significant such as ethnic separation, educational background and wealth. These may alter significantly the perceived role played,

tions is foolish and misleading. Although it may be impossible to list all of the physical limiting factors that should be considered, a number can be listed: (1) the finite nature of land (a substantial limitation in cities such as New York and San Francisco where land use must reflect the near city); (2) the amount of land available for recreation, such as swamps, wooded areas, shores and vistas; (3) the norms of heats and exposure to the sun; (4) contours of the area; (5) rainfall affecting the need for storm sewers; (6) surrounding urban areas; and (7) availability of water sources.

The economy is another limiting factor. If the economic base is small, then it follows that the land use plans must reflect this. It would, for example, be foolish to plan enormous industrial parks if there were no possibility that the land would be used accordingly. Related to the economy is the availability of transportation; land use planning must recognize the need for bringing people and goods together.

## II. GOALS SOUGHT IN LAND USE PLANNING

A governmental body may fix certain goals that it wishes to attain. It may elect to achieve these goals through use of the power to plan land use.<sup>7</sup> Too frequently, however, the goals being sought are not clearly expressed or the effect of an action taken is not clearly understood.<sup>8</sup>

The governmental agency should maintain a continuing study of its area and the population it serves. The agency must make decisions about what concentration of people would be the optimum for the area. Concentration must be determined both in terms of number and distribution throughout the geographical area. The governing body must make fundamental decisions about the movement of people, such as whether private transportation should be utilized exclusively or whether mass public transportation will be developed. Should resi-

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7. Some examples may make this point clearer. A city council may decide that it wishes to expand its tax base in an attempt to reduce the taxes on residential property. When an individual approaches the council with a plan for a shopping center on the edge of the city, the council may, in an attempt to implement its predetermined policy, give permission for the shopping center.

When a state enacts a land use policy, it may deliberately choose to try to maintain the character of the state against the influx of outsiders. Vermont, for example, has adopted a land use policy which is designed basically to maintain its essential characteristics and keep out those who would change the state. VT. STAT. ANN. tit. 24, § 4301 (Supp. 1972); *id.* tit. 10 § 6001.

8. When an interceptor sewer is built, which opens up an entire area of a city, a goal may not be clearly spelled out and the ramifications may not be clearly understood. The city council may not understand that the sewer will allow an enormous population growth that will necessitate services, arterial streets and schools.

dential uses be allowed in the central business zone or in a shopping center zone? Should neighborhood commercial uses be allowed in a residential area? Should a mixture of residential uses, apartments, duplexes and single family dwellings be permitted?

The governing body must decide on the location of public facilities such as libraries, fire stations, recreational buildings and parks. The governing body must make a fundamental decision as to whether the residential areas will be people-oriented as in Columbia or Reston or vehicle-oriented as in most cities in America.

One of the deliberate choices that a governmental agency may make is whether to create or foster unified neighborhoods within urban areas. Historically there have been areas that have remained identifiable units in an urban setting, such as Georgetown in the Washington area, the French Quarter in New Orleans, Old Charlestown in South Carolina, Irvington and Broad Ripple in Indianapolis, and Chinatown in San Francisco. Thus, a city may elect to segment itself in the interest of giving identity to its citizens. If it does, it must then decide what powers will be given to each neighborhood organization.<sup>9</sup>

Planning decisions regarding physical characteristics are important because physical surroundings can have an effect upon the people of a community.<sup>10</sup> Propinquity is one such physical characteristic that is instrumental in creating social relationships. If propinquity is the crucial variable, then planners can affect social relationships by manipulating site plan and architecture.<sup>11</sup>

9. See, e.g., IND. ANN. STAT. § 48-9137 (Supp. 1972).

10. Numerous investigators have argued that the planner—the city official—does have the power to affect human behavior through his design of physical environment. Many of these investigators base their conclusions on studies made of wartime housing projects and the new subdivisions that grew up in the suburbs after the war. H. GANS, *PEOPLE AND PLANS: ESSAYS ON URBAN PROBLEMS AND SOLUTIONS* 152 n.1 (1968), lists the following principal postwar studies: Caplow and Foreman, *Neighborhood Interaction in a Homogeneous Community*, 15 AM. SOCIOLOGICAL REV. 357 (1950); L. FESTINGER, S. SCHACHTER & K. BACK, *SOCIAL PRESSURES IN INFORMAL GROUPS* (1950); Festinger, *Architecture and Group Membership*, 7 J. SOC. ISSUES, Oct. 1959, at 152; Kuper, *Blueprint for Living Together*, in *LIVING IN TOWNS I* (L. Kuper ed. 1953); Merton, *The Social Psychology of Housing*, in *CURRENT TRENDS IN SOCIAL PSYCHOLOGY* 163 (W. Dennis ed. 1947); Whyte, *How the New Suburbia Socializes*, FORTUNE, Aug. 1953, at 120; W. WHYTE, *THE ORGANIZATION MAN* ch. 25 (1956). See also the earlier researches and some negative findings cited by Rosow, *The Social Effects of the Physical Environment*, 27 J. AM. INSTITUTE PLANNERS 127 (1961).

11. Deterministic statements by investigators such as the following were not uncommon:

The architect who builds a house or designs a site plan, who decides where the roads will and will not go, and who decides which directions the houses will face and how close together they will be, also is, to a large extent, deciding the pattern of social life among the people who will live in those houses.

L. FESTINGER, S. SCHACHTER & K. BACK, *supra* note 10, at 160. Or, as one sociologist has said, "We shape our buildings, and afterwards our buildings shape us." Merton, *supra*

note 10, at 204.

The empirical studies conducted in the 1950's found a close correlation between propinquity and social interaction. In one study it was found that the location of partitions in army barracks was related to friendship patterns. Blake, Rhead, Wedge & Mouton, *Housing Architecture and Social Interaction*, 19 *SOCIOMETRY* 133 (1956). Similar results were found in studies of cafeterias, residences and school libraries. R. SOMMER, *PERSONAL SPACE* (1969).

Other studies related the location of front doors to social interaction. For example, in a study of postwar housing in England, social interaction patterns of people who lived in semi-detached housing were analyzed. Every two houses were attached with a party wall—thus, each family shared one party wall with another family. Each family also, however, shared a walkway with another different family. Kuper found that more intensive social interaction occurred between the neighbors who shared the walkway than between those who shared a party wall. It has been suggested that the explanation for this finding was location of doors. Neighbors who shared a walkway had doors much closer together than those who shared a party wall. W. MICHELSON, *MAN AND HIS URBAN ENVIRONMENT: A SOCIOLOGICAL APPROACH* 174-75 (1970).

A similar housing arrangement was studied at the University of Minnesota. People whose front doors looked out on the same sidewalk were extremely likely to know one another. "People were much less likely to know others whose homes and even doors may actually have been closer to theirs but whose front door did not *look out* on the same sidewalk." *Id.* at 177. Supporting results come also from the empirical investigation of a "carefully planned industrial town in the U.S. called Crafton." *Id.*, citing Merton, *supra* note 10. This study also indicates the importance of the location of doors and the development of friendships. Friendships that people maintained with individuals who lived across the street from them were analyzed. "Out of these types of friendships, 74% are among people who have doors facing the street. Only 22% of them are among people only one of whom has a door facing the street, and only 4% of them are among people who do not have doors which face the street." *Id.* at 178.

Another advocate of the importance of propinquity in determining social interaction is William H. Whyte, author of the classic, *The Organization Man*. He states:

Propinquity has always conditioned friendship and love and hate . . . .

. . . Despite the fact that a person can pick and choose from a vast number of people to make friends with, such things as the placement of a stoop or the direction of a street often have more to do with determining who is friends with whom.

W. WHYTE, *supra* note 10, at 330.

In his study of Park Forest, a suburb of Chicago which was the locus of his study of the organization man, Whyte also found that families whose driveways were contiguous were more likely to be friendly to one another than those whose property lines were merged with grass. *Id.* at 343-44. In a carefully designed study of the social interaction of the residents of Park Forest, Whyte mapped the social gatherings of the residents during a three-month period in 1953 and then again for the same area during the same three months three years later. Despite the change in inhabitants, "practically the same homes were involved with the same other homes in social activity." W. MICHELSON, *supra*, at 180.

One of the most frequently cited of the studies of propinquity and social interaction is the study of married student housing at Massachusetts Institute of Technology. L. FERSTINGER, S. SCHACHTER & K. BACK, *supra*. The investigators in that study

found that the proximity of dwelling unit entrances was directly related to the frequency of casual interaction and subsequent growth of friendships. Residents who were physically more isolated (with a dwelling unit nearer the edges of the development, for instance) tended to develop fewer friendships within the neighborhood and reported less of an attachment to the residential area.

J. LANSING, R. MARANS & R. ZEHNER, *PLANNED RESIDENTIAL ENVIRONMENTS* 100 (1970).

The type of house and arrangement of houses on the block has also been related to

Other physical planning can have a more direct effect upon the individuals in a community. The location of businesses and jobs in relation to residential areas, the distances to shopping centers from residences and the availability of schools and recreational facilities to residences will affect traffic and traffic patterns and the need for other transportation.

It would be a mistake, however, to view physical planning as the solution or the explanation of all urban problems. The city planner often sees the environment only in terms of its physical qualities, which leads him to assume that he can manipulate human behavior by manipulating the physical environment. Much of the information used as "evidence" of the importance of social factors in explaining human behavior is gathered in reaction to such physical determinism in an effort to minimize the effects of physical structures on human behavior. Although the physical environment may be a limiting factor, it becomes less important as man learns to ignore, adjust or adapt to it. It has been suggested that even when physical restrictions are imposed by zoning laws, "social intercourse, which has never respected physical boundaries anyway, is increasingly able to ignore them,"<sup>12</sup> because the "essential qualities of urbanness are cultural in character, not territorial."<sup>13</sup>

After analyzing several empirical studies, one writer concludes that planners have overestimated the effect of the physical environment. He says that people overcome the physical environment by what he calls "nonconforming use," which he describes as "an evasion of this impingement in order to maintain or achieve behavior patterns that are in line with their predispositions."<sup>14</sup>

social interaction. For example, it has been concluded:

Within the townhouse and single family categories the enclosed or cul-de-sac neighborhoods result in more daily casual social interaction than the linear or open settings. Overall, the single family cul-de-sac plan fosters the highest rates of interaction, while the open multiple structure townhouse plan leads to the least.

*Id.* at 116.

12. Webber, *Order in Diversity: Community Without Proximity*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 35 (L. Wingo ed. 1963).

13. *Id.* at 30.

14. H. GANS, *supra* note 10, at 19. See also Rosow, *The Social Effects of the Physical Environment*, 27 *J. AM. INSTITUTE PLANNERS* 127 (1961). A study of the West Enders in Boston points out that the social environment has considerably more effect than the physical environment. H. GANS, *supra* note 10, at 19. See also H. GANS, *THE URBAN VILLAGERS* (1962), and H. GANS, *THE LEVITTOWNERS* (1967). The physical environment of these people would be described by planners as inadequate, but to the residents the area represented more than physically inadequate housing:

Most of the planning reports described the area as a neighborhood of five-story tenement buildings in narrow streets, without sufficient sun and air, and characterized by insufficient parking, garbage-strewn alleys, and high delinquency statistics.

There has been great dissatisfaction with housing developments that have failed to eliminate the cultural characteristics of slums, even though they have at least temporarily changed physical conditions. Speaking of people who live in the slums, one authority has concluded that "[i]f their community were cleared, they would move elsewhere, and the physical blight would spread with little improvement of the total situation. . . . They create a 'culture of poverty' reinforced by the group they live with."<sup>15</sup> This is certainly not to suggest that these behavioral patterns cannot be changed but rather to emphasize that they are not changed by a mere change in physical surroundings. Thus, it has been argued that the predisposition of people, not physical surroundings, constitutes the major factor in explaining why people behave in a certain way in a particular situation.<sup>16</sup>

We probably do not have enough information on the effect of site plan on the roles of various members of a family to come to any conclusions.<sup>17</sup> Factors such as social class, age, stage in life cycle and education would, however, be important variables to consider in the relation of site plan and family life.

The debate between social and physical determinism continues with somewhat less emphasis on determinism than was the case historically. Sociologists, psychologists and anthropologists continue to

The people who live in it saw something entirely different: cheap, spacious apartments, a neighborhood full of friends and family, and freedom from attack by delinquents (who did their antisocial work primarily outside of the West End).

H. GANS, *supra* note 10, at 7.

Still, even with dissatisfaction with physical characteristics of housing, one probably would have difficulty finding a situation in which those characteristics *determined* social life. With a note of sarcasm one authority has remarked, "How much well-intentioned housing reform has been carried out under the axiom that the uplifting of character would stem directly from the upgrading of shelter!" Wingo, *Urban Space in a Policy Perspective: An Introduction*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND 4-5* (L. Wingo ed. 1963).

15. Duhl, *The Human Measure: Man and Family in Megalopolis*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND 147* (L. Wingo ed. 1963).

16. H. GANS, *supra* note 10, at 14, referring to B. BERGER, *WORKING CLASS SUBURB: A STUDY OF AUTO WORKERS IN SUBURBIA* (1960). This conclusion was reached in a study of automobile workers who moved to single-family dwelling units in a suburb from apartment living in a small industrial city, after no major changes in the behavior patterns of the sample were found. It was concluded that "despite the auto workers' great satisfaction with the new home and with being homeowners, they remained working-class people and had no interest in adopting middle-class ways usually associated with suburbia." *Id.*

17. There is "little evidence on the basis of controlled investigations, that the dissatisfactions and conflicts of individual family members can be modified or ameliorated by the residential environment." Gutman, *Site Planning and Social Behavior*, 22 *J. Soc. ISSUES*, Oct. 1966, at 111 (1966), quoting White, *A Study of the Relationship Between Mental Health and Residential Environment, 1957* (unpublished thesis in the Department of City and Regional Planning, Massachusetts Institute of Technology).



emphasize their own discipline, and city planners continue to emphasize the importance of physical factors. There are signs of encouragement, however, in the recognition of the need for studying the interrelationship of physical and social factors in the environment<sup>18</sup> and in the recent interdisciplinary approaches to an increasing number of social problems. In the face of existing studies, it would appear no longer reasonable to argue for physical determinism. We should instead ask what differences in behavior can be expected to result from certain changes in the physical environment.<sup>19</sup>

Planners and city officials who consider only the physical aspects of living and working conditions without considering the social and cultural factors will never be completely successful and may never understand what is happening in the area for which they plan.

### III. WANTS AND NEEDS OF THE PEOPLE AFFECTED

Since governmental agencies are eventually subject to control by the people, either directly or indirectly, they will at some point, in controlling the use of land, consider the wishes of the people or what is best for the people. This may be a mere gesture rather than a real attempt to ascertain what the affected people want or need. Faced with a difficult problem and wishing to look to its constituency, the body may have difficulty distinguishing between what certain vocal, present individuals assert and what may be the wishes or needs of an inarticulate body of people of uncertain dimension in an uncertain time frame.<sup>20</sup>

To plan land use best, the governing body should react to the needs and wishes of a continuum of people in a broad geographic area. Three methods that may be used are: (1) formal incorporation in a zoning ordinance of a provision giving some effect to formally expressed opinions of concerned individuals; (2) the recent development of citizen participation, with all its uncertainties, as a method of obtaining involvement of concerned persons; and (3) a more sophisticated method

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18. W. MICHELSON, *supra* note 11.

19. Gutman, *supra* note 17, at 113.

20. MogeY has said:

A contribution in an architects' journal saying that information from the 'consumers' of housing might be desirable, drew this statement from a woman architect. 'Personally I would like to see our architects shut their ears firmly to the voice of multitude and quietly get on with the job that is their special province—that of planning what *they conceive* to be the best possible houses that can be built within the limits of cost laid down.' *J. Royal Institute of British Architects*, li (1944), pp. 191-7 and p. 270.

J. MOGEY, *FAMILY AND NEIGHBORHOOD* 74-75 n.3 (1956).

of using social science information to obtain some perception of the wishes and needs of people.

### A. Zoning Provisions

The law has recognized that people immediately affected may have some special interest in the use of land. By statute in many jurisdictions, land use is subject to at least a partial veto by those living immediately adjacent to the property involved. For example, in Iowa, after a city has been zoned, the city council can change the regulations, restrictions and boundaries with the following limitation:

In case, however, of a protest against such change signed by the owners of twenty percent or more either of the area of the lots included in such proposed change, or of those immediately adjacent in the rear thereof extending the depth of one lot or not to exceed two hundred feet therefrom, or of those directly opposite thereto, extending the depth of one lot or not to exceed two hundred feet from the street frontage of such opposite lots, such amendment shall not become effective except by the favorable vote of at least three-fourths of all the members of the council.<sup>21</sup>

This sort of provision is widespread in the statutes dealing with zoning in the United States. It was found in the Standard State Zoning Enabling Act<sup>22</sup> promulgated in 1922, and now is found in the statutes of many states.<sup>23</sup> Obviously, the provision lends itself to litigation. Cases have involved the interpretation of the people covered by the provision<sup>24</sup> and have challenged the supposed delegation of power to private individuals.<sup>25</sup> The percentage needed to overcome the objection from the adjacent landowners varies from state to state. While Iowa and Kansas<sup>26</sup> require three-fourths of the city council to overcome the objection, Rhode Island requires three-fifths,<sup>27</sup> Illinois requires two-

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21. IOWA CODE § 414.5 (1973).

22. STANDARD STATE ZONING ENABLING ACT § 5 (1926).

23. 1 R. ANDERSON, AMERICAN LAW OF ZONING §§ 4.34-.35 (1968). See also 3 *id.* § 15.15, which deals with the same matter. Enabling acts requiring affirmative consent are discussed in 1 *id.* § 4.36.

24. *Olson v. City Comm'n*, 407 P.2d 374 (Mont. 1965); *Johnson v. Township of Montville*, 264 A.2d 75 (N.J. App. Div. 1970); *Hittl v. Buckhout*, 176 N.Y.S.2d 401 (Sup. Ct. 1958), *aff'd*, 199 N.Y.S.2d 444 (App. Div. 1960); *Dole v. City of New York*, 44 N.Y.S.2d 250 (Sup. Ct. 1943).

25. *Marta v. Sullivan*, 248 A.2d 608 (Del. 1968) (unconstitutional delegation of power); *Koch v. Zoning Bd. of Appeals*, 284 N.Y.S.2d 177 (Sup. Ct. 1967) (unconstitutional delegation of power).

26. KAN. STAT. ANN. § 12-708 (Supp. 1972).

27. R.I. GEN. LAWS ANN. § 45-24-5 (1971).

thirds<sup>28</sup> and Missouri requires a unanimous vote.<sup>29</sup> This type of statute, providing for participation from the people affected, is very limited in scope. In all probability it is used once in a decade in a typical community, if that often. If the voice of the people is to be heard, it must be through some other device.

### *B. Citizen Participation*

Recently the federal government has become deeply concerned with having people participate in the making of decisions that will affect them. For example, the Bureau of Public Roads has published a policy and procedure memorandum, in which it is stated:<sup>30</sup>

a. Citizen participation is needed at all stages of the planning process beginning with the spelling out of goals and objectives and extending through the choice between alternatives for both land use and transportation. Lines of communication should be established and maintained which will not only seek the views of those affected by proposed programs but demonstrate to them in ways they understand that their views receive full and sincere consideration. This may well require the aggressive use of newspapers, radio and television in addition to public meetings and organized citizen committees.

b. The organization responsible for the planning process shall make provisions to inform the public completely, to obtain the public views, and to use these views in developing transportation plans.

The Housing Act of 1949<sup>31</sup> provides that before any federal funds may be granted for any authorized purpose under the Act, the local public agency must demonstrate to the Department of Housing and Urban Development (HUD) that the project is part of a "workable program for community improvement."<sup>32</sup> Four basic requirements have been established by HUD for a workable program; the fourth is citizen participation.<sup>33</sup> A workable program is also a requirement for neighborhood development programs.<sup>34</sup>

Under the federal provisions citizen participation is extremely limited in its impact on land use planning. It may occur when federal

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28. ILL. ANN. STAT. ch. 24, §§ 11, 13, 14 (Smith-Hurd 1967).

29. MO. ANN. STAT. § 64.640 (1971).

30. U.S. DEP'T OF TRANSP., POLICY AND PROCEDURE MEMORANDUM 50-9 (1969).

31. 42 U.S.C. § 1441-90d (1970).

32. 42 U.S.C. § 1451(c) (1970).

33. U.S. DEP'T OF HOUSING AND URBAN DEV., HANDBOOK § 7100.1 (1968).

34. 42 U.S.C. § 1469c (1970).

funding is used in planning by metropolitan or regional agencies, but the impact here is remote at best. Citizen participation under the federal provisions is also sporadic and temporary. It is also subject to the criticism that it represents only a specific group at a specific time. It does not purport to represent the general community and the long range interests of its residents.<sup>35</sup> Other methods of determining the interests and needs of the people should be used by the local planning agencies.

### C. Social Science Information

There are sociological and psychological studies that attempt to answer the questions concerning what the people affected want and what they need. By looking to these studies and the data that have been collected, it may be possible to reach some conclusions about the methods by which zoning and planning can be used to create optimum conditions.

1. *Optimum Living Space*.—There is a need for more “basic data on what constitutes optimum conditions for man’s social and cultural development.”<sup>36</sup> Numerous writers have argued for what they consider to be optimum living conditions for people, but few empirical studies exist in which samples of the population have been systematically tested on this important issue. Evidence is scant on what people actually need in the way of living conditions.

