RETHINKING THE CHILDREN'S HOME-RANGE CONCEPT

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Résumé

Le concept d'extension du chez-soi (home-range) pour les enfants connaît une histoire longue et obscure dans la psychologie de l'environnement. La littérature sur le sujet, qui s'étend sur 30 ans, est examinée pour arriver à une vision plus claire de ce qu'est l'extension du chez-soi et pour suggérer comment ce concept peut contribuer de façon revigorante aux connaissances sur l'accessibilité de l'enfant au voisinage.

Summary

The concept of children's "home-range" has had a long but obscure career in environmental psychology. Literature on the topic, spanning over thirty years, is reviewed in order to arrive at a clearer picture of what home-range is and to suggest how a reinvigorated home-range concept might contribute to our knowledge of children's access to their neighborhoods.

Introduction

For nearly twenty-five years environmental psychologists have attended to children's independent, voluntary encounters with the world centering on the dwelling. The sum of such encounters for any given child is often called "home-range." This concept has helped to reveal, primarily, the relationship between children and such places as sidewalks, backyards, neighborhood shops and vacant lots.

Yet the study of home-range has not advanced steadily or cumulatively; in fact, the most definitive statement on it (Moore & Young, 1978) is now more than fifteen years old. Home-range deserves renewed attention; it remains a viable means for understanding an important aspect of child-environment relations: children's access to their neighborhoods and their neighborhoods' accessibility to them. Here I re-examine the home-range concept by revisiting some basics: What is it? How, and why, have social scientists conceptualized it? What hidden potential might it contain?

The working definition to be used here is from Bussard, in which home-range is the distances from the dwelling that a child goes: "to what kinds of places, for what reasons, and under what circumstances" (Bussard, 1974, no page number).

Evolution of the children's home-range concept.

The first stirrings of attention to children's home-range appeared in speculative, social-critical writings. These had a humanistic concern for the changing environment and for its physical and cognitive accessibility to children, a concern well put by Carr and Lynch: "Exposure to diversity is sharply decreasing...especially for children" (Carr & Lynch, 1968, 1280). Thus these writings had not just a research question but an imperative: children's need -- indeed, their *right* -- to experience a variety of places and spaces in their neighborhoods. At that early stage such a name as "home range" had yet to be used, although the nascent concept can be discerned.

Jacobs (1961), for one, stridently criticized paternalistic, "off-the-street" play facilities as technocratic and harmful, while Carr and Lynch (1968), Mead (1972) and Parr (1967) addressed children's freedom to encounter on their own an array of settings not specifically intended for them. The emphasis of the last three cited was not so much on safety as on learning --even children's "living dangerously some of the time" (Mead, 1972, 248). Such was the state of new thinking then.

A second group of literature consisted of some notable empirical studies delineating the extent of neighborhood access and identifying factors that influence it. Yet these proceeded unconcertedly and largely uninformed by scholarly precedent. Moreover, apparently, there was still no sustained use of a concept with a name such as "children's home-range."

Hole and Miller's (1966) British studies, for example, found home-range an unavoidable research consideration: A crucial finding was that parents' restrictions confined most children to the housing estate. A quite different approach was employed by Rainwater (1966) who, studying wretched high-rise public housing in the United States, focused on parent-child interaction over the often horrific question of the child's leaving the apartment unescorted. Southworth, lending empirical weight to Carr and Lynch's (1968) speculations, outlined a program to "expose children to ongoing changes in the city" (Southworth, 1970, 16). His proposed Urban Service for Children was meant not to change the physical environment radically but to strip away barriers, cognitive and physical, between it and children.

These studies, despite their shared focus on home-range, showed strikingly varied approaches. They treated home-range as, respectively, a design challenge, a socio-psychological crisis, and an urban informational problem. Thus there were few common threads: Home-range's possible influencing factors and applications were shown to be quite diverse. What did emerge most clearly was its character not merely as a measurement tool but as something describing a growing social problem.

