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Neighborhood Evaluations by City and Suburban Children

Willem van Vliet--

A consistent finding in research on housing choice and residential satisfaction has been the preference of parents for suburbs as child-rearing environments. Children themselves though, have rarely been asked about different types of neighborhoods as places to live. The present study is an attempt to address this gap. This article discusses some reasons for the paucity of child-oriented research and develops from the literature a picture of children's own perceptions of city and suburban neighborhoods. The results of an empirical study are then reported. A comparison of the neighborhood evaluations of 148 city and suburban teenagers suggests that both city and suburban children recognize positive as well as negative aspects of their neighborhoods; however, city and suburban neighborhoods do appear to differ in the particular characteristics that are viewed as being positive or negative. Furthermore, using detailed information on each of the individual home environments, differences in children's neighborhood evaluations are found to correspond with measured differences in specific neighborhood features such as child density, number of recreational opportunities, and presence of other selected land uses. Implications for planning and recommendations for further research are discussed.

A consistent finding in research on housing choice and residential satisfaction has been the preference for suburban settings as child-rearing environments (Bell 1968, Fischer 1976). The common rationales for this choice are the relative safety of suburban neighborhoods with respect to traffic, the provision of play space, the proximity to good schools, and the lesser likelihood of association with "undesirable peers." The preference for suburbia has been further reinforced by the widespread aspiration for a single family dwelling, a housing type typically found in the suburbs and believed by many to facilitate a family-centered lifestyle (Michelson 1977).

To the extent that researchers have inquired about the suitability of environments specifically for children, they have commonly done so by asking mothers

about their satisfaction with traffic safety, the number and type of play facilities, and the possibility of supervising their children in the vicinity of the home. Children themselves have rarely been asked what they think of their environments. Nevertheless, there are some indications in the literature that there may be significant discrepancies between the environmental perceptions of mothers and children (Hart 1979) and between those of planning officials and children (Lynch 1977). Considering also that children are more susceptible than adults to influences of environmental conditions (Booth and Johnson 1975; Gove et al. 1979), it seems important to know more about how children experience their residential environments.

Is suburbia indeed a child's haven? How do city children feel about their neighborhoods? Studies directed at finding answers to these questions are conspicuous by their absence. Some reasons for the dearth of such child-oriented research will be suggested below. Following this, the article will draw on a number of "inside" studies to piece together elements of the picture which children hold of "the" city and "the" suburb. This picture will then be examined empirically using information provided by children aged fourteen to sixteen from typical city and sub-

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urban neighborhoods in Toronto. Results of the analysis point out that the city and suburban children have clearly different perceptions of their neighborhoods and that these different perceptions correspond with objectively measured environmental differences between the city and suburban neighborhoods. Furthermore, child density appears to play a primary role in children's neighborhood evaluations. The article concludes with a discussion of implications for planning and further study of children's residential environments.

The paucity of pedocentric research

There are at least three reasons why so little is known about children's perceptions of their neighborhoods. To begin with, children are simply not readily available for talking with interviewers and filling out questionnaires. Most of the time they are studying in school, playing outdoors, doing homework, or asleep (Medrich 1977, Lynch 1977). A further methodological difficulty arises because the research instruments that are customarily employed in studies of adults generally are not suitable for use with children. Consequently, instruments may need to be adjusted and retested with respect to the validity of children's responses. Second, adults do not seem convinced of the appropriateness of children's input into environmental planning and design; nor do they seem to have great confidence in children's capacity to provide useful information, even in such restricted settings as playgrounds (see, e.g., Ackermans 1970, Spivack 1974). Accordingly, children's views on what constitutes a desirable living environment—and what does not—have not, until recently, been a research focus of environmentally interested social scientists and behaviorally oriented design professionals. Finally, a third reason for lack of knowledge concerning children's environmental experiences is that research on this topic is firmly rooted in the behavioral tradition. By and large, data gathering has typically occurred through unobtrusive observation of children's activities in the immediate environment of the home (Aiello et al. 1974; Björklid-Chu 1977; Coates and Sanoff 1972; Hole 1966; White 1970). The studies in ecological psychology of children in well-defined public settings conducted by Roger Barker and his colleagues have similarly been based on observational techniques (Barker and Wright 1951, 1955; Gump et al. 1963).