This article will first analyze man’s need for space as well as his desires for space. In order to understand the analysis fully, however, some attention must be given to the empirical studies of optimum living space among the lower animals.

a. *Effects of Density on Lower Animals*.—The 1920 publication of *Territory in Bird Life* marked the beginning of systematic studies of the importance of territoriality to lower animals.<sup>37</sup> This study has received significant attention, but only recently have the findings been considered in relation to man.<sup>38</sup> Space does not permit an extensive

35. See A. VESTAL, *URBAN PROBLEMS—A LEGAL PRIMER* ch. 6 (1972).

36. Hall, *Human Needs and Inhuman Cities*, in *EVOLUTION OF MAN* 421 (L. Young ed. 1970).

37. *Id.* at 421 n.8.

38. In 1968 Edward Hall said: “As recently as five years ago, it was difficult to interest people in the significance of John Calhoun’s work with rats or John Christian’s studies of the consequences of animal crowding. Today, one can hardly pick up a newspaper without reading about a new study on the effects of crowding.” *Id.* at 417. See also W. MICHELSON, *supra* note 11, at 7 n.8: “There has been a beginning of work in this area, but it has not been from anyone primarily identified with human ecology.” See, e.g., A. BIDERMAN, M. LOURIE & J. BACCHUS, *HISTORICAL INCIDENTS OF EXTREME OVERCROWDING*

review of these studies of lower animals, but general findings will be stated along with references for those who wish to pursue the study in greater detail.<sup>39</sup>

Several researchers have noted a "behavioral sink" in lower animals that occurs when their populations become too dense. By "behavioral sink" is meant "a physical condition in the environment [that] brings about a particular social condition among animals which can lead to physical pathology."<sup>40</sup>

The effect of density on animals has been summarized as follows: "The ethological evidence is overwhelming: as populations build up, so does stress. Eventually, the animals' capacity to withstand stress begins to diminish, and the population collapses for a variety of reasons."<sup>41</sup>

*b. Effect of Density on Man.*—The crucial question for our study, however, is not whether density is dysfunctional for the lower animals but whether it is dysfunctional for man. Are the studies of animal populations applicable to man? Does crowding cause "behavioral sinks" in man? Traditionally, we have argued in the negative, for man, with his powers of reason, has been able to adjust the environment to suit his needs and desires. Recently, however, this position has been questioned.<sup>42</sup> It has been stated:

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(1963); Schmitt, *Implications of Density in Hong Kong*, 29 J. AM. INSTITUTE PLANNERS 210 (1963).

39. See, e.g., P. ERRINGTON, *MUSKRATS AND MARSH MANAGEMENT* (1961); H. HEDIGER, *THE PSYCHOLOGY AND BEHAVIOUR OF ANIMALS IN ZOOS AND CIRCUSES* (1968); H. HEDIGER, *WILD ANIMALS IN CAPTIVITY* (1950); Calhoun, *Population Density and Social Pathology*, in *POPULATION IN PERSPECTIVE* 375 (L. Young ed. 1968); Carrighar, *Nature's Balance, the Teetering See-Saw*, in *id.* 359; Wynne-Edwards, *Population Control in Animals*, in *id.* 362; Christian, Flyger & Davis, *Factors in the Mass Mortality of a Herd of Sika Deer, Cervus Nippon*, 1 CHESAPEAKE SCIENCE 79 (1960); Errington, *Factors Limiting Higher Vertebrate Populations*, 124 SCIENCE 304 (1956).

40. W. MICHELSON, *supra* note 11, at 6. In the classic laboratory study of Norway rats, it was found that when the population became too dense, behavioral sinks occurred. Males became homosexual; females were inadequate in building nests and caring for the young; some young were not nursed and were eaten by adults; rates of mortality among adults were higher; males became more aggressive and attacked females and the young; some males became passive and withdrawn. Calhoun, *supra* note 39. In a study of a deer population that became overpopulated, resulting in the death of large numbers and the final stabilization of the population at a lower level, "[i]t was concluded that physical crowding brings about intense interaction among animals, which in turn lowers adrenal weight, which then lowers the animals' defense mechanisms. Parallel findings were reported for muskrats and for woodchucks." W. MICHELSON, *supra* note 11, at 6. Another famous study is that of lemmings, in which all physical needs except space were met. Up to a certain number, the animals adjusted to one another. Then, the addition of even a few more lemmings made life intolerable. Carrighar, *supra* note 39, at 362.

41. Hall, *supra* note 36, at 417.

42. For example, the cultural anthropologist Hall has argued:

The implosion of the world population into cities everywhere is creating a series

Possibly the brain which has made man dominant in present zoologic time will prove to be the very instrument of his extinction. Perhaps that brain may construct an environment so different from the natural habitat that Man . . . may prove obsolete within it.

Space is one of the vital attributes of habitat, for its quality is a major influence upon the welfare and survival of any organism.<sup>43</sup>

The problem, however, is that such statements are based on conjecture, not empirical evidence. Research is needed. There is a "need to learn much more about man's basic nature and his requirements as a biological organism."<sup>44</sup> Moreover, even if man can adapt physiologically to a dense environment, the question of whether he can adjust socially and psychologically remains an important issue.<sup>45</sup>

In view of the lack of empirical data on the direct effect of density on man, it is appropriate to analyze the hypotheses about the relationship between density and behavior as well as studies in which density has been a variable, but not the only variable, that could explain the resulting behavior. The first question to consider is whether territoriality is important to man. Historically, that concept has been considered to apply only to the lower animals where it is based on instinct. Since the publication of *African Genesis*,<sup>46</sup> however, attention has been focused on the possible importance of territoriality to man. One re-

of destructive behavioral sinks more lethal than the hydrogen bomb. Man is faced with a chain reaction and practically no knowledge of the structure of the cultural atoms producing it. If what is known about animals when they are crowded or moved to an unfamiliar biotope is at all relevant to mankind, we are now facing some terrible consequences in our urban sinks.

E. HALL, *THE HIDDEN DIMENSION* 155 (1966).

43. E. HIGBEE, *THE SQUEEZE: CITIES WITHOUT SPACE* 3 (1960).

44. Hall, *supra* note 36, at 420.

45. "Man's physiological adaptive capacities have been studied intensively for some decades now but there has not been equivalent study of what the non-physiological adaptive capacities of man are in respect to his aesthetic evaluation of environment." Sonnenfeld, *Variable Values in Space Landscape: An Inquiry into the Nature of Environmental Necessity*, 22 J. Soc. ISSUES, Oct. 1966, at 75.

The belief that space is important to man's social and psychological growth and development was emphasized by one investigator who summarized some of the problems in planning human environments. He described the life style of Glenn, a boy who lived in the slum. He described in detail how urban planners fail to realize the meaning of the slum environment to those who live there. Planners (and others) cannot understand why these people do not change their attitudes and life styles when they are given more adequate living facilities. He concludes: "Glenn and the nameless multitude like him make a powerful case for psycho-social values transcending all other considerations in the planning of urban space and its physical environment." Duhl, *The Human Measure: Man and Family in Megalopolis*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 135-36 (L. Wingo ed. 1963) (emphasis added).

46. R. AUDREY, *AFRICAN GENESIS* (1961).

searcher on man's perception and use of space concludes that man, like the lower animals, has a basic need for territory.<sup>47</sup>

An interesting comparison of the effects of crowding on man and the lower animals has been made and points out that studies of density among the lower animals may not be applicable to man because of the ability of the latter to adjust his environment.<sup>48</sup> There may be, however, some situations in which man may not be able to adapt to density, for example farming, hunting and fishing. Until there is further systematic research, it is "futile to argue that high density is always undesirable" for man.<sup>49</sup>

People differ in their tolerance for crowding. These differences may be due to experience or social training, but there may also be a biological basis for them.<sup>50</sup> Some types of overcrowding may be as harmful for man as for lower animals.<sup>51</sup> The effects of crowding have been analogized to those of cancer and smoking; the cumulative effects are not realized until the major damage has been done.<sup>52</sup>

47. Hall, *supra* note 36. He concludes that "space needs may be as basic as the need for food." *Id.* at 421. Hall further notes the cultural differences in man's need for space: Each man has around him an invisible series of space bubbles that expand and contract, depending upon his emotional state, his culture, his activities, and his status in the social system. People of different ethnic origins need different kinds of spaces, for there are those who like to touch and those who do not. There are those who want to be auditorially involved with everybody else (like the Italians), and those who depend upon architecture to screen them from the rest of the world (like the Germans).

*Id.*

48. H. GANS, *supra* note 10, at 9.

49. *Id.*

50. Miller, *Some Psychological Perspectives on the Year 2000*, in *TOWARD THE YEAR 2000: WORK IN PROGRESS* 253 (H. Perloff ed. 1967).

51. As one author has said:

Room overcrowding which forces even people from sociable cultures to live so closely together that they cannot avoid each other when their cultural norms demand privacy—for example, during sexual intercourse—is likely to have detrimental consequences. Similarly, structural overcrowding that leads to a breakdown of basic utilities such as plumbing facilities is undesirable for all people, regardless of their cultural norms for privacy and sociability.

H. GANS, *supra* note 10, at 9.

52. E. HALL, *THE HIDDEN DIMENSION* 161 (1966). Only one study isolates the variable of overcrowding from other variables and measures its effect on human behavior. That has been summarized by Hall as follows:

They produced some of the first statistical data on the consequences of crowding in urban housing . . . [They] collected measurable data on every conceivable aspect of the family life of the French worker. At first they recorded and computed crowding in terms of the number of residents per dwelling unit. This index revealed very little and the Chombart de Lauwes then decided to use a new index to establish crowding—the number of square meters per person per unit. The results of this index were startling: when the space available was below eight to

(i) *Increased Anonymity Among Humans.*—One might assume, on the basis of sociological findings, that anonymity is dysfunctional for humans. For example, the rates of suicide vary with increased anonymity,<sup>53</sup> too much anonymity leading to social isolation and possibly resulting in social pathology.<sup>54</sup> But it is important to look at anonymity in context. Some people obviously feel cramped by the constant surveillance one experiences in a rural area or in a dense urban neighborhood. In the densest of planned communities most people do not want to spend more time with their neighbors, and the “relative anonymity typifying the densest neighborhoods is apparently a desirable aspect of these settings.”<sup>55</sup> Anonymity can thus be a positive or a negative factor, depending upon the degree to which it exists and the socioeconomic background and the attitude of those who experience the phenomenon.

(ii) *Decreased Interaction Within the Nuclear Family.*—After citing the evidence of several empirical studies, one writer concludes that “low densities and segregation of land uses support a life style involving an emphasis on the activities of the nuclear family,”<sup>56</sup> and that “[w]hile living away from large-scale land uses and in low densities enables some roles to be played in families, . . . it also provides the kind of isolation that encourages a man to focus on his family.”<sup>57</sup> At least one writer believes this result to be harmful to the inner city:

It connotes a general aura of low keyed pleasure and aimlessness. Nothing great is being achieved when family men, in splendid isola-

ten square meters per person, social and physical pathologies doubled! Illness, crime, and crowding were definitely linked.

*Id.*

53. E. DURKHEIM, *SUICIDE: A STUDY IN SOCIOLOGY* (1951).

54. Lincoln Daniels of the United States Children's Bureau “believes city-type living in growing metropolitan areas imposes an anonymity and impersonality which undermines family and neighborhood control.” E. HIGBEE, *supra* note 43, at 11. On the other hand, anonymity is an escape for some people. People who live in large cities, such as New York, find “peace and quiet” only on the trains and subways—for example, the man whose wife nags him at home and workers at the office. Thus, for some, the crowded conditions and anonymity of the city transportation system provide a release from their normal lives at home and work. *Id.* This type of density, which affords desired anonymity, however, should not be confused with density in living conditions, which might not lead to the same result.

55. J. LANSING, R. MARANS & R. ZEHNER, *PLANNED RESIDENTIAL ENVIRONMENTS* 111 (1970).

56. W. MICHELSON, *MAN AND HIS URBAN ENVIRONMENT: A SOCIOLOGICAL APPROACH* 87 (1970). “An emphasis on the nuclear family and its joint activities is most congruent with the access of people to each other and to various activities which are not provided by the typical housing, open space, and land use patterns of the suburbs.” *Id.* at 92. David Riesman agrees. See Riesman, *The Suburban Sadness*, in *THE SUBURBAN COMMUNITY* 375 (W. Dobriner ed. 1958).

57. W. MICHELSON, *supra* note 56, at 82.



tion, devote their time to their family roles. By opting for this life style, they reject participation in public affairs in the central city. Those still residing in the city are less likely to have the educational and social skills to provide sound leadership where it's most needed. In effect, they have put emphasis on one role over another, with what Riesman believes are deleterious results for the inner city.<sup>58</sup>

In contrast, it has been argued that we need to create more situations that will bring parents and children together for purposes of recreation.<sup>59</sup> Outdoor activities often strengthen family solidarity. People move to the suburbs for various reasons, one of which is to have the "opportunity to garden and to enjoy the immediate outdoors . . . . Patio cookouts and the like strengthen family solidarity and cohesion."<sup>60</sup> Such opportunities are, of course, limited or even nonexistent in the city. For this reason people may move to the suburbs in search of the good life for their families. Increased densities, absent specific provisions to counteract the problem, may thus lead to decreased interaction with the nuclear family which might lead to increased social pathology.

(iii) *Increased Social Pathology Among Humans.*—"[S]ome men have considered cities as centers of evil and sought to destroy this symbol."<sup>61</sup> Very early in our nation's history there was concern with the potentially harmful effects of cities in this country.<sup>62</sup>

58. *Id.*

59. L. MUMFORD, *THE URBAN PROSPECT* 77 (1956).

60. W. DOBRINER, *CLASS IN SUBURBIA* 65 (1963).

61. R. WEAVER, *THE URBAN COMPLEX: HUMAN VALUES IN URBAN LIFE* 26 (1960).

62. Thomas Jefferson, in a letter to Benjamin Rush dated September 23, 1800, stated: When great evils happen I am in the habit of looking out for what good may arise from them as consolations to us, and Providence has in fact so established the order of things, as that most evils are the means of producing some good. The yellow fever will discourage the growth of great cities in our nation, and I view great cities as pestilential to the morals, the health and the liberties of man. True, they nourish some of the elegant arts, but the useful ones can thrive elsewhere, and less perfection in the others, with more health, virtue and freedom, would be my choice. On October 6, 1800, Benjamin Rush replied:

I agree with you in your opinion of cities. Cowper the poet very happily expresses our ideas of them compared with the country. "God made the country—man made cities." I consider them in the same light that I do abscesses on the human body, viz., as reservoirs of all the impurities of a community.

C. GLAAB, *THE AMERICAN CITY: A DOCUMENTARY HISTORY* 52-53 (1963).

The living together and working together of individuals who have no sentimental and emotional ties foster a spirit of competition, aggrandizement, and mutual exploitation. . . . Frequent close physical contact, coupled with great social distance, accentuates the reserve of unattached individuals toward one another and, unless compensated by other opportunities for response, gives rise to loneliness. The necessary frequent movement of great numbers of individuals in a congested habitat causes friction and irritation. Nervous tensions which derive

Increased density among humans may lead to increased anonymity or increased social isolation, although one might assume that density would create the opposite of isolation. In a classic sociological study,<sup>63</sup> support was found for the hypothesis that certain types of mental disorders are more prevalent in areas of high human density. Dense living, as found in cities, promotes "physical proximity and social distance"—social isolation that results in mental illness.<sup>64</sup>

It has thus been found through empirical research that rates of

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from such personal frustrations are increased by the rapid tempo and the complicated technology under which life in dense areas must be lived.

Wirth, *Urbanism as a Way of Life*, in LOUIS WIRTH ON CITIES AND SOCIAL LIFE 75 (A. Reiss ed. 1964).

63. R. FARIS & W. DUNHAM, *MENTAL DISORDERS IN URBAN AREAS* (1939). The empirical finding was that: "manic-depressive mental illness was related . . . to residence in rooming houses and apartment hotels, in middle class areas as well as poorer areas." W. MICHELSON, *supra* note 56, at 160. The researchers' theoretical explanation of the high correlations is that "communication is essential for normal mental development and that social isolation encourages breakdowns." R. THOMLINSON, *URBAN STRUCTURE: THE SOCIAL AND SPATIAL CHARACTER OF CITIES* 11 (1969). Twenty-five years after that study the hypothesis was supported by the data of Jaco's study "in his analysis of census tracts of residences of 668 mental patients in Austin, Texas; thirteen of Jaco's eighteen sub-hypotheses supported the social-isolation thesis." *Id.* & n.9.

64. W. MICHELSON, *supra* note 56, at 160. In a study of the wives and children of British armed service personnel in Germany, Fanning compared the health of those subjects who lived in self-contained houses with that of those who lived in three- and four-story apartments. *Id.* at 161. He found higher rates of psychoneurosis and respiratory infections (as well as other physical problems, but the differences were greater for those two) among those who lived in the apartments. Furthermore, there was a direct relationship between the rates of psychoneurosis and the height of the apartment building; the higher the building, the higher the rate. Fanning's interpretation of these findings lends support to those who argue that density creates social pathology in humans. The culprits were the "cramped space and greater isolation of women in apartments removed from the ground." *Id.* Those women who lived higher up had less opportunity to interact with neighbors because of their distance from outdoor spaces where such interaction often occurs. Fanning found support for this interpretation in the data which indicated excellent mental health among those who lived in high apartments but who did not have small children and who were thus able to leave their homes more frequently. *Id.* at 161-62. Michelson concluded, on the basis of this and other studies, that "[l]ack of ability to meet people in a space where contact can become meaningful (such as can now be found in certain types of apartment buildings) is related to an increased incidence of reported medical problems, possibly reflecting induced introversion." *Id.* at 167. In an empirical study of Toronto suburban housewives, Michelson found that the women who had a clearly outlined place of their own where they could meet others without the need for an excuse to stay had the most local friends and were satisfied with their situation. That is, women with open space defined as their own (even if not owned as "property") knew significantly more people than did those women without it, and they were far less likely to want to move. Women who predominantly met neighbors in the no-man's land of an interior hallway may have been closer to them for contact, but the auspices for contact made that situation quite undesirable to them.

*Id.* at 162. See also Wirth, *supra* note 62.

certain types of mental illnesses are higher in areas of dense population.<sup>65</sup> But there is lack of agreement concerning what causes these rates.<sup>66</sup> Since all areas of dense human populations do not have high rates of mental illness, it is obvious that density per se is not the cause.

The situation can be described, but the causal relationship is not at all clear. With regard specifically to social pathologies, it has been argued that the problems are not caused by physical density, but the high rates in dense areas are explained by the fact that "people with pathologies seek out particular residential quarters so that their pathologies might be maintained."<sup>67</sup>

Mental illness is not the only form of social pathology that has been associated with the density of the inner city. Numerous ecological studies have been concerned with the rates of crime and juvenile delinquency.<sup>68</sup> Likewise, these studies have been concerned with one further dimension of mental and social health relating to the environ-

65. See A. HOLLINGSHEAD & F. REDLICH, *SOCIAL CLASS AND MENTAL ILLNESS* (1958); L. SROLE, *MENTAL HEALTH IN THE METROPOLIS* (1962).

66. As Michelson has said:

Even today . . . studies report that people with mental and physical ailments are concentrated in areas of high density. But is there *meaning* in this relationship? Or is this relationship instead a result of the clustering in areas left to them by others and which just happen to have high densities of those most likely to experience pathological conditions? Is this finding true for all societies?

W. MICHELSON, *supra* note 56, at 152-53.

67. *Id.* at 160, referring to W. FIREY, *LAND USE IN CENTRAL BOSTON* ch. 8 (1947). Michelson supports this view in the conclusion he draws after a review of Loring's studies of family disorganization in Boston. Loring found higher rates of family disorganization in the more densely populated areas, but concluded that "the densities resulted in pathological results *only* when the seeds of pathology had already been sown among his respondents." *Id.* at 157. Michelson then concluded that "[s]ome people are more likely to react pathologically, and high densities may aggravate the existing condition to bring it about. Densities are the straw that breaks the camel's back." *Id.* Or, as Loring said, "the over-density presented by usage of housing or neighborhood space may aggravate or accelerate, not cause or motivate, any tendency to disorganization in a personality or group." *Id.*, quoting Loring, *Housing and Social Organization*, 3 *SOC. PROBS.* 160, 167 (1956).

68. These studies came out of the "Chicago School" of sociology in the 1920's and the 1930's—many of them were originally doctoral dissertations. See, e.g., C. SHAW & H. MCKAY, *JUVENILE DELINQUENCY AND URBAN AREAS* (rev. ed. 1969); C. SHAW, *DELINQUENCY AREAS* (1929). Shaw and McKay found the rates of crime and delinquency to be highest in the "zone of transition"—where the rates of human density are highest in the city. Furthermore, the rates remained high over a period of years despite the change in the composition of the population. They concluded that the area caused the higher rates of crime and delinquency. Their conclusion has been challenged. Firey's argument might apply here too—the area "collects" but does not create the pathology—it is an "ecological wastebasket." With reference to crime and delinquency, one must also note the importance of differential law enforcement in areas of high density. See Lander, *An Ecological Analysis of Baltimore*, in *THE SOCIOLOGY OF CRIME AND DELINQUENCY* 188 (M. Wolfgang, L. Savitz & N. Johnston eds, 1962).

ment but not directly to density, the dimension of the meaning attached to site.<sup>69</sup>

(iv) *Decreased Open Space and Privacy for Man.*—Obvious results of increased human density are decreased open space and decreased privacy. In his discussion of man's need for open space, one author has suggested that the space should be flexible and open ended.