By the early 1970s empirical and conceptual work began on home-range as a concept

so named. Coming from the fledgling environment-and-behavior field, this sought to introduce, define, develop, and apply home-range as a conceptual framework and research tool for the analysis of environmental behavior, perception, and cognition. Significantly, these lacked the overt social-critical element of the works discussed above.

One interesting feature of this work was home-range's association with human territoriality. For example, Anderson and Tindal (1972) and Everitt and Cadwallader (1972) used territoriality to frame the concept of home-range; interestingly, however, their linkage seems simply to be assumed. There was in fact scant reason to equate home-range and territoriality: As Altman (1970) then pointed out, territoriality is but one of several possible *subsets* of home-range, and not its concomitant. (Perhaps this persistent tendency could be reduced by dropping "territorial range" as a synonym for home-range).

Another development at this time was home-range's linkage with perception and cognition; yet, again, this was done without enough attention to the *distinctions* to be made. Anderson and Tindal (1972), for example, linked home-range with perception --not because there necessarily exists a connection, but simply because perception, and not home range, was their stated object; similarly with Andrews (1973). Tindal's (1971) study was premised on the idea that home-range is contingent upon environmental images, while Everitt and Cadwallader (1972) proceeded from home-range to perception and cognition not in order to better understand home-range but to test "community" as a psychological construct. Thus these were not really home-range studies but territoriality and environmental image studies.

What is the proper relationship between home-range and perception/ cognition? Stea (1970) shed much needed light on the matter: He cited studies indicating that "movement through the environment is necessary for environmental learning..." (Stea, 1970, 142) and that "the child with constricted experience has an appropriately constricted home range and constricted environmental image" (Stea, 1970, 146). In other words, home-range is a *precondition* of environmental (*i.e.* neighborhood) perception and cognition, and not the other way around.

Such criticisms aside, these exploratory studies have been invaluable in helping the home-range concept take shape, for they took it beyond the speculative stage. But where was all of this conceptual development to lead? Below I discuss three important empirical studies (Tindal, 1971; Bussard, 1974; Hart, 1979) in which home-range was a major theme.

Tindal (1971) was primarily a methodological quest, an exercise in whether home-range was a workable concept, i.e. whether its measure could be standardized and compared and variables derived and tested for significance. Studying city -suburban differences, Tindal fulfilled her research mandate substantially, taking bold, if admittedly preliminary, steps toward weighing possible indicators of home-range and toward operationalizing them.

Bussard's (1974) focus, on the other hand, was explicitly practice-driven: She sought re-design criteria for a planned-housing development. Her more open-ended treatment of home-range made the concept seem far less operationalizable than had Tindal's study, which did not attempt to reflect on conceptual premises. For example, Bussard explored three important home-range issues: (a) whether it should be seen as a set of paths and nodes or as an areal unit, (b) whether it must include only places frequently visited or these and also places visited only occasionally, and (c) how to account for the differences between places visited alone and those visited under chaperonage. Of special note was her conclusion that rendering home-range into such a single numeric entity as an index would reduce the data's "richness and complexity" unacceptably.

Hart's (1979) study, so far as home-range is concerned, was derivative of both Tindal (1971) and of Bussard (1974). While continuing Tindal's consideration of variables' effects on home-range (*i.e.*, gender, bicycle use), Hart did not resolve the conceptual dilemmas Bussard had encountered; rather, he embraced his data's "richness and complexity" and rejected reductionism. For example, he recognized not one entity called "home-range" but several, e.g., "free range," "range with permission," etc. And rather than try to determine home-range's precise conceptual content and contours, he used the areal version without losing sight of the mobility within it. Another advance of Hart's was to keep home-range conceptually distinct from perception, cognition, and affect: His hierarchy of data categories put "spatial activity" (including home-range) first, suggesting that home-range functions as a foundation, or container, of experience, and not as its result. Perhaps Hart's greatest contribution was his developmental perspective; although it had been speculated that children can build their own home-ranges, Hart was able actually to observe the process.