Studies of this type are valuable in outlining *objective* profiles of children's activity patterns, but they are quite limited as a basis for making statements about the *subjective* qualities of children's environmental experiences. Although some have argued that the use made of places and artifacts can be taken as an indication of their desirability (Chapin 1971),

environmental features can be valued without being "used;" a tower may serve as a point of orientation, for example, and a fence may protect children from traffic. Furthermore, some places, such as skating rinks and baseball fields, are used on a seasonal basis only. In addition, the attraction of settings, no doubt, decreases beyond a certain optimal number of users (Wicker and McGrath 1972, Carlstein 1975). Finally, and most importantly, behaviorally based indicators of environmental quality do not take into account constraints on alternative preferential behaviors. If, for example, teenagers play football in a toddler's enclosure (White 1970, p. 374), this probably has less to do with their preference for this place as a football field than with the absence of more suitable opportunities to engage in that activity.

Fortunately, researchers have not always inferred the child's view of the environment from parents' or teachers' reports or from their own observational records. Below follows a sketch of city and suburban life as it has been described directly to investigators by children themselves.

Children's views of city environments

Social workers and others concerned with the plight of the working class have provided us with detailed accounts of the squalid conditions under which many city children lived at the turn of the century (Booth 1896, Spargo 1906). Since that time, legislation and social and physical planning have eliminated—or at least ameliorated—much of the misery. However, the general picture of the city remains one of a place that deprives children of chances for healthy development (Beisel 1974, Wilson and Herbert 1978). What do the children themselves say?

Fine (1967) talked with American boys about their neighborhood in a large city. Most apparent were their complaints about dirt, noise, and danger from traffic and "strange" people. Many of these boys had delinquency records and came from lower-class families. It is likely that their perceptions of the environment reflected the social structure of their neighborhood as much as its physical characteristics. Nonetheless, "normal" children living in a low-income neighborhood in Baltimore expressed similar views. Boys and girls, eight to fourteen years old, toured their neighborhood with fieldworkers, showing them where they would do what and telling them what they liked and disliked about their environment. They, too, remarked negatively on dirt, broken glass, and the presence of drunks and derelicts (Gray and Brower 1977). Ranking first among the features attracting them were large open spaces for running and ball play. This need for open space was also found in a British study aimed at finding out how the environment encouraged or inhibited children's play

activities. In a comparison of Southward Borough in London and Stevenage new town, almost 1800 children (about equally divided between the two) were asked about their favorite activities. City boys mentioned activities requiring large open spaces, such as playing football, much more frequently than did their Stevenage counterparts (Holme and Massie 1970, Appendix p. 260).

In another British study, a content analysis was made of essays written by children (aged six to eleven, $N = 1636$) in response to the question, "Where would you like to play?" Children coming from more densely built-up boroughs in London more often mentioned elements of the natural environment such as grass, flowers, animals, parks, and so on (Hole 1966). A recent UNESCO-study reports comparable evaluations by Polish children of inner-city areas in Cracow and Warsaw. They found their environments to be noisy, dirty, and dangerous because of traffic and "hooligans." Nevertheless, they also described their neighborhoods as interesting (Lynch 1977, p. 38). When asked about the best place to live, those preferring a suburban district gave reasons such as greenery, fresh air, and lack of traffic. Those preferring the city did so for its proximity to places, entertainment, and convenient shopping (Lynch 1977).

This brief overview indicates that city children note both negative and positive aspects of their environment: they tend to desire, for example, the open space, cleanliness, safety, and quiet more typically found in suburbs, but they appreciate their easy access to a variety of places. Consider what suburban children say about their environments.

Children's views of suburban environments

Numerous survey studies have shown that many parents choose to live in a suburb because it seems a good and safe place to raise children (Bell 1968, Michelson 1967). How do children themselves feel about living in a suburb? In this regard, age seems to be an important factor. Gans (1967) asked suburban children in grades six through twelve to write essays about how they liked and disliked the place they lived. Liking of the suburb declined rather dramatically with age (see Table 1).