For his satisfaction and growth an individual needs opportunities to engage in active interchange with his environment: to use it, change it, organize it, even destroy it. His physical surroundings should be accessible and open-ended, challenging, wayward, responsive to effort. Individual action is a road to personal growth; cooperative action leads to satisfying interpersonal relations. These require a plastic physical setting, with opportunities for seclusion and for risk, and with a degree of ambiguity and waste.<sup>70</sup>

Another author has suggested that open space is not enough; space must be functional for sociability.<sup>71</sup> Man's greatest need for this open space may be near his home.<sup>72</sup> This concept of the importance of space

69. Some studies, such as Gans' study of the West Enders of Boston, suggest that the site has a significant meaning to the individuals who live there. H. GANS, *THE URBAN VILLAGERS* (1962). Gutman notes that "these studies fail to reveal whether the devotion to 'place,' the 'need for roots,' and the 'sense of belonging' to a particular community are essential conditions for personality integration." Gutman, *Site Planning and Social Behavior*, 22 J. SOC. ISSUES, Oct. 1966, at 112. Although some argue in the affirmative, Gutman cites two authorities who argue that if these needs do exist, they can be satisfied by modern technology. *Id.*, citing Webber, *Order in Diversity: Community Without Propinquity*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 23 (L. Wingo ed. 1963); R. MEIR, *A COMMUNICATIONS THEORY OF URBAN GROWTH* (1962).

70. Lynch, *The City as Environment*, in *CITIES* 194 (Scientific American ed. 1966).

71. "[W]e have learned that open spaces have also a social function to perform that the mere demand for a verdant refuge too often overlooks." L. MUMFORD, *supra* note 59, at 80. Mumford also wrote that

our architects and planners now tend to sacrifice sociability and concentration to mere openness. In the effort to achieve roominess they have forgotten how, in urban terms, to create rooms, that is, public enclosures adapted to particular urban functions. In the neighborhood, if anywhere, it is necessary to recover the sense of intimacy and innerness that has been disrupted by the increased scale of the city and the speed of transportation.

*Id.* at 77. Mumford was criticizing the attitude of measuring the value of open space by the amount which existed. "[O]pen spaces came to be treated as if their value was directly proportional to their area—without too much regard for their accessibility, their frequency of use, or their effect in altering the texture of urban life." *Id.* at 80. He emphasized the need for functional space as opposed merely to abstract open space. Diversity is important. "[A] variety of uses—and therefore a variety of esthetic forms—is the mark of skillful planning and expressive design." *Id.* at 89.

72. "The open space immediately associated with homes and work-places is experienced more than all other open space. This is open space in microcosm. It literally 'hits us where we live,' day in and day out; it is more a part of us than we are of it." Tankel,

arrangement is extremely important, for too often we have made open space available (for example, the large back yard of a public housing building) only to wonder why it was not appreciated and used by the residents.

Another important concept of open space is that it should have limits and boundaries.<sup>73</sup> This places a great responsibility on city plan-

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*The Importance of Open Space in the Urban Pattern*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 62 (L. Wingo ed. 1963). The author referred to open space near work and home as open space "at the scale of the street." In emphasizing the importance of this space he noted that the "significance of open space is not its quantity but how it is arranged in relation to development," thus agreeing with the earlier statement by Mumford. *Id.* at 69.

73. "Socially speaking, too much open space may prove a burden rather than a blessing. It is the quality of the open space—its charm and its accessibility—that counts for more than gross quantity." L. MUMFORD, *supra* note 59, at 89.

The negative effects of too much open space were observed in a study of men who lived in Antarctica in close quarters for a year. They had plenty of open space and it was feared that "isolation at such a remote and forbidding station would be the chief psychological hazard." E. HIGBEE, *supra* note 43, at 12.

The Chief of the Neuropsychiatric Service in Philadelphia's Naval Hospital reported to the AMA that "it was human beings that got on men's nerves rather than the physical environment. . . . [M]en living in close quarters for a year realize that they must control feelings of aggression and mutual hostility. The result at Little America was inhibition, tension, and frequent pains in the head." *Id.* The author from whom the record of this report is taken had also noted that some people find "privacy" only on the subways. See note 54 *supra*. He concluded that the importance of open space is its quality, not its quantity. "Freedom to move away from irritations even if it is by a commuter's coach seems to be a prerequisite." E. HIGBEE, *supra* note 43, at 12.

Clawson has also emphasized the importance of boundaries to space. "Space, to be meaningful at the level of personal experience, must be bounded, it must not stretch indefinitely." Clawson, *Open (Uncovered) Space as a New Urban Resource*, in *THE QUALITY OF THE URBAN ENVIRONMENT* 139 (H. Perloff ed. 1969).

This discussion of the need for boundaries to open space and the need for limits on space can perhaps be better understood by distinguishing between perceptual distance and actual distance:

Perceptual distance implies the degree of proximity between two places according to whether the distance between them is symbolically conducive to being traversed; the doorway around the corner from yours may be closest in physical distance, but it is not the closest in perceptual distance if you never see it or have no reason to go near it. Accessibility describes the distance as implied by the ease (or lack of costs) with which a particular distance can be traversed.

Michelson, *An Empirical Analysis of Urban Environmental Preferences*, in *INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT* 503-04 (L. Bourne ed. 1971).

The factor of perceptual distance, according to Clawson, is crucial in one's concept of crowding. He speaks particularly of downtown areas which contain far too much for the average individual to comprehend.

One element common to most sensations of crowding . . . is the existence of a larger number and/or a wider range of sensations, primarily ocular, than the recipient is prepared to absorb. More people or more objects force themselves upon his attention—or at least are not rejected by him as irrelevant—than his perceptive ability is able to cope with.

Clawson, *supra*, at 153. Clawson applies the same theory to sound and gives the example

ners to discover how much open space people desire in their living accommodations and, as our world grows more crowded, to discover ways in which density can be made attractive to more people.

(v) *Preferences for Open Space*.—Few studies have been conducted on residents' preferences for open space. But a few have found that certain types of people prefer living in density.<sup>74</sup> These people thought the open space would provide no opportunity for excitement and play.<sup>75</sup> The immediate neighborhood was more important to these residents than the physical conditions of their living quarters and for them density was a positive factor.<sup>76</sup>

of the teenager who studies with the record player blaring loud music. Although it is incomprehensible to most adults that studying could occur under these circumstances (and for many people it cannot), the teenager who succeeds has limited his perceptual hearing.

Perceptual density is perhaps the key to the arguments that density per se is not dysfunctional to human beings. Michelson has argued that we might be able to live comfortably in densities much greater than any which now exist if the existing space is arranged properly: "It is not the number of people per acre but rather the nature of separation of these people from each other and from nonresidential land uses that comprises the physical agent of health or pathology." W. MICHELSON, *supra* note 56, at 157. The key to successful concentration of large numbers of people is "superior arrangement of that space." E. HIGBEE, *supra* note 43, at 47. Later in his book the author stated that "[s]pace in itself is an asset only in proportion to the skill with which it is used." *Id.* at 63.

Such arguments have caused Clawson to propose that "[c]rowding is primarily a psychological phenomenon, only loosely related to the physical situation on the land or water. Daniel Boone is supposed to have felt crowded when he could see the smoke of a neighbor's cabin; the Forest Service has said that in a wilderness area one should not see more than two other parties daily . . ." Clawson, *supra*, at 152.

74. Such studies are usually of people in low income areas who prefer their physically inadequate and dense living situation to the changes which they are forced to make after urban renewal. Michelson reviews three of these studies and concludes that the residents preferred high density living. H. GANS, *THE URBAN VILLAGERS* (1962); P. MARRIS, *FAMILY AND SOCIAL CHANGE IN AN AFRICAN CITY* (1962); M. YOUNG & P. WILLMOTT, *FAMILY AND KINSHIP IN EAST LONDON* (rev. ed. 1962). By far the most famous of those studies is Gans' *The Urban Villagers*. Gans studies the West Enders of Boston. The area was characterized by physically rundown housing, mainly five-story walk-up apartments which had no front yards and very small back yards. But the people interacted frequently; members of families lived close to one another and family life was very important to these Italians. Gans gave the example of some young West Enders who were taken to Cape Cod and their reaction might be described as: "Who would want to live here?" H. GANS, *supra*, at 22-23.

75. H. GANS, *supra* note 74, at 22-23. The West Enders considered the newer suburbs to be "too quiet for their tastes, lonely—that is, without street life—and occupied by people concerned only with trying to appear better than they are." *Id.* at 22.

76. A cultural anthropologist, for example, reports of cultural reactions to density. E. HALL, *THE HIDDEN DIMENSION* (1966). He concludes, "[p]robably there is nothing pathological in crowding per se that produces the symptoms that we have seen. Crowding, however, disrupts important social functions and so leads to disorganization and ultimately to population collapse or large-scale die-off." *Id.* at 29. He later points out the following:

The animal studies also teach us that crowding per se is neither good nor bad, but rather that overstimulation and disruptions of social relationships as a con-

2. *Optimum Interpersonal Relations.*—The neighborhood is the key, from a sociological point of view, to obtaining optimum interpersonal relations in man's living accommodations.

a. *Concept of the "Neighborhood Unit."*—The idea of a neighborhood unit was developed in the United States and then spread to many parts of the world.<sup>77</sup> The idea was obviously a reaction to the fears of what the evil city was doing to man, and it appealed to social workers, moralists, poets, engineers and architects, "large-scale real estate developers seeking to protect their investments" and "adherents of the Garden City Movement."<sup>78</sup> The designers of Radburn attempted to include in it the already developed concept of a neighborhood unit "in

sequence of overlapping personal distances lead to population collapse. Proper screening can reduce both the disruption and the overstimulation, and permits much higher concentrations of populations. Screening is what we get from rooms, apartments, and buildings in cities. Such screening works until several individuals are crowded into one room; then a drastic change occurs. The walls no longer shield and protect, but instead press inward on the inhabitants.

*Id.* at 175.

77. Clarence A. Perry is credited with the first public use of the concept when he delivered a paper before a joint meeting of the American Sociological Society and the National Community Center Association in 1923. He also gets credit for the first mention of the concept in print—in a monograph which he published in 1929. He was inspired by the work of Ebenezer Howard who "proposed the creation of Garden Cities consisting of 30,000 people and subdivided into wards of 5,000 people representing a cross section of the community in each. These 'wards' were to have their own primary schools, local governments, and radial road boundaries." S. KELLER, *THE URBAN NEIGHBORHOOD: A SOCIOLOGICAL PERSPECTIVE* 177 (1968). The definition of a neighborhood unit and its specifications were given by Perry and summarized by Keller:

In essence, this concept refers to a delimited area and population sharing basic facilities and services that are conveniently accessible, on foot, to the individual households. Perry specified the size, boundaries, and street system as among the six basic elements of such a unit and was actually far less dogmatic in his initial proposals than many who followed him. . . .

Specifically the neighborhood unit was to do the following: (1) introduce a principle of physical order into the chaotic fragmented urban aggregate; (2) reintroduce local face-to-face types of contacts into the anonymous urban society, thereby helping to regain some sense of community; (3) encourage the formation of local loyalties and attachments and thereby offset the impact of extensive social and residential mobility; (4) stimulate feelings of identity, security, stability, and rootedness in a world threatening such feelings on all sides; and (5) provide a local training ground for the development of larger loyalties to city and nation.

*Id.* at 126 (footnote omitted).

78. *Id.* at 125. Mumford has analyzed Perry's contributions to the reorganization of the modern city by noting that Perry attempted to describe the ideal unit that would be a fully equipped neighborhood. He tried to discover how many people would be needed to support an elementary school, a church and other social institutions, and a shopping center based on serving the daily, domestic needs of the residents. Perry's "neighborhood unit" would be the modern equivalent of the medieval quarter or parish, and Perry sought to show how this could be accomplished by deliberate design. L. MUMFORD, *supra* note 59, at 66-67.

which the playgrounds and open spaces and small meeting halls were treated as an integral part of the housing development; and in Radburn they carried this mode of planning . . . into their designs for the whole community."<sup>79</sup> The concept of the neighborhood unit has been praised<sup>80</sup> and criticized,<sup>81</sup> but it remains an important tool in obtaining optimum interpersonal relationships.

*b. Importance of the Neighborhood.*—The importance of the concept of the neighborhood unit may be declining; some studies indicate that neighboring is less important to people today than it was in the past.<sup>82</sup> Social change has reduced the need for neighboring and changed

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79. L. MUMFORD, *supra* note 59, at 67. Radburn has been described by Mumford as follows:

The main traffic roads of the town went around, not through, the units: the movement of pedestrians was mainly along a spinal green that formed the inner core of the town, and by its very constitution, furthered face-to-face acquaintance; at the center of each neighborhood was an elementary school, with its recreation field and its swimming pool; and the shops and services were gathered in a shopping center, with a parking place for cars, instead of being dispersed along a traffic avenue. The population of the neighborhood unit was calculated in terms of the number of families needed to support an elementary school. . . . As with the city itself, the main thing to recognize in neighborhood units is that there is an upper limit of growth and extension; and that, to define the unit and keep it in form, there must be both a civic nucleus to draw people together and an outer boundary to give them the sense of belonging together.

*Id.* at 67-68.

80. Mumford thinks that by conscious effort and design neighborhoods can (and certainly should) become an integral part of the city. He advocates carrying further the movement started by Perry, embodied in Radburn, and carried out in many of the British New Towns. "Has not the time come for a much more comprehensive canvass of the social functions of the neighborhood, for a more subtle and sympathetic interpretation of the needs of urban families at every stage in the cycle of human growth, and a more adventurous exploration of alternative solutions?" *Id.* at 77-78.

81. In the first place, Perry proposed the ideal size of 5,000 which many people think is too small today to support the type of facilities that he expected the unit to contain. S. KELLER, *supra* note 77, at 130. Secondly, he placed too much emphasis on young couples with small children—the nucleus of the unit was to be the elementary school—and with little or no provisions for older couples or young couples without children. *Id.* at 131. Thirdly, such an arrangement "deprives people of some notable advantages of urban life." Keller, who advanced that objection, pointed out that some people do not like the small town atmosphere of a cohesive neighborhood unit. They prefer to use the entire city, even if that means traveling long distances for social life or work. Too much emphasis was placed on the belief that the neighborhood units would be cohesive, promoting primary group relationships. *Id.* at 132.

82. Keller emphasizes the importance of distinguishing neighbor, neighboring, and neighborhood. She notes that most studies do not make a distinction and thus it is impossible to compare the data of such studies. She proposes the following distinctions between the terms.

There is, first, the neighbor as a special role implying a particular kind of social attitude toward others to be distinguished from the role of friend and of relative with which it may at times merge, as when relatives may be living next door or when neighbors become friends. Second, there are various activities associated with



the situation from "a neighboring of *place* to neighboring of *taste*."<sup>83</sup> This change may characterize mainly the middle and upper classes. For working class people, neighboring "is a compound of necessity, isolation, and relative deprivation, which is as much a cry for help as an expression of mutual friendliness and goodwill."<sup>84</sup>

In addition to the variable of social class in explaining declining neighboring, the variable of location within the city is important. In an empirical study of three samples from the New York City area, it was found that "neighboring gradually increases with distance from the city center and may be distributed in the gradient or zonal fashion made so familiar by the ecologists' work."<sup>85</sup> Another author points out that "several sociological studies have shown that suburbanites are less inclined than central-city residents to join formal associations but are appreciably more inclined toward local neighboring."<sup>86</sup> These findings suggest that neighboring is more prevalent in the working class than in the middle and upper classes and that suburbanites neighbor more than urbanites. This does not indicate, however, that the neighborhood is not a crucial factor in choice of home.<sup>87</sup> Even though neighboring

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this role ranging from highly formalized and regular neighborly rituals to sporadic, informal, and casual contacts. Third, there is the area itself—the neighborhood—where neighbors reside and in which neighboring takes place. This may be a clearly demarcated spatial unit with definite boundaries and long established traditions or fluid, vaguely defined subpart of a town or city whose boundaries are only vaguely apparent and differently perceived by its inhabitants.

S. KELLER, *supra* note 77, at 12.

The sociologist Foley conducted a study of neighborhoods in a middle class district of Rochester, New York. D. Foley, *Neighbors or Urbanites?*, 1952 (unpublished manuscript in the Department of Sociology, University of Rochester). Most of his 446 persons had spent most of their lives in cities. After examining their friendship patterns and neighboring habits, he concluded that "people just don't neighbor as they used to." Neighboring seemed to be less important than it had in the past. The contacts people did have with neighbors were usually superficial and "seldom ran deep." N. GIST & S. FAVA, *URBAN SOCIETY* 407 (5th ed. 1964). After citing Foley's study, Thomlinson, in a 1969 publication, said, "Other studies of residential subareas have also concluded that intimate association within city blocks has decreased considerably—so much that some sociologists challenge the utility today of the traditional concept of the neighborhood." R. THOMLINSON, *URBAN STRUCTURE: THE SOCIAL AND SPATIAL CHARACTER OF CITIES* 185-86 (1969).

Keller, after reviewing numerous studies of neighboring, also concluded that neighboring is less important to people today. She suggests that the need for neighboring decreases as people become more self sufficient. "Fewer crises, more alternatives for dealing with them, increasing individuality and selectivity, and more mobility and fluidity, all make neighboring less compulsory and more variable." S. KELLER, *supra* note 77, at 118.

83. S. KELLER, *supra* note 77, at 61.

84. *Id.* at 52.

85. Fava, *Contrasts in Neighboring: New York City and a Suburban County*, in *THE SUBURBAN COMMUNITY* 126 (W. Dobriner ed. 1958).

86. R. THOMLINSON, *supra* note 82, at 190.

87. See note 82 *supra*, for a distinction between neighboring and neighborhood.

might have declined, the quality of the neighborhood appears to continue as an important factor in choosing where one wants to live.

*c. Measurement of Neighborhood Satisfaction.*—Neighborhood satisfaction is difficult to measure. But attempts have been made and the data indicate some of the characteristics that are associated with neighborhood satisfaction. One study in particular presents some interesting data.<sup>88</sup> The researcher asked the respondents which neighborhood they liked best—their own or any of three pictures that they were shown. Most preferred their own, saying it had just the amount they desired of these characteristics: friendliness, homeyness, quietness, greenery and cleanliness in descending order of importance.<sup>89</sup> This study also revealed that space, beauty and a good environment for the children were important for neighborhood satisfaction. The qualities of familiarity, quietness and friendliness were perceived by the respondents as already present in their neighborhoods. The author suggests that these desirable qualities “can grow up independently of the physical environment.”<sup>90</sup>

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Michelson, in a small empirical study, found that when respondents were asked to rank factors in housing which were most important to them, the largest percentage ranked neighborhood first. Michelson, *An Empirical Analysis of Urban Environmental Preferences*, in *INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT* 507 (L. Bourne ed. 1971). Support for this finding was found in an empirical study in North Carolina by Wilson who attempted to measure the importance of neighborhood to his respondents.

When forced to choose between “a very good neighborhood, but located so that it would be difficult for you to travel to other parts of town” and “a less desirable neighborhood, but located so that it would be very easy for you to travel to other parts of town,” the respondents were three to one in favor of the good neighborhood, at the expense of accessibility. Further verification of the importance of the neighborhood is indicated by a similar comparison in a forced choice between “a very good house in a less desirable neighborhood,” and “a less desirable house in a good neighborhood,” which resulted in an even higher proportion—six to one in favor of the neighborhood over the house.

Wilson, *Livability of the City: Attitudes and Urban Development*, in *URBAN GROWTH DYNAMICS IN A REGIONAL CLUSTER OF CITIES* 381 (F. Chapin & S. Weiss eds. 1962). Wilson also discovered that people are more able to articulate their feelings about the neighborhood than about the city as a whole and that it appears that the neighborhood is much more important to them and “therefore that the neighborhood environment may contribute more directly to livability than does the city viewed as a whole.” *Id.* at 382. He suggests that “it would seem that manipulation of environmental variables at the scale of the neighborhood rather than the city would be somewhat more productive in any effort to increase livability for most people.” *Id.* at 371.

Other studies of mobility have indicated that the reason people give most frequently for moving to the suburbs is to secure a better life for their children. This “reason” is probably another way of saying they desire a certain type of neighborhood. W. DOBRINER, *CLASS IN SUBURBIA* 64-65 (1963).

88. Wilson, *supra* note 87, at 385.

89. *Id.*

90. *Id.*

Based upon an empirical study of planned communities, another researcher concludes that the best single indicator of neighborhood satisfaction is whether a neighborhood is well kept and that the second most important factor is compatibility of neighborhood residents.<sup>91</sup> In addition, a person's conception of the friendliness of his neighbors has been found to correlate with neighborhood satisfaction.<sup>92</sup>

The importance of "friendly neighbors" in these studies of neighborhood satisfaction must be understood in context. Although many people are happier if they perceive their neighbors as friendly, most upper and middle class people also indicate a desire for privacy and reject too much neighboring. In a study of English towns,<sup>93</sup> for example, it was found that residents who lived in cul-de-sac arrangements were generally less satisfied with their housing than were residents who lived in houses in a longer straight line. The author attributed this difference to the lack of privacy caused by the arrangement of windows and doors of homes in the former. People are visible to neighbors every time they enter or leave the house. The author concludes that "[f]or normal daily activities, this is not such a hardship. But when people have unusual errands or trips taken at unusual times, they resent feeling that their movements are well known to their neighbors."<sup>94</sup>

In the study of planned environments, the author assumed that people would reach some point at which they felt they saw enough of their neighbors and would prefer to see them less in order to have some privacy. He asked his respondents directly whether they had seen too much of their neighbors and approximately one-half replied in the affirmative. He concludes: "The tabulations indicate that . . . the threshold may have been reached and that this does lead to a devaluation of the neighborhood setting."<sup>95</sup>

The same author reports the following in a separate study that he co-authored:

The regressions . . . suggest that *lower* dwelling unit density . . . is significantly associated with neighborhood satisfaction because it is usually related to greater privacy and less noise. This, together

91. See generally J. LANSING, R. MARANS & R. ZEHNER, *PLANNED RESIDENTIAL ENVIRONMENTS* (1970).

92. Lansing and Hendricks found that factor to be more important than the frequency of interaction as a predictor of neighborhood success. *Id.* at 101. But "knowing and interaction with one's neighbors is positively related to neighborhood satisfaction." *Id.* at 118.

93. Kuper, *Blueprint for Living Together*, in *LIVING IN TOWNS* 1-202 (L. Kuper ed. 1953). But see note 136 and accompanying text *infra*.

94. Kuper, *supra* note 93, at 179.

95. J. LANSING, R. MARANS & R. ZEHNER, *supra* note 91, at 128.

with their finding that compatible neighbors are more important than frequent neighborhood interaction for satisfaction, this suggests that site arrangements which preserve privacy by reducing density and increasing insulation from undesired intrusions are likely to be highly valued.<sup>96</sup>

One must be cautious in generalizing from this study, for it represents only a segment of the population. The authors did not include in their sample lower and working class people, and as noted in an earlier section, members of these classes often prefer living in dense situations. Another author, in discussing why people move to the outlying regions of the city, cited the demand for private space for some functions and particularly noted this as a value for the middle and upper class families.<sup>97</sup> Still another author, after reviewing studies of density preferences, concludes that "[p]eople with 'cosmopolitan' life styles desire more physical separation from neighbors and place less emphasis on proximity to facilities and services than do people whose interests are 'local.'"<sup>98</sup> He warns, however, that this and his other conclusions should not be considered final because of the paucity of data on the subject.

In the Greensboro, North Carolina study, respondents were given photographs of neighborhoods and asked to rank them according to desirability. Of the three photographs, one was consistently ranked least desirable in the sample. When respondents were asked the reason for this ranking, the most frequent response was "lack of privacy."<sup>99</sup> In a "game" that the author asked his respondents to "play," subjects were given a limited number of markers in which to choose various factors which they would want in their neighborhoods. Very few chose the most dense of the five choices of density (about forty families per acre); most chose four families per acre, but when allowed to "play the game" again (in part of the sample only) without markers and thus with unrestricted choices, "a substantial proportion selected a density even lower than their previous choice."<sup>100</sup> In contrast to the previous studies, this study's sample was representative of the low income groups of the city.<sup>101</sup>

In an empirical study of the distance people prefer to live from

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96. *Id.* at 101.

97. Wurster, *The Form and Structure of the Future Urban Complex*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 80-81 (L. Wingo ed. 1963).

98. W. MICHELSON, *MAN AND HIS URBAN ENVIRONMENT: A SOCIOLOGICAL APPROACH* 94 (1970).

99. Wilson, *supra* note 87, at 386.

100. *Id.* at 390.

101. *Id.* at 361.

others, it was found that the variable "which explains the most variance . . . is the distance people now live from their personal friends (other than relatives and formal neighbors). Those whose friends currently live relatively far away tend to choose greater separations from neighbors; those living close to friends want lesser separations."<sup>102</sup> This could explain why lower class people living in a dense environment and considering their friends to be those living close to them prefer to remain in such proximity to others.

But density might also be associated with "neighborhood satisfaction" for the upper and middle classes. In a study of people who had moved back to the city from the suburbs, it was found that many did so in pursuit of privacy and a more exciting social life based on shared interests, not propinquity. Such people had found the more spacious arrangements of dwellings in the suburbs to be less desirable than the dense city where anonymity offered the privacy they were seeking.<sup>103</sup>

Despite the paucity of data on neighboring and neighborhood satisfaction, we can at least analyze the independent variables that, on the basis of existing research, appear to be related to these dependent variables. One study found that family income, education and occupation do not have a significant relationship to neighborhood satisfaction, but that a significant relationship does exist between neighborhood satisfaction and the value of the home and concluded that "residents in more expensive housing are more satisfied with their neighborhood."<sup>104</sup> Another variable relevant to neighboring is time—that is, the length of residence. Physical proximity has been found to be important in initial contacts, but less important as length of residence increases.<sup>105</sup> Age is also an important variable in satisfaction with the neighborhood. More satisfaction is expressed by older than by younger residents.<sup>106</sup> Thus, it has been said that the older residents suffer most from urban renewal programs. Uprooting them from the ties of the

102. Michelson, *supra* note 87, at 506.

103. See generally THE EXPLODING METROPOLIS (Editors of *Fortune* eds. 1958).

104. J. LANSING, R. MARANS & R. ZEHNER, *supra* note 91, at 126. Once again, it must be remembered that this study did not include the lower or working classes.

105. Gans, *Planning and Social Life*, 27 J. AM. INSTITUTE PLANNERS 126 (1961); L. FESTINGER, S. SCHACHTER & K. BACK, SOCIAL PRESSURES IN INFORMAL GROUPS 157 (1950). Keller reports a "frantic period of neighboring" immediately after a move to counteract the trauma of the move, later a settling down period when middle-class people begin to join community organizations and the working-class "retreat to the home" and are more selective in their neighboring. She concludes, "Time . . . plays a crucial role in neighboring and must always be considered when evaluating a particular community." S. KELLER, *supra* note 77, at 72. Length of residence is a more important factor "during the early stages of residence at a site" than later. Gutman, *Site Planning and Social Behavior*, 22 J. Soc. ISSUES, Oct. 1966, at 111.

106. P. ROSSI, WHY FAMILIES MOVE 197, 198, 214 (1955).

neighborhood, such as the church, the store and their clubs (although not necessarily the residences) is often a traumatic experience for the aged.<sup>107</sup> In addition, stage in the life cycle is an important variable in an analysis of the effect of moving on human beings. Two researchers report that "neighborhood satisfaction . . . is . . . closely tied to the phase of a family's life cycle. Young couples with small children are most eager to move in search of more space."<sup>108</sup>

Privacy once again appears as an important variable in satisfaction with living accommodations. Noise is also an important factor. The following observations were made on the basis of a study of planned communities: "Results tend to be systematic and in the expected direction. Residents who hear their neighbors often or report having a 'noisy' neighborhood evaluate their neighborhoods least favorably while those in 'quiet' neighborhoods who 'almost never' hear their neighbors evaluate their neighborhood most favorably. Similarly, people with yard privacy are more likely to evaluate their neighborhood highly (57 percent) than those who lack such privacy (44 percent)."<sup>109</sup>

After reviewing numerous studies of neighboring, one author suggests another important variable—the availability of relatives. He concludes: "If people are totally taken up with relatives, they will not cultivate ties with friends or neighbors. Neighbors become important when relatives are not available or where people lack the skills or opportunities to make friends."<sup>110</sup>

One of the most important variables relating to the extent of neighboring and neighborhood satisfaction appears to be socioeconomic class.<sup>111</sup> This social class differential in the extent and importance of neighboring is characteristic of other countries as well as of the United States.<sup>112</sup>

107. F. COLBORN, *THE NEIGHBORHOOD AND URBAN RENEWAL* 59 (1963).

108. S. KELLER, *supra* note 77, at 115, referring to C. VEREKER & J. MAYS, *URBAN REDEVELOPMENT AND SOCIAL CHANGE* 95, 108-09 (1961). Vereker and Mays measured satisfaction with neighborhood by whether or not a person wished to move.

109. J. LANSING, R. MARANS & R. ZEHNER, *supra* note 91, at 117-18.

110. S. KELLER, *supra* note 77, at 34.

111. One writer concludes:

There is agreement that middle class neighboring is more selective, personal, or intimate and more likely to involve next door neighbors. Moreover, in middle class settings families blend neighborly with social and recreational activities, and neighboring is thus more home-centered than is working class neighboring. The latter is a compound of necessity, isolation, and relative deprivation, which is as much a cry for help as an expression of mutual friendliness and goodwill.

....

Higher socioeconomic status tends to be associated with neighborhood satisfaction and a disinclination to move out of an area.

*Id.* at 53, 114.

112. R. THOMLINSON, *supra* note 82, at 188. See also E. BOTT, *FAMILY AND SOCIAL*

A study conducted in a middle-sized city reveals that "the higher the economic status of a local area the higher the degree of neighborhood intimacy and vice versa." The study attributes "the low degree of neighborhood intimacy in low income areas to the frequent change of residence of families living there."<sup>113</sup> At first glance this study would appear to contradict our earlier findings that lower class people neighbor more. But the investigators concluded that residential mobility is the crucial variable related to less neighboring, and in an area like the West End of Boston the population was relatively stable. Certainly, the factor of mobility should be considered in studies of neighboring.

One final factor associated with extent and type of neighboring is personal desire.<sup>114</sup> Personal desire, however, is intertwined with past experiences; thus, socialization and culture become the important variables for study.

3. *Optimum Living Conditions.*—Planning agencies should be interested in creating optimum living conditions for their constituencies. This includes amenities such as aesthetics, house type and site and noise level. Optimum living conditions would not be complete without consideration of space,<sup>115</sup> interpersonal relations<sup>116</sup> and conveniences,<sup>117</sup> which are topics of other sections of this article. This section, however, will be concerned mainly with physical amenities. What types of houses do people prefer? What site plan? What physical surroundings do they consider preferable?

Amenities have been defined as "those stimuli which lead to feelings of comfort, pleasure, or joy."<sup>118</sup> "Factors, such as smog, which can interfere with the reception of the amenity (or stimulus) or which affect the capability of the precipitant to give rise to the amenity," have been labeled disamenities.<sup>119</sup>

Human responses to environmental configurations vary widely. The tolerance that individuals have for smog, dirt, noise or other disamenities varies as does tolerance for those factors that lead to feelings of comfort, pleasure or joy. These variances in responses are due

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NETWORK (1957); R. WILSON, *DIFFICULT HOUSING ESTATES* (1963).

113. N. GIST & S. FAVA, *supra* note 82, at 408, referring to Smith, Form & Stone, *Local Intimacy in a Middle-sized City*, 60 AM. J. SOC. 276 (1954).

114. S. KELLER, *supra* note 77, at 118.

115. See p. 276 *supra*.

116. See p. 287 *supra*.

117. See p. 302 *infra*.

118. Atkisson & Robinson, *Amenity Resources for Urban Living*, in *THE QUALITY OF THE URBAN ENVIRONMENT* 183 (H. Perloff ed. 1969).

119. *Id.* at 184. Atkisson and Robinson developed an "amenity scale" by which they attempted to measure whether or not a situation or characteristic promoted "comfort, pleasure, or joy." *Id.* at 183. They argue that "the amenity value of any environmental configuration is determined by the human responses which it engenders." *Id.* at 185.

to differences in socialization and in cultural experiences such as religion, ethnic group, region or country.<sup>120</sup> Industries forced to compete for professional specialists and skilled labor have often located in areas considered to be rich with amenities.<sup>121</sup> Amenities are also influential in selection of a site for a home.<sup>122</sup>

Thus, because of the importance of amenities, planners must decide

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120.

Demand for amenities is related to both sociocultural and economic factors. The amenity demands of an individual at any income level are a function of his cultural experience, his social conditioning to environmental quality variables, and the attitudes and habits of other individuals within his life space.

*Id.* at 190.

The authors introduce another factor which is influential in determining one's demand for amenities.

We have called this influence the "acculturation factor," by which we mean to suggest that a growing fraction of our population is learning to appreciate particular amenities as a consequence of being exposed to them, perhaps for the first time. The rash of campers on our highways, the growing fleet of pleasure boats on our waterways, and the substantial sale of camping and hiking equipment is confirmation that this process is widely operative within our urban communities.

*Id.*

They also note that the "available literature suggests that the intensity and extensity of amenity responses within an urban population varies as a function of the sub-environment in which the response is measured." *Id.* at 194. As evidence they cite Wilson's study of Durham and Greensboro, North Carolina, realizing that this study might not be applicable to metropolitan areas. Wilson found that people place greater value on the amenities of their immediate neighborhood than of the entire community. *Id.*, referring to Wilson, *Livability of the City: Attitudes and Urban Development*, in *URBAN GROWTH DYNAMICS IN A REGIONAL CLUSTER OF CITIES* (F. Chapin & S. Weiss eds. 1962).

Unfortunately, the paper by Atkisson and Robinson was written only for the purpose of suggesting a way in which planners could place greater emphasis upon attempting to ascertain which amenities are important to the people for whom they are planning residential areas. Thus, the authors give no empirical data on such preferences. They do, however, refer to others who note examples of the importance of amenities to individuals. For example, it has been suggested that a key factor in human migrations is the "lure of amenities" with the migrations to Southern California cited as an illustration. Atkisson & Robinson, *supra* note 118, at 186, referring to Ullman, *Amenities as a Factor in Regional Growth*, 44 *GEOGRAPHICAL REV.* 119 (1954).

121. "The 'think-tank' developments at Santa Monica, the IBM facility near Nice, the proliferation of electronic plants near Orange County's beaches are all suggestive of this trend." Atkisson & Robinson, *supra* note 118, at 187.

122. Herbert and Stevens "measured residential amenities in terms of such factors as the general appearance of the neighborhood, open spaces, views, greenery, the condition of yards, and the appearance of housing. They have found these factors to be important variables in residential site decisions." *Id.* The importance of amenities has been summarized by William I. Slayton, Executive Vice President of the American Institute of Architects, who said, "the quality of urban living is not just the particular house in which one lives, but it is also the kind of amenities they are provided with relative ease of access within the metropolitan areas." *Hearings on the Quality of Urban Life Before the Ad Hoc Subcomm. on Urban Growth of the House Comm. on Banking and Commerce*, 91st Cong., 1st & 2d Sess., pt. 2, at 500 (1970).



what amenities people desire.<sup>123</sup> One study in particular gives the best example of an attempt to ascertain the amenities people desire in their neighborhoods. The researcher had his respondents play a "game" in which each was given \$3,000 to spend in selecting amenities. It is interesting to note the high priority given to "basics" such as police departments, fire departments, sewer systems and public water supplies. Extralarge front and back yards are more valued than large side yards; big shade trees in the yard rank above a private telephone line; street lights and concrete sidewalks are valued highly—such amenities are not always available in the outlying residential areas of a city.<sup>124</sup> Two

123. Wilson, *supra* note 120.

124. *Id.* Wilson also asked his respondents to respond to certain items in terms of how important the respondent considered them to be in making a town an ideal place to live. An interesting comparison of responses between the Durham and Greensboro samples is the higher ranking of physical amenities by the Durham sample. The first four ranks of the Durham sample were: good roads, convenient public transportation, good sidewalks and plenty of parks. The Greensboro respondents ranked good roads and sidewalks first, followed by: a town that persons in other communities look up to and hold good opinions of, the right kind of people in your town and a town where people attend to their own business. Wilson suggests that the difference between the two samples might be attributed to a change of wording. The Durham respondents were given the question with the word "city" as opposed to the word "town" in the Greensboro sample. The latter perhaps equated "town" with "neighborhood" and thus ranked qualities relating to interpersonal relations much higher than did the Durham sample. More specific information on desired physical amenities comes from the same study. Respondents were shown three photographs of different neighborhoods and asked to respond in terms of certain characteristics which the investigator mentioned. The respondent also rated his own neighborhood on the characteristics. The list below gives the characteristics, in decreasing order of ranking, as ranked by the Greensboro sample. Many of these characteristics are physical amenities: spaciousness, beauty, a character that is good for children, exclusiveness, a country-like character, closeness to nature, privacy, greenery, homeness, quietness, cleanliness, newness, friendliness, crowdedness and dirtiness. *Id.* at 384-85.

When the respondents were asked, in an open-ended question, what things they particularly *liked* about living in their cities, they mentioned people, jobs, schools and stores and shopping—no physical amenities. *Id.* at 377. When asked what they particularly *disliked*, the Durham sample listed streets first, but that was the only strictly physical amenity mentioned by either sample. *Id.*

In a study of 12,000 families in the unincorporated areas of Milwaukee County, Wisconsin, Richard Dewey investigated why people moved to the suburbs. Dewey, *Peripheral Expansion in Milwaukee County*, 54 AM. J. SOC. 118 (1948), *cited in* W. DOBRINER, *CLASS IN SUBURBIA* 64 (1963). Of the most frequently given reasons, only one related to physical amenities. The third-ranked reason, suburbs are cleaner, was listed by about sixteen percent of the respondents. *Id.* at 121.

The desire for improved living conditions was found to be an important factor in residents' decisions to move into the planned communities studied by Lansing. J. LANSING, R. MARANS, & R. ZEHNER, *PLANNED RESIDENTIAL ENVIRONMENTS* (1970). Lansing's study included ten planned communities, six of which were new communities, two of which were older communities, and two of which were inner city communities. He found that people who moved to the new town stressed "the plan, idea, or concept of the community or nearness to the country or outdoor recreation." *Id.* at 41. The terms "plan, idea, or concept of the community" suggest physical amenities as well as interpersonal relations.

factors should be remembered in this discussion of what people prefer in residential amenities. In the first place, when asked the question directly, most people will give a socially acceptable answer—for example, "We did it for the children."<sup>125</sup> A second factor to keep in mind in a discussion of physical amenities that people desire is that these preferences vary in terms of social characteristics.<sup>126</sup> Because of the differences in values of the social classes, it is understandable that the preferred amenities will differ.<sup>127</sup>

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"[R]esidential site preferences . . . [are] influenced by the amenity values of alternative sites. These researchers have measured residential amenities in terms of such factors as the general appearance of the neighborhood, open spaces, views, greenery, the condition of yards, and the appearance of housing." J. HERBERT & B. STEVENS, MODEL FOR THE DISTRIBUTION OF RESIDENTIAL ACTIVITY IN URBAN AREAS, cited in Atkisson & Robinson, *supra* note 118, at 187. See F. CHAPIN & S. WEISS, FACTORS INFLUENCING LAND DEVELOPMENT (1962).

125. W. DOBRINER, *supra* note 124, at 65. This reason is the one most frequently mentioned in studies of migration to the suburbs. Dobriner, after commenting that there are no intensive qualitative studies of suburban migration, has warned that the answers people give to a direct question of why they moved, may not be the real reason. They may be influenced by what the sociologist W. I. Thomas has labeled the "definition of the situation." *Id.* at 68.

The "reasons" men advance for their behavior are only verbalizations, the actor's need to explain his own course of action to himself, and there is not always a high correlation between the manner in which men perceive a social situation and the reality of that situation.

*Id.* For example, a family might move to the suburbs in order to get away from racial groups that were moving into the neighborhood. To give that reason, however, would be socially unacceptable; so they say they moved to find better schools for the children. Dobriner tested his hypothesis that people give socially acceptable answers by interviewing a few people who said they moved for "better schools" or "for the sake of the children." He then questioned them as to why they did not move to specific other areas which also had good schools (to Jews he would name an area with few Jews and to Protestants an area with many Jews, etc.), and respondents would then indicate that the real reason was a desire to be away from—or close to—certain racial or religious groups. Dobriner suggests that the "[f]light to the suburbs may be a polite assertion of the principle of white supremacy." *Id.* at 64.

126.

The threshold of amenity or disamenity experience may therefore be hypothesized to vary widely throughout a population, as may the intensity or significance of the experience. The process of socialization to which an individual has been exposed and the values of his family, his region, and his country can be viewed as factors important to the patterns of response he exhibits toward any environmental stimuli. Consequently, an understanding of these variations in human response patterns is a key aspect of urban amenity planning and management. Atkisson & Robinson, *supra* note 118, at 185-86.

127. Dobriner has indicated, in his study of Levittown, that the values of privacy, upward mobility, initiative and moderation are characteristic of the middle class and that they keep their homes in good condition even if they consider them to be temporary—on their road to upward mobility. The working class, however, "is less concerned with privacy or appearances. The people are more given to emotional expression and live for the moment rather than pursue the middle-class pattern of 'self-denial' for a more important but future goal." W. DOBRINER, *supra* note 124, at 106-07. From this we may

Two important and often little regarded amenities will be considered separately: aesthetics, and house type and site plan. It has been suggested that although we often consider aesthetics to be a "frill" compared to other problems of the city, "beauty and good design [are] very important for the quality of the life of the people who have to live in that environment."<sup>128</sup> Thus, disamenities relating to aesthetics may be a real source of urban unrest.<sup>129</sup>

Public housing has been criticized for many reasons, but one that is heard frequently today is that it has failed to provide for beauty and diversity in the environment. The National Commission on Urban Problems reported to the Congress and to the President of the United States that one of the weaknesses of public housing is "comparative neglect of the importance of design and beauty, which are elements in the good life along with space, light, and shelter."<sup>130</sup> The need for aesthetic planning is manifest.<sup>131</sup>

conclude that the desire for specific physical amenities will vary according to social class.

128. *Hearings Before the Ad Hoc Subcomm. on Urban Growth, supra* note 122, at 502.

129. Cohn, in his study of the importance of urban streets, assumed that "aesthetics are the real cause of the public dissatisfaction with the urban environment." S. Cohn, *Public Control of Urban Esthetics*, 1962, at 51 (unpublished thesis, University of Washington, Seattle).

That assumption would appear to be accurate in light of the reasons people give for moving to particular areas. Lansing, for example, in his study of ten planned communities, found that Reston, one of the two "highly planned new communities" in his sample, "was the most highly rated overall of all the communities. Reston residents often mention the planned nature of the community . . . various aspects of the physical environment, the surrounding trees, hills and lakes . . . and the adequacy of space and lack of congestion. . . ." J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 50.

Webber has noted that when companies that need specialists of certain professional groups select a location or move their plants, they select areas with pleasant natural settings. Webber, *Order in Diversity: Community Without Proximity*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 48 (L. Wingo ed. 1963). Mumford has advocated that "[i]n the cities of the future, ribbons of green must run through every quarter, forming a continuous web of garden and mall, widening at the edge of the city into protective greenbelts, so that landscape and garden will become an integral part of urban no less than rural life . . ." L. MUMFORD, *supra* note 59, at 91.

130. NATIONAL COMM'N ON URBAN PROBLEMS, *BUILDING THE AMERICAN CITY*, H.R. DOC. No. 34, 91st Cong., 1st Sess. 119 (1968).