Table 1. Liking for Levittown, New Jersey suburb by age

| Age group | Percent liking Levittown |
|-----------|--------------------------|
| adults | 85 |
| grade 6 | 68 |
| grade 8 | 45 |
| grade 10 | 37 |
| grade 12 | 39 |

Source: Tabulated from Gans (1967, p. 206).

Gans (1967) writes that the children's likes and dislikes reflect the state of recreational and social opportunities. The absence of neighborhood stores, coffee-houses, workshops, bowling alleys, and transportation was criticized by boys and girls alike. This lack of opportunities and meeting places may give rise to relative social isolation. There is, for example, the case of the Toronto boy who was so desperate for something to do that every weekend he would walk several miles to a hospital to look all day at the aquarium and watch the patients come and go (Jones 1978). While this may not be the typical behavior pattern of all suburban children, the lack of something to do is evident from many studies. The Polish suburban children in the UNESCO study wanted better access to the city center (Lynch 1977, p. 54), and the suburban children in Salta, Argentina, and Melbourne constantly spoke of their boredom (*ibid.*, pp. 24, 118). In his account of children in the city, Colin Ward (1978, p. 72) writes about the suburb as the place of "tedium and monotony where nothing happens," and Popenoe (1977) makes similar observations about the feelings of adolescents in the suburb of Levittown, Pennsylvania. One author, in an ethnographic study of what he calls "suburban youth in cultural crisis," describes the "nothing-to-do syndrome" characterized by cynicism, despair, cruising, vandalism, and an inability to challenge the environment (Larkin 1979). Suburban children in a Toronto study, when asked where they would go if they could visit anywhere, indicated places in the downtown area as the most attractive places (Durlak et al. 1976).

In spite of the reservations which children clearly have regarding the suburban environment, they also recognize a number of positive points. Data presented by Michelson (1977) suggest that suburban children favorably judge the social aspects of their environment. Adolescents in Levittown, New Jersey, spoke quite positively of the friendliness of their community (Gans 1967). This stands in sharp contrast to the negative evaluations of the social environment by city children. Furthermore, children not living in the city seem to enjoy their relatively easy access to natural environments where they find better opportunities for building forts and making tree houses, and where they can find hideouts and explore woods, sand piles, river banks, and quarries (Hart 1979; Payne and Jones 1977; Otterstadt 1962).

Analysis of neighborhood perceptions

The above review of the literature on children's environmental perceptions makes clear that it would be too simplistic to characterize city and suburban neighborhoods as being either good or bad for children. City and suburban children discern both negative and positive aspects in their environments. This

is, in part, a function of personal characteristics (such as the child's age and sex) and familial characteristics (such as the parents' socioeconomic status and child-rearing values). It is, however, influences of features of the residential environment which are of more interest here, as these are more readily amenable to manipulations by planners and designers concerned with improving the quality of children's environmental experiences.

What follows reports on a study comparing the environmental perceptions of children living in city and suburban neighborhoods. The neighborhoods differed significantly with respect to land use patterns and child densities. The research background and methodology are described first and the environmental differences between the city and suburban neighborhoods are illustrated. Following this, the neighborhood evaluations of children from these two different types of environments are discussed. Finally, some implications for the planning of residential areas, as well as some recommendations for further research, are presented.

Research background

Data were collected from 148 high school students in metropolitan Toronto. The students, between fourteen and sixteen years old, attended schools which were selected because they were located in "typical" city and suburban areas.¹ During regular class hours each student filled out a questionnaire in which he was asked, among other things, to evaluate his neighborhood. The responses, which were solicited by a mixture of open- and closed-ended questions, were supplemented with information on the students' home environments. Specifically, the child density was determined by dividing the square land area of the census tract in which their home was located into the number of fifteen to seventeen year old children living in that census tract.² Furthermore, an inventory was made of the land uses represented in each neighborhood by checking each of forty-five different land uses on its presence or absence within a radius of 400 meters around the home. These child density and land-use data were obtained for the environment of each individual child. Inspection of Tables 2 and 3 shows that the city and suburban children lived in environments which differed in significant ways with respect to both child density and variety of land uses. As compared to the city neighborhoods, the suburban neighborhoods were characterized by low child densities and few non-residential land uses.