131. As a result of the *Fortune* study of the city, Whyte concluded that the housing projects of the city are characterized by a "striking failure of aesthetics," and that "[t]hese vast, barracks-like superblocks are not designed for people who *like* cities, but for people who have no other choice . . . . The institutional approach is dominant, and unless the assumptions embalmed in it are re-examined the city is going to be turned into a gigantic bore." Whyte, *Are Cities Un-American?*, in *THE EXPLODING METROPOLIS* 25 (Editors of *Fortune* eds. 1957).

The need for diversity has been emphasized by Lynch. "A good environment is richly diverse: its parts have distinct, identifiable character; they are marked by visible differences that allow choice and sensuous exploration, and they give a sense of place and

An important question, however, is whether the physical amenities that people seem to desire can be provided in an increasingly crowded world. Physical amenities are obviously closely intertwined with the desire for space. If population growth continues, the real challenge for planners will be to design residential areas that provide for a maximum number of people with a maximum level of amenity satisfaction. It has been suggested that it is possible to have a "reasonable degree of amenity at considerably greater densities than exists in our cities today."<sup>132</sup>

The second specific area of physical amenities to consider is house type and site plan. Although these amenities are important, it should be remembered that they cannot be separated from the surrounding environment, particularly when considering the middle and upper classes: "The house that is adequate in itself ceases to be adequate for the middle-class family when dropped in the middle of a slum or otherwise unsuitable surroundings."<sup>133</sup>

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home." Lynch, *The City as Environment*, in *CITIES* 192 (Scientific American ed. 1966).

In his book, Higbee summarizes his concept of man's need for beauty:

The most respected of human attitudes do not develop or flourish amid ugliness. If children grow up spiritually undernourished, the society that they create in turn will be underprivileged and anemic. A concern for the qualities of landscape can scarcely be brushed off as idle sentimentality, for the really important thing is not what is done to the inanimate environment but what that environment can do to living people. If the human organism is constantly harrassed by tensions and stresses, or if the little part of the world it lives in is tawdry, disorganized, and cheap, it will surely be conditioned to react in a frantic, unbecoming manner. On the other hand, when things go well and the environment is both beautiful and functional, the citizen himself is likely to be more agreeable to others and more contented with his own existence.

E. HIGBEE, *supra* note 43, at 127.

132. Atkisson & Robinson, *supra* note 118, at 193. This could be possible because of the increased trend toward having two homes.

It is economically possible and based on present cultural tendencies, socially not improbable, that a pattern of living may evolve which entails living part-time in dense center cities, and part-time in country semi-wilds or even perhaps in houseboats on lakes or rivers.

*Id.*, referring to J. DYCKMAN, *THE IMPACT OF TECHNOLOGICAL CHANGE* (Philadelphia Housing Association No. 1, Feb. 1958). Such optimism may be unrealistic, however, for if population growth continues at its present rate the time will come when space will not allow a "second home" for many people.

133. NATIONAL COMM'N ON URBAN PROBLEMS, *supra* note 130, at 9 (1968). Louis Wirth has noted that, at least in the city, the house does not stand alone but is part of a community.

A house, even from the standpoint of the property values involved, is judged by the community in which it is located and the people who inhabit that community, by the schools, playgrounds, parks, community centers and public utilities to which the inhabitants have access, and by the incidence of social problems, such as delinquency and crime and community disorganization.

Wirth, *Housing as a Field of Sociological Research*, in *LOUIS WIRTH ON CITIES AND SOCIAL LIFE* 298 (A. Reiss ed. 1964).

The variable of social class must also be considered. Whereas social class has been a crucial variable in explaining differences in preferences in some areas, the evidence indicates that it is not significantly related to preference of housing type. The single-family dwelling is overwhelmingly preferred by all classes.<sup>134</sup> Obviously, personal preferences are restricted by one's ability to pay for the amenities desired, but "no significant differences in the *preferred* form of homes, neighborhoods, and cities have been shown related to social class differences."<sup>135</sup> Studies indicate that choice of house and site plan are very important in determining why people move.<sup>136</sup>

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134. Michelson, *An Empirical Analysis of Urban Environmental Preferences*, in INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT 507 (L. Bourne ed. 1971). In this study, which was a small sample, Michelson asked his respondents to design the "ideal neighborhood." All of the respondents indicated their preferences for a single-family dwelling. *Id.* at 508.

135. W. MICHELSON, *MAN AND HIS URBAN ENVIRONMENT: A SOCIOLOGICAL APPROACH* 130 (1970).

136. Boyce, in his study of Seattle, interviewed families leaving the "ghetto" to find out why they moved to other parts of the city. He studied housing moves for 3,000 residences between 1962 and 1967. He found that forty-two percent of the residents listed "dissatisfaction with house and/or old neighborhood" as the primary reason for their moves. Boyce, *Residential Mobility and Its Implications for Urban Spatial Change*, in INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT 339 (L. Bourne ed. 1971).

Lansing and his associates found that of the residents who moved to the six new suburban communities which they studied, a large percentage gave as their reasons the factor of house and lot over neighborhood or community. The residents in one of the communities, a moderately planned new community, "place unusual stress on the amount of house for the money." J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 40.

But they also found that this factor was not important to those residents who had moved to the in-town communities. They stressed nearness to work, shopping facilities, and downtown location as their reasons. *Id.* at 38.

Another preference in housing site plan discovered by Lansing and his associates was the "tendency for low density site plans and types of dwelling unit to be preferred to high density . . ." But these differences were not significant. *Id.* at 121. As for housing arrangement, "[m]ore people in single family cul-de-sac neighborhoods like their neighborhood than in a single family linear neighborhoods, even though density is slightly greater . . ." *Id.* at 122. *But see* pp. 277-88 *supra*. One reason listed for preference of the cul-de-sac is that such arrangements are quieter since there is less traffic. *Id.* at 116. It is important to remember, however, that this study represents responses of people from the upper and middle classes and not from the lower class.

Dissatisfaction with house and site plan is also connected with the variable of noise. In a study of reaction to noise, it was found that children and neighbors, combined with neighbor's pets, constitute the main noises of which residents complain; these noises are considered to be worse than traffic noise. BOLT, BERANEK & NEWMAN, INC., *NOISE ENVIRONMENT OF URBAN AND SUBURBAN AREAS* (1967). This study, however, was based on a very small sample and the authors gave no indication of how the sample was selected or how the areas were selected. It is thus doubtful whether the study has much validity. Lansing found that "[r]eporting a 'noisy' neighborhood and 'hearing neighbors' increases fairly regularly with density." J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 110.

Hearing the noise, however, may not be the main problem. Willis has suggested that

The main conclusion to be drawn from the available data concerning optimum living conditions is that little is known about the subject. There are difficulties with the major sources of data on preferences in living conditions. Some studies are based on very small samples; others are based on responses from residents of planned communities and thus cannot be applied to metropolitan areas in general, other types of suburban areas or low income people. Many of the "authorities" referred to in this section have based their "conclusions" on anything but sophisticated empirical research. The dearth of information is particularly distressing because decisions that affect the type of housing from which people will be forced to choose their living accommodations may not reflect their desires or their needs for optimum living conditions.

4. *Optimum Convenience.*—Closely connected with optimum space, interpersonal relations and living conditions is preference for conveniences. How close to certain facilities do people wish to live? Realizing that individuals differ in their preferences, it seems desirable first to observe some of the variables associated with those differences before looking at specific preferences.

Socioeconomic status is once again an important variable to consider.<sup>137</sup> Adequacy of facilities would be another variable in determin-

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one of the main problems of high density residential areas is that people, in order to be good neighbors, must keep the noise level down, particularly when they share party walls. This is particularly detrimental for children, who should be allowed to express themselves more freely. Willis, *Living in High Flats*, 1955 (unpublished manuscript in London County Council, Architects Department); see also Raven, *Sociological Evidence on Housing*, 2 *The Home Environment*, 142 ARCHITECTURAL REV. 236 (1967).

137. Although most studies support this conclusion, McGough concluded on the basis of her study in West Philadelphia, that "the use that residents make of local facilities is not related to such characteristics as class, race, or family size; rather, it seems strongly associated with the social mix of the area. In racially mixed areas, for example, she discovered a strong tendency for residents to go outside their areas for the satisfaction of their needs." S. KELLER, *supra* note 77, at 4, referring to McGough, *Social Factor Analysis*, 1964 (unpublished Technical Report No. 11 in Philadelphia Community Renewal Program).

Caplovitz found in his study of residents in four settlements in New York that the poor, more frequently than the middle-income families, make their purchases from salesmen or local shops. D. CAPLOVITZ, *THE POOR PAY MORE* 49-57 (1963). See also Herman, *Comparative Studies of Identification Areas in Philadelphia*, 1964 (unpublished Technical Report No. 11 in Philadelphia Community Renewal Program); H. BRACEY, *NEIGHBOURS: ON NEW ESTATES AND SUBDIVISIONS IN ENGLAND AND U.S.A.* 38-39 (1964). Economic reasons obviously at least partially explain this reliance of the poor on local resources. But ethnic and cultural preferences are also important.

As Warner and Srole showed more than two decades ago, immigrant and ethnic minorities not only patronize local shops, churches, and clubs that cater to their special needs and habits, but their acculturation process may be traced thereby. Status-consciousness may likewise inhibit or encourage the use of local resources.

ing whether people prefer to shop locally or at some distance. The automobile is a factor; obviously people without transportation must rely on local facilities, and public transportation is less than ideal for grocery shopping. The day of the week may also be relevant.<sup>138</sup> In addition, some people might shop at a shopping center that is located in the direction of the town center rather than closer to their homes but in the opposite direction.<sup>139</sup>

People who are cosmopolitan in their current shopping habits are more likely to plan neighborhoods which are entirely residential, preferring to travel to commercial facilities outside their neighborhood.<sup>140</sup> Studies indicate that use of local facilities varies according to the particular facility. People use local facilities more frequently for grocery shopping than for any other reason.<sup>141</sup> People also prefer to have items

For example, in one working class housing estate the immediate neighborhood was avoided because of the existence of a rough crowd at the end of one road.

S. KELLER, *supra* note 77, at 103-04.

138. Stevenage, before the town center was completed, could be described as follows: "Although 85 percent of the inhabitants said they had shops within ten minutes walking distance, only 16 percent made use of these on weekends, whereas during the week, 60 percent made use of them." S. KELLER, *supra* note 77, at 104, referring to Willmott, *Housing Density and Town Design in a New Town: A Pilot Study at Stevenage*, 33 TOWN PLANNING REV. 115 (1962).

139. S. KELLER, *supra* note 77, at 104. She notes that the "importance of physical distance decreases as various social, economic, and technological elements exert their influence. Families whose main wage earners work outside the local area, tend to make less use of local facilities than families both living and working within the areas." *Id.*, referring to Cohen, *Social Surveys as Planning Instruments for Housing: Britain*, J. Soc. ISSUES, Oct. 1951, at 35.

140. In an interesting but limited empirical study, Michelson interviewed seventy-five people "whose general level dominant value orientations had been previously determined by means of the Kluckhohn Value-Orientations Schedule, but who otherwise differed greatly from each other." W. MICHELSON, *supra* note 135, at 90. The interviews were taped, and a content analysis was done on the responses. Respondents were shown photographs of different types of housing and these were used as the basis for projective type questions. Respondents were asked to "plan" their ideal environment. They were also asked questions on how they used their neighborhoods. "Those who did not just utilize the various kinds of stores and facilities that were nearest to their homes, but who went beyond these to patronize establishments that met their particular desires, were significantly more inclined than those with local habits to place all commercial facilities outside their ideal neighborhoods." *Id.* at 91. He also found that people who "emphasize convenience throughout their lives want to be relatively close to the facilities they must or desire to visit." Michelson, *An Empirical Analysis of Urban Environmental Preferences*, in INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT 506 (L. Bourne ed. 1971). One must be cautious in generalizing from this study since only seventy-five respondents were involved.

141. Lansing and his associates concluded, on the basis of their study of ten planned communities, that people "enjoy unusually quick access to their grocery stores." J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 177. McGough found that "grocery shopping was more locally based than any other activity investigated. One-half of the respondents shopped for their groceries only in their own areas." S. KELLER, *supra* note 77, at 105.

of daily use such as religious buildings, elementary schools and bus stops near their homes.<sup>142</sup> General shopping facilities and nearness to work also receive high priority in terms of convenience factors.<sup>143</sup> With regard to shopping facilities, a significant question is whether people want the facilities in one place—a regional shopping center—or dispersed in local centers. People who desire a strictly residential neighborhood may prefer the regional shopping center concept.<sup>144</sup>

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142. In Wilson's carefully designed study of respondents in Greensboro and Durham, North Carolina, he asked his respondents to play a game in which they were allowed a certain number of markers, and they had to choose the distances which they would prefer certain facilities to be located from their homes. Because of the limited markers, the respondents had to choose in terms of priorities. One sample, however, was allowed to play the game a second time with no limits on choices. Wilson, *Livability of the City: Attitudes and Urban Development*, in *URBAN GROWTH DYNAMICS IN A REGIONAL CLUSTER OF CITIES* (F. Chapin & S. Weiss eds. 1962). The results of this study clearly indicate that people prefer to have items of daily use near their homes. Within the first five ranks of the three groups were included religious buildings, elementary school and bus stop. Interesting differences occurred, however, between the results when respondents had unlimited as opposed to limited choices. Both groups with limited choices ranked grocery store high—third for the Greensboro sample and second for the Durham sample. But when the Durham respondents were permitted unlimited choices, they ranked grocery store thirteenth, placing shopping center and neighborhood park (which they ranked sixth and ninth respectively in the limited choice game) within the first five ranks. Both groups, even the Durham sample with unlimited choices, ranked nursery, preschool play space and shoe store lowest of the amenities. The date of the study might account for the lack of emphasis on nurseries and preschool play areas. The high priority placed on religious facilities might also be a dated response, but that finding does coincide with McGough's study. She found that "one-third to one-half of the respondents worshipped only in local churches." S. KELLER, *supra* note 77, at 105.

The study is dated and limited in number of respondents; thus, it is unwise to generalize the findings. But the study does at least indicate that in its restricted application, people place emphasis on frequent use amenities when they are limited in their choices of amenities which can be located nearest to their homes.

People also prefer to have a bus stop near their homes. This convenience rated fifth and first in the two restricted North Carolina samples and third in the sample which had unrestricted choices. Lansing found this convenience to be important in his study of ten planned communities; it was important even to people who did not use the facility. J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 178.

Schools are another high priority convenience. An elementary school near the home was ranked third in the restricted North Carolina samples and fifth in the unrestricted choices. "Good schools" is often listed by people as their reason for moving to a new area. McGough, *supra* note 137.

143. In all ten communities Lansing and his associates studied the "item most often mentioned as a source of satisfaction with the community was the nearness or accessibility of work, shopping, and other facilities." J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at ix.

"Nearness to work" was not an alternative given to the respondents in the North Carolina study, but the respondents did give high priority to shopping facilities. McGough, *supra* note 137.

144. Michelson, *supra* note 140, at 508. It should be noted, however, that he based his findings on a small sample of respondents, thereby limiting the generalizations one can draw.



Recreational facilities rank low in priorities in one study, but they increase in rank as the respondents were given unlimited choices. Another study indicates that most participation in recreational activities is related to the availability of facilities near the place of residence—the notable exception being golf.<sup>145</sup> Data on specific desires in this area are just beginning to receive the attention of investigators, and it has been predicted that convenience to recreational areas might become more important than any other factor in determining where people wish to live.<sup>146</sup> This prediction is perhaps already a reality in the increasingly popular “planned communities,” which have numerous recreational facilities.

Shopping facilities, grocery stores, religious institutions, places of work and elementary schools—these appear to be the conveniences people most desire near their homes. But there is a lack of data on how close people prefer these facilities to be and on the type of facilities desired. Do people prefer shopping centers near their homes—if so, within what distance and with what type of facilities? Are they interested only in facilities that accommodate their daily needs? Or do they also prefer easy access to specialty shops? These and other problems need to be investigated.

#### IV. CURRENT CONTROLS OF LAND USE

Once it is accepted that land use regulations are to reflect, at least to some extent, the people's needs and desires that are perceived, however dimly, it becomes possible to measure current controls against these wishes and needs. By so measuring, it is possible to see whether controls are really serving the people or are having an adverse impact on people.

In order to get some picture of present zoning practices a study was made of eighteen cities in the middle west. The cities were located in North Dakota, South Dakota, Minnesota, Nebraska, Kansas, Missouri, Iowa, Illinois, Wisconsin and Indiana.<sup>147</sup> The cities ranged in popula-

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145. See note 142 *supra*; J. LANSING, R. MARANS & R. ZEHNER, *supra* note 124, at 61-93.

146. Webber, *Order in Diversity: Community Without Propinquity*, in CITIES AND SPACE: THE FUTURE USE OF URBAN LAND 48 (L. Wingo ed. 1963). Tanel has reported that, “The Regional Plan Association has estimated that there will be a greatly increased demand for swimming, golf, boating and a whole range of natural area activities within fifteen or twenty minutes of the home, in part because of the increased half-day use on weekdays which we foresee.” Tanel, *The Importance of Open Space in the Urban Pattern*, in CITIES AND SPACE: THE FUTURE USE OF URBAN LAND 65 (L. Wingo ed. 1963).

147. The cities studied were Cedar Rapids, Iowa; Duluth, Minnesota; Fargo, North Dakota; Fort Wayne, Indiana; Green Bay, Wisconsin; Iowa City, Iowa; Lincoln, Nebraska; Moline, Illinois; Racine, Wisconsin; Rochester, Minnesota; Sioux City, Iowa; Springfield, Montana; Springfield, Illinois; Terre Haute, Indiana; Topeka, Kansas; and Wichita, Kansas.

tion from approximately 44,000 to about a quarter of a million. Obviously, this is not a cross-section of the United States; it is a sample of similar cities in the heartland of America. By examining the zoning ordinances of this group, it should be possible to see whether or to what extent the wishes and needs of the people are reflected in the ordinances.

One of the constant themes running through the analysis of the wants and needs of the people is that different people want different living conditions.<sup>148</sup> There is no single pattern that will serve all people; the diverse population wants different living styles. On the simple matter of group size and the interrelationships of the group, there is some difficulty in the present zoning laws.

The key factor in residential provisions is the "family." For example, "single family" zones are those in which habitation of a lot is limited to a single family.<sup>149</sup> In examining the zoning ordinances of the eighteen sample cities it was found that many of them have provisions that are quite restrictive in defining the basic family unit.

In the Prototype Zoning Ordinance for the Wichita-Sedgwick County Metropolitan Area,<sup>150</sup> the living unit is limited by defining family as:

Either (a) an individual or two or more persons related by blood, marriage or adoption, living together as a single housekeeping unit in a dwelling unit; or (b) a group of not more than four persons who need not be related by blood, marriage, or adoption, living together as a single housekeeping unit in a dwelling unit; plus in either case, usual domestic servants. A family may include any number of gratuitous guests or minor children not related by blood, marriage, or adoption.

The Iowa City definition reads:<sup>151</sup>

One person or two or more persons related by blood, marriage, or adoption occupying a living unit as an individual housekeeping organization. A family may also be two but not more than two persons not related by blood, marriage, or adoption.

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148. See notes 53-55, 82-84, 105-08, 110-11, 124-26 and accompanying text *supra*.

149. For example, the Rapid City Low Density Residential (LDR) District "is intended to be used for single-family residential development . . . ." RAPID CITY, S.D., ZONING ORDINANCE art. IV, § 2(a) (1964).

150. R. BABCOCK, PROTOTYPE FOR ZONING ORDINANCES FOR THE WICHITA-SEDGWICK COUNTY METROPOLITAN AREA 274 (1965).

151. IOWA CITY, IOWA, CITY CODE § 8.10.3 (28).

Iowa City then provides that in certain zones only single family dwellings are permitted. In the single-family zones, however, "not more than two persons not members of the family may room in such premises."<sup>152</sup> This means, then, that four unrelated individuals may occupy a single family dwelling; two of them must be roomers.

What then of the group of students in Iowa City who wish to rent a house as a dwelling place for a year and live together as a housekeeping unit? Two students pose no problem; the next two may be able to squeeze in as roomers. Beyond this they would be violating the zoning ordinance. This is true even though a family next door might be mother, father, uncle, aunt and four children.

Examination of the ordinances shows there is a great disparity in the definition of family. This appears to be unfair to some persons. Litigation has followed as in *Palo Alto Tenants Union v. Morgan*.<sup>153</sup> There, the claim was made that a group of unrelated persons, treating themselves as a family and treated by others as a family, should be allowed to occupy a dwelling in a single family neighborhood despite violation of the wording of the Palo Alto ordinance.<sup>154</sup> The district court upheld the ordinance.

From the point of view of the wants and needs of people, it seems that a sizeable segment of our population may be interested in living in nontraditional housekeeping units. Zoning ordinances that do not allow this are undesirable. Some of the cities studied have ordinances that would permit this new life style. Rochester, Minnesota, defines family as<sup>155</sup>

A person living alone, or two or more persons living together as a single housekeeping unit, in a dwelling unit, as distinguished from a group occupying a boarding house, lodging house, motel or hotel, fraternity or sorority house.

The Topeka ordinance is almost exactly the same.<sup>156</sup> Fort Wayne simply defines family as<sup>157</sup>

One or more persons living as a single housekeeping unit, as distinguished from a group occupying a hotel, club, nurses home, fraternity or sorority house. A family shall be deemed to include servants.

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152. IOWA CITY, IOWA, CITY CODE § 8.10.7(A)(1).

153. 321 F. Supp. 908 (N.D. Cal. 1970). *But see* Boraas v. Village of Belle Terre, 476 F.2d 806 (2d Cir. 1973).