While recognizing the existence of environmental differences within the city and suburban neighborhood types, the much greater differences between them seem to justify a simple city-suburb dichotomy. As evidenced by the findings presented below, this

Table 2. Variety of land uses in city and suburban neighborhoods

| | In the child's home environment | | | N |
|--------|---------------------------------|-----------------------------|---------------------------|------|
| | Percent low ¹ | Percent medium ² | Percent high ³ | |
| City | 9 | 27 | 64 | (64) |
| Suburb | 51 | 36 | 13 | (84) |

1. Less than nine different land uses in a 400 meter radius around the child's home

2. Between ten and fourteen different land uses in a 400 meter radius around the child's home

3. More than fifteen different land uses in a 400 meter radius around the child's home

$\chi^2 = 46.9$
df = 2
p < .0001

analytically more economical reduction of categories in many instances clearly differentiated children's neighborhood perceptions. At times, however, environmental characteristics more specific than the city or suburb connotations—and therefore more meaningful to planners and designers—proved to be more effective. The discussion will also provide examples of some such specific environmental influences.

Children's neighborhood perceptions

The analyses of children's neighborhood perceptions are based on responses to: (1) a series of forced choices between polarly opposed adjectives describing the neighborhood; (2) open-ended questions, asking the children what they liked best and what they liked least in the neighborhood; and (3) open-ended questions inquiring about places in the neighborhood and the wider urban environment where the children were afraid to go.

According to the literature, one would expect city children to mention noise, dirt, lack of open space, and unfriendly people relatively often as disliked features of their neighborhoods, whereas suburban children would mention lack of something to do and poor accessibility. Among the liked features, one should find easy access to places cited by the city children, and aspects such as greenery, quiet, and lack of traffic

Table 3. Child densities in city and suburban neighborhoods (fifteen to seventeen year olds)

| | Number of children in the child's home environment | | | N |
|--------|--|-----------------------------|---------------------------|------|
| | Percent low ¹ | Percent medium ² | Percent high ³ | |
| City | 16 | 27 | 58 | (64) |
| Suburb | 75 | 25 | — | (84) |

1. Between 17 and 73 children per square kilometer (KM²) in the census tract in which the child lives.

2. Between 108 and 113 children per KM² in the census tract in which the child lives.

3. Between 131 and 1051 children per KM² in the census tract in which the child lives.

$\chi^2 = 74.6$
df = 2
p < .0001

Table 4. Children's evaluation of their neighborhood by residential location

| Evaluation | City | | Suburb | | χ^2 1 | df | Significance level |
|--------------|---------|------|---------|------|------------|----|--------------------|
| | Percent | N | Percent | N | | | |
| Safe | 1 | (60) | 28 | (70) | 17.4 | 1 | .0001 |
| Looks nice | 73 | (62) | 96 | (70) | 11.9 | 1 | .0005 |
| Friendly | 81 | (59) | 96 | (74) | 5.9 | 1 | .01 |
| Quiet | 64 | (61) | 85 | (65) | 6.5 | 1 | .01 |
| Lot to do | 53 | (64) | 32 | (71) | 5.1 | 1 | .02 |
| Boring | 43 | (58) | 61 | (67) | 3.4 | 1 | .06 |
| All the same | 39 | (62) | 58 | (67) | 3.5 | 1 | .06 |
| Slow | 42 | (53) | 61 | (54) | 3.4 | 1 | .06 |

1. Yates' corrected χ^2

listed more often by suburban children. Generally, these expectations are upheld by the data. The suburban children said more frequently that the neighborhood was new, quiet, safe, slow, and friendly, and that it looked nice. On the other hand, they more often found it boring and lacking in things to do (see Table 4).

Spontaneous answers generated by questions about what children liked and what they disliked in their neighborhoods showed a city-suburban difference that the checklist of adjectives had not brought out. The city children clearly more often enjoyed the company of friends in the neighborhood. Indeed, this finding emerged as the most significant city-suburban difference in the responses to the open-ended questions. Furthermore, children complained significantly less often about a lack of friends as the actual number of their friends increased. These perceptions concerning peer relations are, as will be shown later, completely in line with objective indices on the availability of children with whom to become friends.

The other answers to the open-ended questions generally confirmed the expectations. Suburban children, for example, described their neighborhood, more often as boring and safe, and city children more often referred to unfriendly people, noise, and dirt as disliked neighborhood features. The city-suburban differences come into better relief in a comparison of the ranking of the categorized answers (see Tables 5 and 6). Accessibility of places and people seemed important to city and suburban children alike. The city children though, more often listed aspects of good

access as liked features, whereas suburban children more often mentioned poor access as a disliked feature. Also, city and suburban children mentioned accessibility with respect to different kinds of places. As compared to the suburban children, the city children cited better access to shops, community centers, cinemas, and libraries, but they were less satisfied with their access to parks and outdoor recreational facilities. Furthermore, suburban children tended to stress qualitative aspects such as friendliness of the people, the quiet, and the scenic qualities of the neighborhood while for city children qualitative aspects like unfriendly people, noise, dirt, and traffic dominated.

Another dimension of children's environmental experiences concerns their fear of particular places. The children were asked whether there were places in their neighborhoods or elsewhere in Toronto where they were afraid to go; if their answers were in the affirmative, subsequent questions asked just what they were afraid of and where the object of their fear was located. More than 25 percent of the city children said that there were places in the neighborhood where they were afraid to go, as compared to 17 percent of the suburban children. At the urban level there is a more significant, but inverse relationship: 38 percent of the city children were afraid of some place or places in Toronto, as compared to 58 percent of the suburban children ($\chi^2 = 4.7$, 1 df, $p < .03$). This seems to suggest that city children were more often afraid inside their own neighborhoods, whereas the suburban children were more often afraid in the

Table 5. "What do you like best about your neighborhood?" by residential location

| Environmental feature | Percent city | Environmental feature | Percent suburb |
|-----------------------|--------------|-----------------------|----------------|
| Access (total) | 62 | Access (total) | 44 |
| Many friends | 33 | Friendly people | 25 |
| Friendly people | 25 | Quiet | 21 |
| Lot to do | 14 | Scenic qualities | 18 |
| N | (64) | | (84) |

Table 6. "What do you like least about your neighborhood?" by residential location

| Environmental feature | Percent city | Environmental feature | Percent suburb |
|-----------------------|--------------|-----------------------|----------------|
| Neighbors | 31 | No friends | 37 |
| Noise, dirt | 19 | Nothing to do | 16 |
| Crime | 11 | Neighbors | 10 |
| Traffic | 9 | Rules | 7 |
| N | (64) | | (84) |

wider urban environment. Why this is so is not quite clear from an examination of descriptions of the fearful places, since these were rarely specified in environmental terms. It may be that the suburban children had a stereotyped image of what is "out there in the city," which could increase their fears. Illustrative of this may be a handful of suburban children who were afraid of the so-called Yonge Street Strip, but had actually never been there themselves and thus based their fear on hearsay and other secondary information (cf. Garbarino 1973). On the other hand, it is likely that most city children had had more exposure to fearful places within their own neighborhoods and, through these experiences, had developed better coping skills and a more realistic appraisal of risks in the wider environment. Fears decreased significantly with age, and girls said more times that they were afraid than boys did. These results parallel earlier findings (Jersild and Holmes 1933) and may be explained largely by the learning of fears and ways to control them (Newson and Newson 1968; Hebb 1978).