154. PALO ALTO, CALIF., MUNICIPAL CODE §§ 18.04.210, 18.88.050.

155. ROCHESTER, MINN., ORDINANCE No. 1296, § 13.31 (1968).

156. TOPEKA, KAN., PLANNING AND ZONING REGULATIONS ch. 30, art. 3, § 30.302(14) (1971).

157. FORT WAYNE, IND., GENERAL ORDINANCE No. 2836, art. II, § 3 (24) (1955).

If freedom of choice, not uniformity, is the goal, then the living group should be a matter of choice. Zoning ordinances should not favor one arrangement over another.

The data indicate that there is an expressed wish for heterogeneity in residential living.<sup>158</sup> Some people would like to associate with different types of persons—from different income levels, different family sizes and different tenure probabilities. This would suggest that cities should promise a mixture of inexpensive housing, expensive housing, and apartments; a mixture of large houses and small houses; houses for sale and houses for rent; one story and two story houses; townhouses and free-standing houses with apartments.

Many zoning ordinances allow for some mixture by providing, for example, in an apartment zone, that duplexes and single-family houses may be constructed. But, the pressures of the market are such that owners of property in an apartment zone will use the land only for apartments if that will assure the greatest return on investment. Owners will not build duplexes or single-family houses because the return will be less. A developer will not mix expensive and inexpensive houses because he "knows" the inexpensive houses will depreciate the value of the expensive houses. Something more than permission to mix residential uses must be provided; some mandate must be used if mixtures are to be obtained.

The wish of some people for heterogeneity in living conditions can be satisfied in part by the planned area development (P.A.D.). Such areas are found in Topeka,<sup>159</sup> Wichita,<sup>160</sup> Lincoln,<sup>161</sup> Rochester,<sup>162</sup> Duluth,<sup>163</sup> Iowa City,<sup>164</sup> Sioux City,<sup>165</sup> Fort Wayne,<sup>166</sup> Muncie,<sup>167</sup> Terre Haute,<sup>168</sup> Rapid City,<sup>169</sup> Moline,<sup>170</sup> and Springfield, Illinois.<sup>171</sup> The other cities studied apparently do not have provision for planned area developments.

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158. See note 131 and accompanying text *supra* and notes 207-15 and accompanying text *infra*. But see note 208 and accompanying text *infra*.

159. TOPEKA, KAN., PLANNING AND ZONING REGULATIONS ch. 30, art. 20 (1971).

160. WICHITA, KAN., CITY CODE § 28.04.190 (1970).

161. LINCOLN, NEB., MUNICIPAL CODE § 27.40.150 (1969).

162. ROCHESTER, MINN., ORDINANCE NO. 1296, art. 46 (1968).

163. DULUTH, MINN., CITY CODE § 50-37 (1968).

164. IOWA CITY, IOWA, CITY CODE § 8.10.20.

165. SIOUX CITY, IOWA, ZONING ORDINANCE § 4A-155-3201 (1967).

166. FORT WAYNE, IND., ZONING ORDINANCE, amendment to art. IV, § 14N (Aug. 12, 1970).

167. MUNCIE, IND., DELAWARE COUNTY ZONING ORDINANCE art. XX (1970).

168. TERRE HAUTE, IND., COMPREHENSIVE ZONING ORDINANCE § 1123.70 (1967).

169. RAPID CITY, S.D., ZONING ORDINANCE art. V, § 1(A) (1964).

170. MOLINE, ILL., ZONING ORDINANCE § 3.2(90) (1960).

171. SPRINGFIELD, ILL., ZONING ORDINANCE art. III, § 49.3.21.

In all of the P.A.D. ordinances provision is made for flexibility in the use of the land. Commercial use may be allowed for the convenience of the residents. Density may be somewhat greater than would be allowed in the traditional development. Yard setbacks, lot size, type of dwelling units, height and frontage may be waived. This means, for example, that town houses or row houses may be permitted. Some of the P.A.D. ordinances are related in other ways to the wants and needs of the people. The Fort Wayne ordinance, for example, includes directions concerning applicable standards. It states:

Each development shall provide reasonable visual and acoustical privacy for dwelling units. Fences, insulation, walks, barriers, and landscaping shall be used, as appropriate, for the protection and aesthetic enhancement of property and the privacy of its occupants, screening of objectionable views, or uses and reduction of noise. High rise buildings, if permitted, shall be located within a planned unit development in such a way as to dissipate any adverse impact on adjoining low-rise buildings and shall not invade the privacy of the occupants of such low-rise buildings.<sup>172</sup>

The Rochester ordinance requires dedicating space "for the purpose of developing a neighborhood playground or playgrounds in the amount of one acre of land for each 350 dwelling units."<sup>173</sup>

Mixed types of housing can be provided. Neighborhoods can be created by arranging housing units so that a cohesive grouping is achieved. The wish of some people for high density living can be accommodated. By good planning, units can be arranged so that the perception is that of closeness and density. At the same time, open spaces can be arranged to meet some people's needs for vistas. As has been indicated, the wishes and needs are in doubt in some matters. The P.A.D., however, offers the possibility of conformance when it is possible to ascertain the feelings of the people.

It should be emphasized that P.A.D. does not guarantee conformity with the wishes and needs of the people. It may be that the developer does not comprehend them or chooses to disregard them. The agency that approves a P.A.D. may not relate the plans to the prevailing attitudes. The possibility, however, is there. This is more than can be said of traditional zoning.

Another apparent want or need is for green spaces in all sections of the urban complex. Even among the people living by choice in the

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172. FORT WAYNE, IND., ZONING ORDINANCE, amendment to art. IV, § 14N (Aug. 12, 1970).

173. ROCHESTER, MINN., ORDINANCE No. 1296, § 46.0151 (1968).

most dense concentration, there is a felt need for open spaces; at least there is a need to perceive open space.<sup>174</sup> Through affirmative planning, it should be possible to include in every section of the city vistas and space arrangements that will meet the needs of individuals. This is a matter that will require either special municipal ordinances to institute spacing in developments, or planning bodies that are aware of the need and will meet the need on some ad hoc basis. Certainly, present planning has not attempted to meet this need for dispersed perceived space; in fact, there is no reason to believe that urban planning bodies understand the true nature of this need.

One of the recurring themes in the available data is the need of some people for neighborhoods.<sup>175</sup> Apparently, for some there is a pressing need for the support that can be found in a close neighborhood arrangement. Fortunately, these close-knit communities are available in some cities, but not because of planning on the part of those who control land use. In all of the zoning ordinances studied, there was no recognition of the value of neighborhoods nor was there any attempt to create neighborhoods. Size of proposed residential urban developments is never mentioned except in the planned area developments. The unity of a proposed development is not recognized in the ordinances. Obviously, a good planning staff or an alert governing body may be able to build into a plan some neighborhood elements, but the possibility of this occurring is remote. If a segment of the population that wishes or needs the opportunity to be part of a neighborhood can be identified, then it should be provided with the living arrangements that will meet these wishes or needs. This may involve arrangements of streets, lots, buildings, entrances, green plots or walks. A good planner can so arrange the environment that a neighborhood is created. This apparently is not part of urban planning at the present time. If neighborhoods are being created, it is not because of the deliberate planning of developers.

Another of the wants that the data indicate is that for living accommodations in the central business district (C.B.D.).<sup>176</sup> There are people who apparently wish to live not in the usual residential areas but rather among the activities—the hustle and bustle—of the commercial center of the city.<sup>177</sup> This suggests that planning agencies should provide for living accommodations along with or above com-

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174. See pp. 276-86 *supra*.

175. See pp. 287-95 *supra*.

176. See pp. 323-26 *infra*.

177. What Jane Jacobs seems to consider desirable from the point of view of maintaining a vital, dynamic city, seemingly is the life style which some people desire. J. JACOBS, *THE DEATH AND LIFE OF GREAT AMERICAN CITIES* chs. 2, 12 (1961).

mercial establishments. Perhaps this can be done by providing residential clusters in the central business districts, which may be in the form of apartments or town houses. These could be people-oriented on courtyards rather than vehicle-oriented on the streets. The example of the French Quarter in New Orleans suggests some possibilities. The green areas of the C.B.D. might be central plots for the residential arrangements. An examination of the zoning ordinances of the various cities indicates that none have really planned for residential living in the C.B.D. Some residential living is allowed, but it is secondary. None of the cities view the providing of accommodations for residential living as a primary consideration in planning for the C.B.D. Again, the wishes of a substantial share of the people have been given no consideration.

In addition, no shopping center zoning provides for residential housing although there are indications that some people—owners of stores, retired persons, young couples—would prefer living in such an environment.<sup>178</sup> The available material indicates that many people wish to have service facilities close to their residence.<sup>179</sup> Under the present zoning laws and the actions of zoning commissions, there is a reluctance to allow service facilities in residential areas. No longer are small grocery stores and drug stores allowed in residential areas. The total segregation of commercial from residential is the goal sought by many zoning agencies so that substantial distances must be traveled in order to shop. There is some reason to believe that many people would rather have facilities close at hand. At least this living style should be available for those persons who choose to live in an area not virginally pure of all commercial activities. Only in some of the P.A.D. provisions is there some mixture of residential and commercial uses. It is interesting that this concession is in the P.A.D. that is relatively new in planning.<sup>180</sup>

An examination of the zoning ordinances of the selected cities against the background of the available data on the needs and wishes of people, suggests several conclusions. First, the examined ordinances are rigid and cast in a single mold. Front, side and back yards are uniformly provided. Secondly, they are the result of stereotyped thinking and physical planning. Physical measurements are crucial. Thirdly, the separation of residential uses from others, such as commercial and industrial, is accepted as basic. Separation of types of residential uses,

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178. Jane Jacobs' idea of a vital neighborhood would seem to apply in the shopping center situation. *Id.*

179. See pp. 302-05 *supra*.

180. Sussna, *New Development in Zoning Law*, in INSTITUTE ON PLANNING AND ZONING 14 (Southwestern Legal Foundation ed. 1970).

such as apartments from single-family housing, is a result of zoning into different residential classifications. High density residential uses are seen as buffers between commercial and low density residential use. Homogeneity is the end sought. Finally, residential living is vehicle-oriented; all houses must be located on streets or public ways.

All of this reflects a physical approach to zoning without considering what the people involved may want. The physical attributes of the uses are considered without any thought given to attitudes of people and the relationships that may be affected by the physical development. Clearly there is a need for a reappraisal of the planning process to provide for the wants and desires of people. Only if this is done will urban areas provide living conditions that allow for the maximum development of the people living there.

## V. FUTURE PLANNING FOR LAND USE

Agencies with planning power must act in a responsible manner; they must set goals and then make decisions that will achieve those goals. Such actions should be taken only after careful consideration of both the goals and the methods selected to reach them. City planners should consider carefully the social characteristics of the people for whom they plan. In areas where affirmative planning is not done, the responsible agencies must respond to the needs and wishes of all of the people involved.

### *A. Recognition of the Needs and Desires of Residents*

Probably the most important conclusion that might be drawn from an investigation of research in the area of human living conditions is that the needs and desires of residents who will live in an area should be taken into serious consideration in planning. Too often city planners decide on the basis of their own experiences and ideas of what types of accommodations and amenities would be desired or needed by others.<sup>181</sup> The real task for planners is to arrange space so that people

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181. An example of disastrous results is the Pruitt-Igoe project in St. Louis, which was designed to house 3,500 families. This project was perhaps the result of the influence of architects and city planners, such as Corbusier, who proposed "sky-scrapers in a park." This particular facility was "awarded a prize for the excellence of its design. Now it is universally admitted to be inferior; many people would say a disaster." NATIONAL COMM'N ON URBAN PROBLEMS, *supra* note 130, at 123. Some of the welfare mothers who live in that project were so upset about their living accommodations that they protested and took over the banquet of the Midwestern Sociological Society which held its 1970 meeting in a plush hotel near the housing project. The women were demanding that sociologists use their knowledge to help the poor and improve their housing accommodations.



may enjoy greater freedom for interaction and at the same time have access to natural amenities.<sup>182</sup> The mistake made by planners is in assuming that order exists "in simple mappable patterns, when it is really hiding in extremely complex social organization, instead."<sup>183</sup>

Although "consideration of human needs can lead to more adequate utilization of space," planning decisions affecting the totality of human life are currently made primarily on the basis of economics.<sup>184</sup> There is a new demand to consider human needs in the allocation of space.<sup>185</sup>

In contrast, Keller has noted an example of a popular city which defies current concepts of architectural design and planning.

There is a city in the United States that violates most of the first principles of sound urban planning. Its land use is chaotic; its streets come in patches of gridiron fitted neither to themselves nor to their topography; its "in-town" houses are usually made of wood frame and are three-or-four story walkups. Yet it is considered here and abroad one of the most attractive cities in the world. It is, of course, San Francisco.

S. KELLER, *supra* note 77, at 113.

182. See Webber, *Order in Diversity: Community Without Propinquity*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 54 (L. Wingo ed. 1963). See also E. HIGBEE, *supra* note 43, at 47. "The very key to satisfactory city organization is concentration without congestion. Despite popular belief, the two are not naturally wedded. Dense populations and cluttered space only seem to go together because of the ineptitude of the usual management of urban space." *Id.*

183. Webber, *supra* note 182.

184. Duhl, *The Human Measure: Man and Family in Megalopolis*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* (L. Wingo ed. 1963). "The allotment of so much space to the automobile and so little to human beings in the places where people live is civic folly and quite unnecessary even from the standpoint of traffic engineering." E. HIGBEE, *supra* note 43, at 51. See also Form, *The Place of Social Structure in the Determination of Land Use: Some Implications for a Theory of Urban Ecology*, in *INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT* 186-87 (L. Bourne ed. 1971). The study is of zoning changes in the Lansing area. Form concluded that these changes could not be accounted for by a "simple economic or cultural analysis." He continued:

The traditional ecological processes are no longer adequate to analyze changes in land use. These processes, like most ecological concepts, are based on models of eighteenth century free enterprise economics. Yet fundamental changes in the structure of the economy call for new economic models which in turn call for a recasting of general ecological theory. The new vital trend of cultural ecology does not do this adequately, for it considers the structural realities of urban society only indirectly.

*Id.*

185. See, e.g., R. WEAVER, *THE URBAN COMPLEX: HUMAN VALUES IN URBAN LIFE* 27-28 (1966). "It is human beings who, today, are shaping the vast metropolitan areas which house some two-thirds of the population in this Nation. Consequently, it is in terms of people that urban problems must be conceived and their solutions developed." *Id.* at 26. He then points out that in our discussions of the problems of cities today we talk mainly of the slums and how we will finance urban renewal; only occasionally is reference made to the human values of urban life.

The very semantics of our approach is sometimes unrealistic and frequently incomplete. We speak of slum eradication and ridding the city of all slums in a

Community planners must anticipate this new demand and adequately plan for it today.<sup>186</sup> In addition, "[t]here is an urgent need for psychological study of the facts and possibilities, and for our architects and urban planners to recognize that what they design in the minds of men is more important than what they create in steel and concrete and traffic patterns."<sup>187</sup>

It is easy enough to say that planners should consider the needs and desires of those for whom they plan. It is much more difficult to de-

decade. Seldom do we pause to consider the human . . . costs of their clearance. Thus, emphasis is placed upon the buildings in the slums and little attention is paid to the people who inhabit them or to the reaction of the rest of the population to these people. Yet the values of slum dwellers are of crucial importance. They determine, in large measure, the behavior patterns of those who dwell in blight and influence the reaction of others to slum dwellers. The values of the dominant elements in urban areas, in turn, determine, in large measure, the opportunities and mobility of the present residents in slums and blighted areas. These and associated values, if understood and taken into account, would make efforts to preserve the city more realistic and successful.

*Id.*

186. Duhl, *supra* note 184, at 148.

187. Parr, *Psychological Aspects of Urbanology*, 22 J. Soc. ISSUES, Oct. 1966, at 44.

Higbee stated that planning decisions are based on factors other than human needs. In a pointed indictment of this practice, he declared:

Urban space is seldom allocated with the needs of people guiding the minds of engineers and bureaucrats. Instead a few obvious issues such as the accommodation of automobiles and the zoning of land according to the influence of self-interested groups take precedence. The basic purpose of the city as an environment gets lost in the shuffle.

E. HIGBEE, *supra* note 43, at 48.

Herbert Gans, who has carefully studied the reaction to relocation of working class people of the West End of Boston, stated: "[I]t is time to stop asking whether or not 'better' housing as such improves the living conditions of its tenants and to inquire instead: What aspects of such housing have what impact on these tenants, within the context of their lives and the choices open to them?" H. GANS, *PEOPLE AND PLANS: ESSAYS ON URBAN PROBLEMS AND SOLUTIONS* 7-8 (1968).

Gans continues with specific examples:

For example, most planners and housers would agree that moving people from walk-up tenement apartments to single-family dwellings would be beneficial. If they are lower-class families, with a culture in which child-parent relationships are not sociometrically as close as in the middle class, the single-family house may not have the same meaning or virtue for them as for the planners. Moreover, the technologically "better" housing must be viewed within the context of choices available to these people. If the single-family house is located in the suburbs far from job opportunities, it will not be beneficial to people who suffer from job insecurity. They should be living near the center of the city where they are centrally located with respect to job opportunities and mass transit facilities. If such housing is more expensive than what people had before, the advantages of modernity may be offset by deprivations resulting from new budgetary pressures. Or if such housing isolates people from a friendly social environment, it is not "better" for those whose life style calls for that environment more than for modern housing.

*Id.* at 8.

termine the specific nature of those needs and desires. Human needs and desires differ and it is thus impossible to make planning decisions applicable to all people. Social class is a crucial variable in an analysis of what people want and need in housing and surrounding amenities. Sociologists have made an outstanding contribution to our understanding of human needs as related to social class, particularly in their studies of lower and working class people.<sup>188</sup> Such studies have made us aware of the importance of the environment. They have indicated that social life in the slum is organized, not unorganized. They have made us realize that even the worst slum has meaning to the inhabitants and that uprooting people through a process of urban renewal may create more problems than it solves; they have indicated that density may be a positive factor for this segment of our population.<sup>189</sup> In general, such studies have discovered the importance of cultural variables in the explanation of human behavior.

Although the studies of the lower and working classes cannot be used to generalize to the middle and upper classes,<sup>190</sup> it is important to pay attention to these studies in our analysis of implications for planning and zoning. Members of the middle and upper classes have more choice in their decisions of where to live. They also have more control over their immediate environment in that they are the people in power who make zoning ordinances and planning decisions; "[s]o physical planning imposes most rigorously on those areas of the community inhabited by the lower classes, playing havoc with their ways of life, their roles in the larger community, and their opportunities."<sup>191</sup> Much of our planning and zoning centers around urban renewal, the major impact of which falls most heavily on the lower and working class people. But more important, it is possible that our discovery of the im-

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188. See, e.g., E. HIGBEE, *supra* note 43; H. GANS, *THE URBAN VILLAGERS* (1962); E. LIEBOW, *TALLY'S CORNER* (1967); W. WHYTE, *THE ORGANIZATION MAN* (1956); Duhl, *supra* note 184; Fried, *Grieving for a Lost Home*, in *THE URBAN CONDITION: PEOPLE AND POLICY IN THE METROPOLIS* (L. Duhl ed. 1963).

189. "There is security in crowding and closeness to people with similar religious views, values, recreations, family patterns. Ghettos are made by both the oppressors and the minorities themselves." Duhl, *supra* note 184, at 137.

190. Fried, in his analysis of the importance of the local environment to working class people, particularly noted the limitation of such studies.

We would not expect similar effects or, at least, effects of similar proportion in a middle-class area. Generally speaking, an integrated sense of spatial identity in the middle class is not as contingent on the external stability of place or as dependent on the localization of social patterns, interpersonal relationships, and daily routines. In these data, in fact, there is a marked relationship between class status and depth of grief; the higher the status, by any of several indices, the smaller the proportions of severe grief.

Fried, *supra* note 188, at 157.

191. Duhl, *supra* note 184, at 151.

portance of cultural, as opposed to physical, variables in influencing human behavior might apply to the middle and upper classes as well as to the lower class. Specific attention, then, must be given to the needs of the lower classes since that is where most of the research in this area has been conducted.

In the first place, the importance of "community" and the local environment to lower classes must be recognized in planning. As found in a study of the West End of Boston, the immediate neighborhood is more important than the physical conditions of the house.<sup>192</sup> The culture of such areas must be preserved,<sup>193</sup> and this can be done if we

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192. See H. GANS, *supra* note 187. Also, the failure of public housing to provide more than merely adequate physical structures has been noted in two of the conclusions made by the research report which was prepared for the National Commission on Urban Problems:

Public housing has made little contribution toward the development of a sense of community among its own tenants or between tenants and the surrounding neighborhood. The formula for conventional public housing has been inherently anti-community. However, some of the new approaches to public housing may remedy this deficiency.

Comparatively speaking, the average public housing development may provide a better environment and more social and community services than the typical slum neighborhood. However, from the viewpoint of strengthening individual and family life, most public housing is tragically deficient.

NATIONAL COMM'N ON URBAN PROBLEMS, MORE THAN SHELTER: SOCIAL NEEDS IN LOW-AND-MODERATE-INCOME HOUSING vi-vii (1968).

Perhaps biological studies of the importance of "home" may have some applicability to man.

A Wisconsin conservationist, while stocking streams with trout, noted that a fish taken from its home becomes unhappy and that, like an unhappy person in similar circumstances, it may behave in a suicidal way. The first act of a trout upon being released into strange waters is to look for an unoccupied home. If it cannot find one quickly, the fish may actually swim itself to death in the search. Biologists have found that the stress of a new environment may cause the lactic acid of the blood to rise to the point where death results. If the human desire to create life is matched with a desire to live agreeably, then the quality of the environment cannot be ignored.