Beyond the city-suburban dichotomy

In order to examine possible influences of more specific environmental characteristics on children's neighborhood perceptions, the individual responses were related to the child density and land use pattern of each neighborhood. The number of children per square land area, the variety of land uses, and various other environmental variables were measured at the interval level and used as criterion variables in one way analyses of variance where children's responses were dichotomously scored. The results, in part presented in Table 7, indicate rather strong effects of these global environmental characteristics. For example, the child density in neighborhoods of children who mentioned a lack of friends as a disliked neighborhood feature was significantly lower than in neighborhoods of children who did not mention this. Not surprisingly, children from low density suburban neighborhoods also reported, on the average, having a smaller number of friends. Furthermore, they also shared fewer of their activities with friends [$F(1,146) = 4.3, p < .04$] and more with the rest of the family [$F(1,146) = 8.3, p < .004$]—a behavior pattern

which accords with a family centered life style more typically found in traditional residential suburbs. These findings suggest that the relative proximity of children in the same age group may be an important factor in peer group interaction and friendship formation (van Vliet--1981).

Another interesting environmental influence concerned children's relationships with adults. Children more often said they knew a lot of people in the neighborhood if it contained a greater number of places for recreation and assembly such as playgrounds, sports buildings, skating rinks, poolhalls, auditoriums, churches, and so on. Knowing people in the neighborhood was also related to the presence of institutional land uses associated with community organization and service like community centers or fire and police stations. From these results it appears that opportunities for meeting people in the local environment may affect the number of people children say they know in their neighborhood.

Other perceptions of the neighborhood tended to reflect objective environmental characteristics as well. Children who mentioned noise and dirt as disliked aspects of their home environments lived in neighborhoods with more land uses related to industry and manufacturing. Those who described their neighborhoods as being "all the same" found significantly fewer different land uses in their home environments. Children who said that there was a lot to do in their neighborhoods lived in neighborhoods with a greater diversity of land uses and more indoor recreational opportunities. Furthermore, children who mentioned accessibility aspects of their neighborhoods as a positive feature lived, on the average, closer to a variety of activity sites (see Table 7).

Implications for planning and recommendations for future research

The principal point emerging from the analyses above concerns the correspondence found between children's perceptions of their neighborhoods and the objective absence or presence of particular environmental features, be they the number of children, the amount of noise or dirt, the variety of recreational opportunities, or the absence or presence of specific land uses. This finding is significant because it sug-

Table 7. Relations between children's perceptions of their neighborhood and objective environmental characteristics of that neighborhood

| Children's perceptions of their neighborhood* | Objective environmental characteristics present | Degrees of freedom | | F-value | significance level |
|---|---|--------------------|---------------|---------|--------------------|
| | | between groups | within groups | | |
| Miss friends | number of children per KM ² in census tract where child lives | 1 | 137 | 16.2 | .0001 |
| Lot to do | variety of land uses† | 1 | 133 | 8.1 | .005 |
| | number of indoor recreational opportunities† | 1 | 133 | 7.4 | .007 |
| Dirty and noisy | number of land uses related to industry and manufacturing† | 1 | 146 | 6.9 | .009 |
| All the same | variety of land uses† | 1 | 127 | 4.8 | .03 |
| Know a lot of people | number of institutional land uses associated with community organization and service† | 1 | 133 | 4.1 | .04 |
| | number of places for recreation and assembly† | 1 | 133 | 6.8 | .01 |
| Easy access | mean distance between the child's home and selected activity sites | 1 | 146 | 3.9 | .05 |

*Dichotomously scored and used in one way analyses of variance with the environmental variables as the criterion variables

†Within a 400 meter radius around the child's home

gests that planners and designers can enhance children's positive feelings about their neighborhoods, or at least decrease their negative feelings, by manipulation of the environment. While this is a valuable point of departure for creating residential environments that are responsive to children's needs, its elaboration into more specific planning and design implications should be placed in a more holistic perspective, recognizing the broad spectrum of relationships between children and their environments. Along these lines, children's knowledge of and activities in the environment were also examined in a study which seems to indicate that the development of children's affective, cognitive, and conative environmental experiences follows a pattern of differential spatial emancipation (van Vliet--1980). In this more encompassing context, it was possible to point out some implications having to do with, for example, integrating certain commercial and semi-public settings in residential areas, insuring minimum levels of child density, providing adequate transportation, and creating opportunities for children's own input into the planning and design process.