E. HIGBEE, *supra* note 43, at 9.

Duhl has also argued that to the people in Gans' study of the West End of Boston geography is very important; the nearness of other houses is important for their social life; and in general, "the physical environment is part of the individual's identity." He refers to the public housing projects as a "sterilized sardine-can-existence" and concludes that if that is the only choice we give the poor they will look for other slums. "These slum communities have attractions for many groups that cannot be surpassed by anything we now have on our planning boards." Duhl, *supra* note 184, at 138. Duhl does not think we must keep the slums but that in planning for their elimination, the rights of the residents and "their aspirations and the satisfaction of their needs require a new dimension of physical planning." *Id.* at 139. Or, as stated by Michelson, "If voluntary ghettos play such a part in people's lives, then safe and clean ghettos can be designed to replace those that must disappear." W. MICHELSON, MAN AND HIS ENVIRONMENT: A SOCIOLOGICAL APPROACH 70 (1970).

193. Hall has concluded:

consider the needs of the people and abandon our current habit of basing planned communities upon the "kind of design purity which feverishly excites only city planners and architects."<sup>194</sup> If man does not preserve the cultures of the people who inhabit the slums—workers from the rural South, the Appalachian Highlands or Puerto Rico—he should expect negative consequences:<sup>195</sup>

Since comfort and security come from people they know, they create in the slums urban versions of rural villages which become tightly knit communities with more social value than the sterile new housing which wouldn't meet their needs even if they were acceptable as tenants. The few who can move may find themselves unable to adapt to their new environment. This may result in a lashing out at the environment leading to destruction of property and their ultimate removal.

The study of the importance of local culture and ties with the past has not been limited to the poor in the United States. The famous Greek engineering company, Doxiadis Associates, has discovered that "the Arab often mourns for his traditional way of life when he moves to the city. He misses . . . the tribal campfire."<sup>196</sup> The company, realizing the importance to the Arab of his past way of life, made provisions

City planners should go even further in creating congenial spaces that will encourage and strengthen the cultural enclave . . . . In the words of Barbara Ward, we have to find some way of making the 'ghetto' respectable. This means not only that they will be safe but that people can move on when the enclave has performed its functions.

In the course of planning our new cities and revamping our old ones, we might consider positively reinforcing man's continuing need to belong to a social group akin to the old neighborhood where he is known, has a place, and where people have a sense of responsibility for each other. Apart from the ethnic enclave, virtually everything about American cities today is sociofugal and drives men apart, alienating them from each other. The recent and shocking instances in which people have been beaten and even murdered while their 'neighbors' looked on without even picking up a phone indicates how far this trend toward alienation has progressed.

E. HALL, *THE HIDDEN DIMENSION* 163 (1966).

194. Duhl, *supra* note 184, at 147. He continues:

City planners are not playing a game on a massive, terrestrial chess board, rearranging pieces so that the city looks magnificent in models, on paper, from the air. A vice president of the Prudential Insurance Company has appropriately observed that if the planners had little people to test out all their magnificent chess board models they might be able to determine whether living would be as pleasant, enjoyable, vital, and stimulating as postulated.

*Id.*

195. *Id.* at 137. Although Duhl may not be correct in his reasoning, his predictions of reactions to housing units have been accurate in numbers of instances.

196. E. HIGBEE, *supra* note 43, at 52.

for including some ties with the past in the development of new communities.<sup>197</sup>

In addition to its failure to provide for ties with the past and for the continued expression of the local culture of its inhabitants, public housing has failed to provide the services needed by its residents.<sup>198</sup> But such failures are not limited to public housing. There is also a lack of services in some suburban developments:<sup>199</sup>

While portions of today's suburbia grow up . . . as tight complexes with no reserves of open space for future roads or recreational areas, other portions are scattered like shot from a blunderbuss without the slightest umbilical tie to their maternal metropolises. These dispersed housing developments often leapfrog so far into the cornfields that all public services are left behind. Instead of sewers each house has a do-it-yourself septic tank. Instead of water mains each home has a well. Instead of public buses and trains, there is nothing but the private automobile and the obsolete art of walking to put people in contact with jobs, supplies, school, and the rest of society. No dauntless pioneer on the fringe of Indian territory was so far removed from the essentials of existence.

Obviously, residents in single-family suburban developments as well as in public housing need basic services. The major question is where these services should be located. Studies of members of the working class<sup>200</sup> indicate that they frequently shop in local stores. Yet many of the housing developments have failed to provide such facilities. And even in the studies mentioned, it is not clear just what type of facilities (other than the usual demand for near-by grocery stores by all classes of people) are really needed and desired. The availability of adequate transportation as well as the ability to utilize the facilities is an important variable. Because of this, there may be a greater demand for local services in areas that house the poor, the aged and families with small children.<sup>201</sup>

In this discussion of the need for city planners to recognize the

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197. *Id.*

198. "A serious defect in the construction and staffing of many public housing projects has been the failure to provide adequate space and personnel for services the occupants sorely need." NATIONAL COMM'N ON URBAN PROBLEMS, *supra* note 130, at 127.

199. E. HIGBEE, *supra* note 43, at 119-20.

200. *See pp.* 302-05 *supra*.

201. The importance of local recreational areas for the aged and children, for example, has been noted by Higbee, who said, "If they cannot walk to a recreation area, many may not go at all. A place to play and exercise or just to congregate and talk must be close at hand, preferably within the block, if it is to be of genuine daily value to either young or old." E. HIGBEE, *supra* note 43, at 51.

needs and desires of the people for whom they plan, considerable space has been given to the studies of lower and working class needs. The studies clearly indicate the differences that exist between actual needs and desires and the perception of planners. They demonstrate the importance of considering nonphysical factors in planning a residential environment. Although the specific findings should not be generalized to other populations, the importance of cultural factors must always be considered if plans are to be successful. Ties with the past may be applicable to groups within our population other than those studied, and this possibility should be explored. For example, in planning condominiums designed mainly for retired people, how much attention is given to the possibility that the aged may have special needs (perhaps analogous to those of the working class) and desires in housing and the surrounding environment? Failure to discover and then plan for such needs will result in such situations as the high rise apartment complex built for the elderly in downtown Indianapolis; no grocery stores were located within easy walking distance. In addition, the emphasis upon human needs must be characteristic of the total city, not just suburban residential areas and public housing developments.<sup>202</sup>

As a plastic creation the city must speak to us of humanistic values. The dehumanized city that is hardly more than an artifact, a nonhuman world of technology and machine-made sterility, must give way to a city that has meaning to the individual and the community as a social environment. In its form the individual should find the satisfactions of human scale, order, and coherence, and perceive in both function and symbol those qualities of the city which command his loyalty. In its form the community more broadly should find those perceptions and social values which support strong family and community activities and are fundamental to a workable urban society and a strong urban economy. *The planning of such a city is dictated by the highest ideals of our civilization.* [Emphasis added.]

### *B. Provision for Maximum Choice in Living Accommodations*

It has been suggested by many people that one of the greatest needs in planning for future living accommodations is to allow individuals maximum choice of homes and neighborhoods. It has been argued that many of the choices made today are not based on desire, but on the lack of sufficient alternatives.<sup>203</sup> As already indicated, planners have

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202. Gutheim, *Urban Space and Urban Design*, in *CITIES AND SPACE: THE FUTURE USE OF URBAN LAND* 129 (L. Wingo ed. 1963).

203. "In the FORTUNE-ACTION study of city households, a significant minority of

designed homes and neighborhoods without considering individual needs and desires.<sup>204</sup>

Since human needs and desires differ according to certain social variables, it would seem reasonable to allow as much flexibility in housing as possible. More research on the relative roles of propinquity and homogeneity is needed before definite conclusions are drawn, but some may be suggested. The city planner should try to provide maximum choice. Furthermore,

[i]f possible, the site plan should contain a variety of house-to-house relationships, so that residents who desire a large group of visual and social contacts and those who prefer relative isolation can both be satisfied. If density requirements permit, however, the site planner should not locate dwelling units within such close physical and functional distance to each other that the occupants are constantly thrown together and forced into social contact. In areas of single-family houses, the planner should avoid narrow courts. In row-house developments, soundproof party walls are necessary. . . . If and when sufficient research has been done to establish the relationship between site planning and social life on a sounder empirical basis, the concept of voluntary resident placement should be explored. Thus, if the studies indicate that some locations in a site plan will inevitably result in greater social contact than others, potential occupants should be informed, so that they can take this fact into account in choosing their houses.<sup>205</sup>

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younger couples with children said they were going to suburbia only because there was no logical alternative." Whyte, *Are Cities Un-American?*, in *THE EXPLODING METROPOLIS* 39 (Editors of *Fortune* eds. 1958).

204. See notes 20 & 181 *supra*. Thus, Higbee has suggested that people would not go to the expense and often inconvenience of moving to the suburbs "[i]f it were not to live a fuller, richer, pleasanter life." He further commented, "Those who plan the suburbs of the future could not go wrong if they were guided by what is right for people rather than by what they think people will endure if there is no alternative." E. HIGBEE, *supra* note 43, at 127.

205. S. KELLER, *supra* note 77, at 162. Most of Keller's suggestions have also been mentioned by others in the field. For example, Whyte, on the basis of the *Fortune* study, suggested the possibility of combining high rise with garden apartments in one area, thus providing more than one kind of housing type.

In such a design the two forms borrow room from each other. No longer does open space have to be squandered. The houses and their gardens provide the air and light the towers need; and the towers complement the houses by raising the over-all density.

. . . Aesthetically, the combination can be equally pleasing—and eminently contemporary.

. . . Such projects can recapture the pleasures of the best of the old residential blocks.

Whyte, *supra* note 203, at 47-48.

In an unpublished master's thesis study of the importance of streets, Cohn has sug-



Flexibility is thus important in housing and the arrangement of housing. It is also important in the environment of the house—or the neighborhood.<sup>206</sup> The changes necessitated because of changes in life cycle have led some to argue that the immediate neighborhood facilities

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gested that zoning laws should provide more flexibility in siting of houses and location of streets. He asks, "Why must all subdivision houses from coast to coast be set back a prescribed distance from the property line? Why must the typical subdivision street be a monotonous cheesebox-on-a-raft-row of houses?" Cohn quoted Charles Agle in his critique of the lack of flexibility in zoning requirements:

Typically, sideyards separating buildings are too narrow either for privacy or for any tangible use of the land area. Front yard requirements force all buildings into a line so that side yard privacy is automatically lost . . . rear yard requirements have the same negative feature—they force the buildings into a line.

Agle, *A New Kind of Zoning*, 95 ARCHITECTURAL F. 176, 234 (1951), quoted in S. Cohn, Public Control of Urban Esthetics, 1962 (unpublished thesis, University of Washington, Seattle).

Criticism of zoning requirements for front yards has also been voiced by Sommer in his discussion of man's environment. He suggests that requirements for side and front yards are wasteful and discourage community feeling. The front yard provides no privacy and therefore is seldom used, as Whyte noted in *The Organization Man*. Sommer suggests that a sense of community might be improved if a number of families were allowed to have their "setback space . . . combined to form a common green area." Sommer, *Man's Proximate Environment*, 22 J. Soc. ISSUES, Oct. 1966, at 67.

Obviously not all people would desire this arrangement—the point is that it is not allowed by most zoning laws and that people who do desire the arrangement should have the flexibility, within reason, to build their homes in this manner.

Sommer goes further in his criticism of the lack of flexibility in zoning laws by attacking requirements that so much space be devoted to windows (which he says fosters the picture window which overlooks a picture window in a neighbor's home) and that ceilings be a certain height. With regard to the latter, he cites a Canadian study which concludes that "there is no behavioral evidence to justify any ceiling height other than that which accommodates a tall man wearing a hat." *Id.* at 66. Sommer's conclusion is that most zoning laws and building codes are based "at least partly on myth and superstition." *Id.*

Exploding those myths and superstitions with substantial empirical data is a challenge to social scientists, and one would hope that as such information is acquired it will be incorporated into zoning laws and building codes. Flexibility in housing arrangements and locations is necessary if we are to avoid what has been called the "forced solutions, providing housing and other aspects of urban development to meet a specific need without thinking of the range of choices that the urban resident should have." *Hearings on The Quality of Urban Life Before the Ad Hoc Subcomm. on Urban Growth, supra* note 122, at 501. Slayton further states:

The incremental expansion that we have had on the periphery of our metropolitan areas has created a life style in the free-standing single-family house which does not give a broad spectrum of choice to those who are looking for a place to live, nor does it provide the open space, the availability of recreational areas, that are essential for urban living. There are rule aspects . . . to urban living if one is going to have a real choice in living within the urban areas.

*Id.*

206. As Michelson has observed, "The very same environment which is congruent for a style of life emphasizing the nuclear family becomes incongruent when, by virtue of a change in stage in the life cycle, a teenager may desire a life style different from that of his parents—at least temporarily." W. MICHELSON, *supra* note 192, at 102.

should center around "constants"—those items and services which one needs at all stages, such as food and clothing—and that more flexibility be involved in planning other essential functions for which demands change—such as education, work opportunities and health facilities.<sup>207</sup>

Flexibility should also exist in plans for homogeneity or heterogeneity of the neighborhood. It has been argued that heterogeneity in neighborhoods is to be preferred over homogeneity.<sup>208</sup> Mixing dif-

207. "[T]hese are variables and can be arranged and planned with much more flexibility and designed so as to accomplish certain social and philosophical objectives beyond those basic survival functions which are carried on in the home." *Hearings on the Quality of Urban Life Before the Ad Hoc Subcomm. on Urban Growth, supra* note 122, at 526-27.

208. Gans, for example, cites some of the goals of a heterogeneous neighborhood. It exposes people to alternative life patterns, enriches the lives of the residents by adding "demographic balance" to the area, exposes children to different types of people, and creates tolerance. But he also notes that the real heterogeneity is difficult to achieve. We may design areas so that diverse people might live next to one another but as long as we have such inequalities in income and education, it is doubtful whether such living arrangements would result in the achievement of the above goals. H. GANS, *PEOPLE AND PLANS: ESSAYS ON URBAN PROBLEMS AND SOLUTIONS* 168-69 (1969). See also Keller, *Social Class in Physical Planning*, 18 INT'L SOC. SCI. J. 494, 504 (1966), stating:

The evidence gathered from new towns and housing estates throughout the world suggests that mixing groups may actually lead to hostility and conflict rather than to a more interesting and varied communal life, that the better off, no matter how defined or measured, refuse to live side by side, not to say co-operate in community clubs and projects, with those they consider inferior to them, and that those whose conceptions of privacy and friendship, sociability and neighboring are opposed will soon find themselves pitted against each other in resentment or withdrawing into loneliness. Social contrasts do not, apparently, automatically foster either creative self or community development. [Citations omitted.]

The problems of heterogeneity have also been emphasized by Hall:

A point I want to emphasize is that in the major cities of the United States, people of very different cultures are now in contact with each other in dangerously high concentrations, a situation which brings to mind a study by pathologist Charles Southwick. Southwick discovered that peromyscus mice could tolerate high cage densities until strange mice were introduced. When this occurred there was not only a significant increase in fighting but an increase in the weight of the adrenal glands as well as the blood eosinophil count (both of which are associated with stress). Now even if it were possible to abolish all prejudice and discrimination and erase a disgraceful past, the lower-class Negro in American cities would still be confronted with a syndrome that is currently extremely stressful: the sink (popularly referred to as 'the jungle'), the existence of great cultural differences between himself and the dominant white middle class of America, and a completely foreign biotype.

Sociologists Glazer and Moynihan in their fascinating book, *Beyond the Melting Pot*, have clearly demonstrated that in fact there is no melting pot in American cities. Their study focused on New York but their conclusions could apply to many other cities. The major ethnic groups of American cities maintain distinct identities for several generations. Yet our housing and city planning programs seldom take these ethnic differences into account. Even while writing this chapter I was asked to consult with an urban planning agency which was considering the problem of urban life in 1980. The entire plan under discussion was predicated on complete absences of both ethnic and class differences by this date. Nothing in man's past

ferent types of people is likely, however, to lead to cool relationships, and "a markedly heterogeneous community that spells enrichment to the planner . . . may mean endless bickering and unsettled feuds to the people who actually live in it."<sup>209</sup>

Despite the fears (or perhaps realities) of the effects of heterogeneity, many people prefer a heterogenous neighborhood to one which contains only their "own kind."<sup>210</sup> Obviously, not all would agree—as evidence, one need only cite the frantic flight of people whose neighborhoods are "invaded" by people near whom they do not wish to live. Within the obvious limits of constitutional and statutory law, people who wish to avoid heterogeneity in their habitat should not have it forced upon them by planners. Conversely, those who prefer heterogeneity should be able to secure it; one method of facilitating heterogeneity may lie in improving the downtown area for living, thus encouraging inward migration.

### *C. Improvement of the Downtown Area*

For some time we have been concerned about the potentially harmful effects that the mass migration to suburbia might have on the city. For most people the city is no longer an ideal place in which to live. The city today houses those who cannot afford to leave and the very rich.<sup>211</sup> President Johnson's chief advisor on urban planning warned of the dangers of this migration from the central city.<sup>212</sup>

indicates to me that these differences will disappear in one generation!

E. HALL, *supra* note 193, at 156.

209. H. GANS, *supra* note 208, at 169.

210. Whyte, in the *Fortune* study, noted that some couples "maintain that the city can be a *better* place to raise children than suburbia. In the city . . . the children are brought up in an environment closer to reality; . . . it exposes children to all kinds of people, colored and white, old and young, poor and rich." Whyte, *supra* note 203, at 40. Mumford describes as positive his experience in living in Sunnyside Gardens which housed people with incomes ranging from twelve hundred dollars to twelve thousand dollars a year. He believed such heterogeneity to be "the best kind of community. In terms of educating the young and of making the institutions of democracy work, the arguments are entirely in favor of a mixed community." He also suggested in addition to a mixture of different types of people, a mixture of house types and densities. L. MUMFORD, *supra* note 59, at 75.

211. Hall has noted:

As now constituted, the American city is extraordinarily wasteful, emptying itself each night and every weekend. One would think that efficiency-minded Americans could do better. The result of the suburbanization of our cities is that the remaining residents are now predominantly the overcrowded improverished and the very rich, with a sprinkling of holdouts from the middle class. As a result, the city is very unstable.

E. HALL, *supra* note 193, at 167.

212. R. WEAVER, *supra* note 185, at 37.

To abandon our central cities . . . would be to forsake the cornerstones of our culture. A great city is far more than the sum of its parts. To fragment that city, and scatter its energies through a score of communities would destroy the institutions that give it greatness and the culture they make possible.

. . . [W]e want to revitalize the central city. We want to open it up, by surgery if need be, so that it is accessible to all. We want to facilitate, not extinguish, the flow of people and ideas through the downtown area. We want to make it a place where people come not only to work and to shop, but to seek out the highest intellectual and cultural experiences available in their communities.

In *The Exploding Metropolis*, the editors of *Fortune* report the findings of a study of attitudes toward city life. Specifically, an attempt was made to discover why people did not wish to live in the downtown area and what changes would be necessary in order to entice them to do so. "A significant minority of younger couples with children said they were going to suburbia only because there was no logical alternative. It wouldn't take too much, they indicated, to make them change their minds—some provisions for play space, for example, and, for working mothers, a nursery school—most important, good elementary schools."<sup>213</sup> Those who had returned to live in the city after migration to the suburbs, when asked why they returned, mentioned such factors as convenience to work, ease of getting help, the bother of keeping up the home and yard in the suburbs, convenience to shopping and other facilities, and transportation.<sup>214</sup> The people who return are of many different types, but they have one thing in common:

[T]hey *like* the city. They like the privacy; they like the specialization, and the hundreds of one-of-a-kind shops: they like the heterogeneity, and contrasts, the mixture of odd people. Even the touch of Sodom and Gomorrah intrigues them; they may never go to a nightclub, but they enjoy the thought that if ever they were of a mind, there would be something interesting to go out to.<sup>215</sup>

City planners should capitalize on this type of data and use the findings to make the city more attractive to people who prefer the way of life which can be found only in an area of high concentration of diverse facilities. Such studies suggest that perhaps more people would be attracted to the city if efforts were made to provide adequate amenities such as good schools and adequate housing that could be afforded

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213. Whyte, *supra* note 203, at 39.

214. *Id.* at 11-12.

215. *Id.* at 40.

by all, not only by the very rich. One author has suggested that "New Towns" be created within the city and that such communities provide a "great variety of housing" as well as "intown industrial estates" and facilities for shopping and fun. He suggests that such action would attract middle class whites back to the city while at the same time providing "a more favorable environment for youth growing up in a city."<sup>216</sup>

The city has many attractions, but "the average redevelopment project does not make the most of the strengths of the city; it denies them."<sup>217</sup> The challenge for planners is to plan facilities that are within the budget limits yet still provide the amenities necessary to keep them within the city.

Another way to attract some people to live in the downtown area is to encourage remodeling of old homes in town.<sup>218</sup> The city should

216. Perloff, *Modernizing Urban Development*, in TOWARD THE YEAR 2000: WORK IN PROGRESS 163 (H. Perloff ed. 1967).

217. Whyte, *supra* note 203, at 40. One example of a plan which has capitalized on the strengths of the city is the circular apartment project in Chicago known as Marina Towers. The following description of the project is lengthy, but it gives a clear picture of the advantages of the plan.

The towers occupy a city block downtown on the edge of the Chicago River. The lower floors spiral upward and provide open-air, off-street parking facilities for the apartment residents. Marina City has many other features that answer the needs of city dwellers: restaurants, bars and taverns, a super market, liquor store, theatre, ice skating rink, a bank, boat basins, and even an art gallery. It is safe, protected from weather and possible city violence (you don't need to go outside for anything). If tenant turnover isn't too great because of the small spaces in the apartments, some tenants may actually get to know each other and develop a sense of community. The view of a city, especially at night, is a delight and one of its greatest assets, yet how few people get to appreciate it? Visually, the design of Marina City is superb. Viewed from a distance, the towers are like the pine trees on the ridges around San Francisco Bay; the balconies stimulate the fovea and beckon the viewer to come closer, promising new surprises with each shift in the visual field . . .