The literature, however, is replete with examples that justify caution in inferring implications derived from limited data sets. Accordingly, this study should not be viewed as an apposite basis from which to

arrive at firm conclusions regarding planning and design guidelines that may be generalized to other settings; the objective was to explore the role of particular environmental factors in children's lives. The analyses focused on city-suburban differences for the reason that should children's experiences in these extreme environmental types differ in minor ways only, one would expect to find even more minimal differences in comparisons involving less contrasting environments. Should, however, the city-suburban distinction be associated with clear differences in children's evaluations (as well as knowledge and use) of the environment, some indications should be provided of the environmental features which might fruitfully be studied in further investigations of children's experiences in a greater variety of neighborhood types.

The findings of this study provide evidence that the child density and land use pattern of the neighborhood may be influential factors in children's experiences. It would nonetheless be desirable to broaden the scope of inquiry by including consideration of non-physical dimensions and also by examining all dimensions in greater depth. It is not sufficient to know whether or not certain places, facilities, and services are present in a child's neighborhood. More refined measurement should also indicate

whether these places possess qualities which may or may not make them attractive to use, and whether there are financial, temporal, or other restrictions which constrain the accessibility of available settings to children. A potentially useful approach incorporating similar notions was recently developed by Hill and Alterman (1979); they proposed a scheme for the categorization and allocation of public land uses which is based on, among other things, behavioral information concerning specific user groups. Also, the classification of genotypes that has come out of ecological psychology should be helpful (Barker and Schoggen 1973). While this classification covers settings important to children at levels not ordinarily picked up by a land use inventory, its utility to designers and planners is somewhat hampered because the categories do not represent environmental variables which may be manipulated by these professionals. Further research along these lines is warranted in order to gain a better understanding of how children experience the environment as a simultaneous configuration of different dimensions complexly interrelated at various levels.

From the above follows the necessity to broaden and deepen also the measurement of children's environmental experiences. In the analyses reported in this article, the interest was in exploring whether children's neighborhood perceptions were patterned according to an empirically verified city-suburban distinction. A standardized research instrument appropriate for finding answers to questions of this sort cannot, however, capture the full meaning of children's environmental experiences. For example, this study does not tell us what it means to children to live in a city or a suburban environment when it comes to playing hide-and-seek—a universal game which, it has been suggested, plays an important role in the development of children's self-concept (Bruner and Sherwood 1976). Such qualitative information is better obtained with participant observation (Hart 1979, Fine and Glassner 1979) or child-guided field trips (Gray and Brower 1977) and forms a necessary supplement to the quantitative information reported here. In addition more must be learned about the long-term consequences of living in a particular environment. Do otherwise comparable city and suburban children grow up to have different personalities? Do they have different occupational careers? With the first post-war suburban generation coming of age and the continuing decentralization of the population, studies examining such developmental differences become increasingly possible and relevant.

Author's note

The research reported here is taken from a broader investigation of children's environmental experiences conducted for the author's doctoral dissertation in the Department of Sociology at University

of Toronto (Van Vliet--1980). Part of the data were collected for a pilot study for the Whole City Catalogue at the Child in the City Program, University of Toronto, and obtained with the cooperation of Martha Friendly and Fred Hill. William Michelson provided very thoughtful advice. The research was made possible by a fellowship awarded within the framework of a bilateral exchange program between Canada and The Netherlands. The support of the Social Sciences and Humanities Research Council and the Department of External Affairs of Canada is gratefully acknowledged.

Note

1. "Typical" in this context refers to features which typify "extreme" environments, characterized by polarly opposed values on variables such as distance to the city center, population density, and degree of separation between residential and non-residential land uses. This simplification does not negate the existing diversity of city and suburban neighborhoods; the aim was precisely to distill from a study of extreme neighborhood types those environmental features which might potentially affect children's experiences in less contrasting environments as well.
2. This is the age breakdown used by Statistics Canada.

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