. . . One of the advantages of Marina City, apart from the excitement it generates visually, is that it represents a definite, well-delineated amount of contained space without the killing effect of long corridors. There will be no spilling out or spreading or sprawling from this structure. Its principal defect is the cramped living space, which a number of the tenants I have talked to experience as unduly confining. In the heart of the city one needs more space in the home, not less. The home must be an antidote for city stresses.

E. HALL, *supra* note 193, at 166-67.

Unfortunately, this housing complex is too expensive for the average middle class family.

218. Whyte discusses the possibility after mentioning the example of the Georgetown area of Washington, D.C.:

For all the occasional preciousness, people move into such areas out of plain common sense. Their streets provide an intimate scale and a minimum of traffic and noise. There is variety too; each house is done differently, and usually there is at least one hideous house to relieve the good taste. The green space is small; often it is only a fourteen-by-fourteen backyard with a lone sumac in the middle,

be made more attractive for the casual visitor or shopper as well as for the potential inhabitant. The city of Kalamazoo, Michigan has attempted to do this by providing green areas in the downtown district.<sup>219</sup> One final strength on which the city could capitalize is use of the specialty shop, a unique way to attract shoppers.<sup>220</sup>

#### D. Providing "Total Environment" Communities

A last suggestion drawn from our analysis of the literature is that some "total environment" communities should be provided for people who prefer such accommodations. The Marina Towers complex has already been mentioned as a total living environment with a downtown area.<sup>221</sup>

In a recent popular article it was suggested that American people are increasingly demanding "to purchase an entire environment along with their home. Thus, creation of an esthetically, socially, and environmentally attractive comprehensive plan is critical to any new city's success."<sup>222</sup>

One of the newest of the "total environment" communities is Sunriver, a housing development in Oregon which is described as a "pollution-free Paradise." The area—5,500 acres—has been developed for single family dwellings, condominiums and guest cabins, thus providing the choice in housing previously discussed. Families who live there seemed pleased and some declared that the environment was an enrichment for family life. The many and varied activities—"golf, tennis,

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but even this ignoble weed seems to give more pleasure to people than acres of abstract greensward.

Is there not a moral here for redevelopers? Obviously, fixed-up town houses can satisfy only a small fraction of the market, but the fact that people are often willing to pay quite high prices for them would suggest that they meet some human needs worthy of more attention from architects and redevelopers.

Whyte, *supra* note 203, at 46.

219. The city "has ripped up completely two blocks of paving and replaced the asphalt with lawns, walks, and flower gardens to give human beings a sense of leisure and relief from the mechanical jostling that makes most city shoppers wish they were home." E. HIGBEE, *supra* note 43, at 69.

220. Whyte, in his introduction to *The Exploding Metropolis*, suggested that it is the special store for which the city "has always been congenial." Whyte, *Introduction*, in *THE EXPLODING METROPOLIS* 10 (Editors of *Fortune* eds. 1957).

Later in the book he refers to Jane Jacobs' emphasis on the importance of the street and the specialty store. The little candy stores, the corner delicatessens, she pointed out, are social centers. They are the institutions that people create themselves. Whyte, *supra* note 203, at 43. Such important institutions have been destroyed in most urban projects, leaving the people without some of their most meaningful social centers.

221. See note 217 *supra*.

222. Downs, *Private Investment and the Public Weal*, *SATURDAY REV.*, May 15, 1971, at 25.

boating, skiing, fishing, ice skating, swimming, hunting, exploring, horseback riding, hiking, mountain climbing, sky diving, flying saddle trips"—provide entertainment for all ages.<sup>223</sup>

Another of the "new communities" is Columbia, Maryland. This community has not attracted both the rich and the poor, but it is racially mixed and has some housing for people with moderate incomes. It is too early to evaluate this new type of community, but at least it offers an alternative way of life. The town is organized into neighborhoods built around an elementary school, outdoor recreation facilities, a "convenience" store and a neighborhood center.<sup>224</sup> Three or four of the neighborhoods combine to form a village. The idea of a planned "community" appears to be more and more popular with Americans, and although we would not suggest that this way of life be forced upon people, it should be offered as an alternative for those who prefer such facilities, including the poor and the aged.

## VI. SOME IMPLICATIONS FOR RESEARCH

"Our most crying need at present is for imaginative research on a massive scale."<sup>225</sup> This quotation clearly presents the current status of information in the area of desired housing and amenities. The cry for additional research is heard from almost every writer in the field.<sup>226</sup>

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223. Connelly, *The Healthiest New Town in America*, AM. HOME, Jan. 1971, at 76.

224. Von Eckardt, *A Fresh Scene in the Clean Dream*, SATURDAY REV., May 15, 1971, at 21.

Lansing and his associates, in studying ten planned communities of different degrees of planning, found "a general tendency for degree of planning to be associated with high overall ratings." J. LANSING, R. MARANS & R. ZEHNER, *PLANNED RESIDENTIAL ENVIRONMENTS* 45 (1970). But they are quick to point out that these findings are not statistically significant. Such studies are new—as are most of the planned communities which are the subjects—and therefore cannot be adequately evaluated for some time.

225. E. HALL, *supra* note 193, at 161.

226. One of the best studies of preferences in living accommodations, the North Carolina study by Wilson, was only a beginning, as Wilson noted when he stated that, "Some of the most fascinating work—exploring the needs and aspirations of those who were not heard from in this chapter—still lies ahead." Wilson, *Livability of the City: Attitudes and Urban Development*, in *URBAN GROWTH DYNAMICS IN A REGIONAL CLUSTER OF CITIES* 398 (F. Chapin & S. Weiss eds. 1962). Another outstanding source of information—the work of Michelson—includes a statement from one of the researcher's correspondents who said that, "The frontier of action is moving much faster than the frontier of social science thinking." W. MICHELSON, *supra* note 192, at 198. Michelson did not suggest stopping action to allow research time to catch up, but he did state that, "Since understanding the effects of innovations depends in part on social research, there is no excuse for the frontier of social thought to be a yard removed from the frontier of action." *Id.* at 200. The need for additional sociological research has also been emphasized by Keller.

When physical planners design houses and streets, community centers and transportation networks, neighborhood units and open spaces, they make many assumptions—most of them untested—about the ways in which people relate to one another,

what needs exist in different groups, which needs have priority, and how social life may be influenced by physical design. Ideally, the planners should be able to draw on established sociological information on each of these points, but such knowledge is not, unfortunately, readily at hand.

S. KELLER, *supra* note 77, at 4.

Margaret Mead has discussed the increasing importance of research in designing environments in which humans are expected to live. She emphasized the importance of involving people in the decisions which affect them—for example, housewives should be involved in the planning of grocery stores, nurses and doctors in the planning of hospitals, members in the planning of churches. She explains the importance of such participation in her contrast of the past and the present.

In the past no one decreed what the slope of a stair would be or that a hallway should be large enough to get a stretcher or a coffin out of a second story bedroom. Long use had established a style which accommodated the customs of the people who were born and reared and died within the same walls. But when planning has to be as new and as innovative as ours today, then there must be provision not only for the best research in all the relevant disciplines, including the human sciences as well as engineering, architecture and economics, but also for the actual living trial participation of those for whom the new cities and new buildings are being built.

*Hearings on the Quality of Urban Life Before the Ad Hoc Subcomm. on Urban Growth, supra* note 122, at 425.

Gans has also emphasized the importance of research to discover the needs and desires of people—the consumers in housing. He hypothesizes that “most effects are based on prior predispositions.” Therefore, if the planner wants to influence behavior, he must consider the predispositions of the people for whom he is planning. He argues that when a planner’s ideas have been accepted (such as curved streets in suburban areas) it was because the idea fit an already existing desire of the persons for whom it was designed. Some of the planners’ designs have failed because they did not take into account these predispositions. For example, planners have pushed high-density single-family housing. Such housing so far has appealed only to the upper-middle classes. Gans suggests that it is probably possible to design such housing so that it would appeal to other social classes but one must first discover their predispositions. He also suggests that we could probably design row houses to appeal to more people. “If the consumer research is done, and its conclusions are allowed to influence row-house design, some of the problems of urban sprawl will be closer to solution than they are at present.” H. GANS, *supra* note 208, at 21-22. And with the increasing demand for housing and the decreasing amount of space which can be devoted to housing, it will become increasingly necessary for more people to live in areas of high density.

The need for research has been succinctly summarized by Michelson:

While recent studies have begun to investigate the relationship of man to his environment more carefully than in the past, the literature in this area is fragmented and unsystematic; its primary importance has been the suggestion of social variables thought to be related to the urban environment.

One of the recent studies which he mentions is the Wilson study, in which an attempt was made to measure attitudes toward the city, housing, neighborhood, and amenities of samples of residents of Durham and Greensboro, North Carolina. His study was well designed but its obvious limitation is the sample size and the location of the respondents, which make it unreasonable for us to generalize to other people. Michelson, *An Empirical Analysis of Urban Environmental Preferences*, in *INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT* 502 (L. Bourne ed. 1971).

Keller reviewed hundreds of studies in research for her book, and she concluded that “not one is sufficiently comprehensive in scope, design, or locale to serve as an absolutely reliable source of data or model of procedure.” Small samples, ambiguous terms, and



The basic problem is that we simply do not know what people want and desire; nor do we know what types of housing situations are most conducive to certain types of behavior. We know that different individuals respond differently to amenities.<sup>227</sup>

One investigator has listed what he considers to be the five major items which must be considered simultaneously if we wish to build a model of residential mobility: "(1) location of area, (2) site characteristics of residences and neighborhood, (3) status of housing—*e.g.*, rental versus ownership, (4) class and value of housing, and (5) the characteristics of the resident such as income, size of family, monetary and marital status."<sup>228</sup> Indications are that this list is not complete. Other cultural factors such as race, religion and ethnic background should be considered as well as possibly education and occupation. At any rate, the task of measuring and studying these variables will not be an easy one. With the understanding that all of the areas for research discussed below should be studied in terms of the independent variables of age, social status, stage in life cycle, sex, education, nature of family, life style, value orientations, occupation, race, ethnic and religious background and perhaps others, we turn to a brief discussion of some of the major areas in which research is needed.

### *A. Areas of Research*

What type of house do people prefer? To what extent are their needs and desires being met by available housing and amenities, or are forced "choices" being made because of the lack of desirable alternatives? As the famous sociologist Louis Wirth said, "Surely we cannot proceed far in the analysis of housing as a social problem until we know more than we now do about the nature and the extent to which people's desires and expectations in respect to housing are realized or frustrated."<sup>229</sup> Wirth mentioned specifically frustration of the desire for privacy. Also, what types of adjustments do family members have

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limitation of variables studies are only some of the major problems. S. KELLER, *supra* note 77, at 15.

227. Atkisson and Robinson have suggested that we could aid planning and management of the environment if we could construct "response curves" indicating how human reactions differ to certain amenities. "However, we have found little hard data which could be used to construct such curves at this time. The task of developing scales of human response to environmental stimuli seems to us to be a more important and challenging one." Atkisson & Robinson, *Amenity Resources for Urban Living*, in *THE QUALITY OF THE URBAN ENVIRONMENT* 186 (H. Perloff ed. 1969).

228. Boyce, *Residential Mobility and Its Implications for Urban Spatial Change*, in *INTERNAL STRUCTURE OF THE CITY: READINGS ON SPACE AND ENVIRONMENT* 343 (L. Bourne ed. 1971).

229. Wirth, *Housing as a Field of Sociological Research*, in *LOUIS WIRTH ON CITIES AND SOCIAL LIFE* 294 (A. Reiss ed. 1964).

to make as age changes?<sup>230</sup> We must not stop our research at a discovery of what type of housing people have, for that might not represent their real desires.<sup>231</sup>

In addition to housing research, there are numerous related questions that should be investigated. What type of neighborhood do people want? Is neighboring really declining, and if so, is this desirable and is it by real choice? With regard to neighborhood ties, some interesting questions have been raised:

How natural are these ties? Can we do without them? Will the children of tomorrow miss the local neighborhood any more than we miss the villages of our grandparents? To help clarify this issue, we clearly need more information on the habits, manners, and morals of individuals and groups in villages and cities, in the old central districts and the newer suburbs, in settlements inhabited by people ever on the move and in those of settled, stable populations.

. . . At this point, both among protagonists and opponents of the neighborhood ideal, the plea ultimately is for more knowledge, for more precise answers so that future policy may be more soundly based.<sup>232</sup>

What facilities do people want in their neighborhoods? How close do they wish to live to grocery stores, churches, recreational areas, businesses? With regard to the latter, are some people really interested in living in shopping centers or in the downtown area, given certain provisions for desired amenities?<sup>233</sup> How important is the site plan on human behavior?<sup>234</sup>

Zoning laws place restrictions on the size of front and side yards; yet we know nothing about human needs and desires in this area. We discussed man's possible need for space, but concluded that our "conclusions" in this area were only hypotheses.<sup>235</sup> The possible need for

230. *Id.* at 297.

231. "Fruitful housing research . . . might be devoted to the discovery of the housing ambitions of people and the manner in which and the degree to which these ambitions are frustrated among different economic and social groups in our society." *Id.* at 294.

232. S. KELLER, *supra* note 77, at 8.

233. See notes 213-14 and accompanying text *supra*.

234. In discussing the increasing number of homes which are being built and which must be built in the future, Gutman raised the question of the importance of site plan. "It is difficult to accept the conclusion, that it makes no difference how these houses are built, where they are located, and how they are arranged in space. Surely, there must be better and worse methods of planning a site, and hopefully the social sciences will be able to guide us in deciding what these methods are." Gutman, *Site Planning and Social Behavior*, 22 J. Soc. ISSUES, Oct. 1966, at 114.

235. "Is there a clearly demonstrable and measurable need, or demand, for open space in any or all of its forms?" Clawson, *Open (Uncovered) Space as a New Urban*

space is closely intertwined with the effects of density.<sup>236</sup> We have already noted that crowding per se is not necessarily harmful to humans.<sup>237</sup>

Another unanswered question with regard to man's needs in his environment is how much exposure he needs to the outside world. When the windowless schools were built there were cries that children would develop claustrophobia, but "it is abundantly clear that examples of claustrophobia, in the traditional clinical sense of the word, are extremely rare or non-existent. . . . This raises the interesting question of whether humans do indeed have an instinctive need for visual access to the outside."<sup>238</sup> Perhaps these and many other voids in research in this area are explained by the many difficulties in research design.

### B. Problems in Research Design

The basic problem in the research conducted in the field of housing and planning is that the research is not cumulative. Because of the differences in techniques and definitions, studies are not comparable:

Since carefully designed, systematic studies of neighboring are virtually nonexistent, research findings often appear to be contradictory when they may only be reflecting differing definitions of terms or research procedures. In view of these limitations, the empirical find-

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*Resource*, in *THE QUALITY OF THE URBAN ENVIRONMENT* 143 (H. Perloff ed. 1969). Michelson has suggested that sociologists should provide us with the needed research on how people react to various kinds of space. "Social scientists can aid the development of housing by identifying the spatial separations that current research shows most easily accommodate various subsectors of the population. They can and should study the success with which physically different homes and neighborhoods accommodate different social groups." W. MICHELSON, *supra* note 192, at 202.

236. Sommer has indicated that in studies of humans we need to differentiate between "effects of confinement and effects of crowding." Sommer, *Man's Proximate Environment*, 22 J. Soc. ISSUES, Oct. 1966, at 59.

237. Parr has suggested some specific areas which should be researched as we attempt to discover the potentially harmful effects of the environment:

Are covered arcades superior to open sidewalks in warding off claustrophobic effects in manmade canyons? How do the proportions and dimensions of the vista, its unobstructed distance, width and height, relate to the psychosomatic fatigue which sets in very quickly in some locations, and is never felt before genuine physical weariness is reached in other settings? Are there forms or obstructions of space that promote irritability and social stress? We are fairly certain that there are those that tend to induce peace and calm, but are almost totally ignorant of conditions at the other end of the spectrum.

. . . It is high time to insist that the behavior of men, and the needs of the human mind, be also made the first objects of study in planning the environments in which our minds must function and our lives will be contained.

Parr, *Psychological Aspects of Urbanology*, 22 J. Soc. ISSUES, Oct. 1966, at 45.

238. Sommer, *supra* note 236, at 66.

ings presented here are suggestive rather than firmly established. Future studies should hold constant social traditions, social class, and phase of neighboring so that the role of such factors as sex, age, personality, and family cycle may be properly assessed. All of these factors have been shown to be related to neighboring in some manner although to which of its several dimensions or in what measure is not yet clear.<sup>239</sup>

Perhaps the most serious of these problems is definition, for unless researchers can agree on the definitions of the variables they are measuring, the problem of measurement cannot be solved. Certainly one cannot "cumulate" results when varied definitions of the concept are used. Research thus cannot build, and instead of numerous studies measuring the same concepts in the same way and giving us a large picture of the variables in which we are interested, we have a number of fragmented studies none of which are comparable.

Another serious problem of research in the area of housing needs and desires is the problem of measurement. For example, how does one measure satisfaction with the neighborhood? Some investigators have used the measure of a person's expressed desire to remain in the area or move to another neighborhood. But that measure overlooks the other variables which might be associated with a decision to move or stay—such as economic or status reasons.<sup>240</sup> Still another problem in measuring satisfaction in the area of housing and its amenities is to distinguish between "an attitude of satisfaction with city and neighborhood and an attitude of general satisfaction with life as a whole."<sup>241</sup>

These criticisms may be applied to survey research in general. This type of research often fails to result in refined answers. Perhaps a better approach would be a semiprojective game approach—intensive interviews in which respondents are not asked to rate some element on a three or five point scale as in survey research, but are asked questions which force them to choose the preferred among a small (perhaps only two) number of choices.<sup>242</sup>

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239. S. KELLER, *supra* note 77, at 72.

240. *Id.* at 110-11. Wilson recognized this problem, and in addition to asking a specific question concerning desire to move, he asked his subjects to rank their neighborhoods with three photographs which he showed them of different types of neighborhoods, and he also asked direct questions about their likes and dislikes. Wilson, *supra* note 226. The problem with the latter is that such direct questions often elicit answers which people might not otherwise give.

241. Wilson, *supra* note 226, at 366.

242. See W. MICHELSON, *MAN AND HIS URBAN ENVIRONMENT: A SOCIOLOGICAL APPROACH* (1970). Sommer has also been concerned with the problems of traditional questionnaires and survey approaches. His suggestion follows:

Questionnaires or survey approaches to the study of environmental influences are

In addition to the use of projective and semiprojective measuring devices, we might also suggest that research in the area of man's relationship to his environment would be facilitated by "before and after" studies. As has been pointed out,

[s]ociologists should conduct before and after studies of people who move and thus try to ascertain what changes occur in their behavior and whether these changes are intended or unintended.

Such an analysis would provide the sociologist and the planner with considerable data on the structure and functioning of the community. If changes can be attributed to the community, and especially its physical aspects, it would suggest that the planner can affect behavior through direct changes in the community plan; if changes are primarily the result of predispositions, policy aimed at behavior change would have to affect the formation of predispositions.<sup>243</sup>

The "before and after" studies may be the ideal way to study man and his relationship to his environment. This approach would enable one to analyze, for example, the effect that a new type of housing arrangement had on one's feeling of privacy—assuming one could hold other variables constant.<sup>244</sup>

Over thirty years ago the great sociologist Louis Wirth challenged sociologists to develop the techniques necessary for adequate research in the field of housing.<sup>245</sup> Unfortunately sociologists did not fully accept the spirit of Wirth's challenge. More sophisticated research tools are available today than were available when Wirth wrote about cities,

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limited by the fact that the environment tends to affect people from beyond the focus of awareness. Except in rare instances, such as standing awestruck in a grove of majestic redwoods or alongside the eternal calendar of the Grand Canyon, people do not articulate in any organized way how their environment affects them. The use of instruments such as Osgoods' Semantic Differential in exploring the connotations of environment is warranted.

Sommer, *supra* note 236, at 67.

243. H. GANS, *supra* note 208, at 13-14.

244. Michelson also notes the possibility of assuming the "before" and measuring the "after," less than the ideal method. W. MICHELSON, *supra* note 192, at 207-08 (1970).

245. Wirth has written:

In the case of housing we confront, as sociologists, a genuine problem of social concern which should challenge us to mobilize our knowledge and to perfect our methods of analysis. We will not make a contribution of value to society if we merely mechanically apply the conventional concepts of our discipline to the problem. I suggest we look at the problem and then see what we have in existing knowledge and methods of approach that appear relevant to gaining a better understanding of it, noting to what extent our knowledge and methods are inadequate, and perfect the knowledge and methods so as to make them more adequate. In the long run this might make us more useful in the world and at the same time give us a more realistic science.

Wirth, *supra* note 229, at 303.

but we have not applied those tools systematically to a study of man's relationship to his environment. Hopefully, the recent emphasis on the importance of the environment will stimulate the needed research in this area. The challenge today has been thus voiced:

The environmental disciplines are in an era when they are newly challenged by broad social concern and offered the prospect of increased interest, support, and prestige. They stand somewhat split between science and design, suggestive of C. P. Snow's two cultures. Perhaps the social and behavioral sciences can help bridge the gap by injecting new intellectual content to relate both science and design to human needs.<sup>246</sup>

The real question is whether social scientists will accept the challenge and if they do whether city planners will incorporate their findings into their plans for the future.

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246. Kates, *Stimulus and Symbol: The View from the Bridge*, 22 J. SOC. ISSUES, Oct. 1966, at 26.