Let us pause to consider what was the state of the knowledge of home-range in 1979. On this we have an excellent meta-analysis (Moore & Young, 1978). These authors wrought a decade's worth of often diffuse work into viable categories, testable relationships, and socially progressive policy directions. As a collectivity, home-range data under Moore and Young's scrutiny seemed to have illuminated the far corners of children's environmental experience; what remained, apparently, according to them, was, most immediately, to use all available knowledge to democratize the planning and design process and, in the longer run, to fill some gaps in knowledge. At one point Moore and Young seemed even to hold out hope for a bold step -- an all-embracing home-range "index or measure" (Moore & Young, 91).

Far from proceeding to such an ever-more generalizable level, however, home-range study has since stagnated. Of course, the concept has, in one form or another, found its way into the periphery of research projects, but this is a far cry from the unity of concept, application, and practice that Moore and Young's review should have encouraged. There is any number of possible reasons for this: the drastic decline in funding for social research that may seem out of the mainstream, for example, or the shift in child research away from serendipitous neighborhood access and toward

facilities, programs, and staged events. Another possible explanation is that home-range fell through the conceptual cracks: Misconstrued as a adjunct to territoriality, perception, and cognition, it never emerged in its own right. Finally -- and certainly most sadly -- home-range as a concept may have faded simply because home-range as a *reality* has faded; it has taken some time, but the fears of Carr and Lynch (1968) are realized: Children today are estranged from their neighborhoods.

Some of these developments can be seen in the most recent group of studies itself. Two show how home-range can enhance knowledge of territoriality (van Vliet--, 1983) and environmental cognition (van Vliet--, 1983; Webley, 1981), without substantially enhancing knowledge of home-range itself. van Vliet--'s (1983) study of city/ suburban differences, while mistakenly equating home-range with territoriality, does nevertheless succeed in showing how it contributes to environmental cognition; and yet one wonders what would have resulted had he disentangled behavior and cognition. Webley's (1983) gender-comparisons comprise what is primarily a cognitive-task study in which home-range is an abstraction. More squarely within the home-range focus is Berg and Medrich's (1980) large-scale study (n=764), in which home-range ("mobility") is the main outcome sought.

Lastly, four studies by six researchers at the City University of New York, all having conducted their fieldwork in that city, use home-range in interesting ways, but find children's actual home-ranges to be so scant as to be difficult to analyze. Perez and Hart (1978) find the home-ranges of children in one struggling community to be extremely limited, and so the bulk of their investigation treats only such inhibiting factors as traffic and parents' restrictions. Working in the same community as Perez and Hart, I myself have found a historical progression in which such inhibiting factors -- which I trace to urban planning policy -- come to overwhelm the positive aspects of neighborhood experience (Gaster, 1991; 1992; 1993). Blakely's (1993) eye-opening study of a stable working class neighborhood treats home-range through omission, focusing on parents' concerns and the associated restrictions on home-range (e.g., for most children the radius was less than 400 feet), while Hart, Iltus, and Mora (1991), working in the city's most blighted ghetto, find home-range to be virtually undetectable. Evidence from other cities is hardly redeeming: Berg and Medrich (1980), working in four California neighborhoods of varying socioeconomic profiles, find serious obstacles to home-range in all, while Hillman, Adams, and Whitelegg (1990), replicating a 1971 British study, find home-range nearly extinguished.

Discussion

The history of the home-range concept reveals several points of confusion. First, on the issue of home-range's entanglement with such other concepts as territoriality and perception: While almost all would agree that home-range *can* be disengaged from other concepts, it ought to be realized that it *should* be. This is not to say that cognitive maps, place-feelings, etc. are irrelevant to home-range, only that home-range, as a concept, is capable of independent existence. Wohlwill and Heft (1987),

addressing child development, suggest that home-range can be most useful if tied in with cognition and child development. Such a proposition can be based only on the already-muddled state of the home-range concept.

Now, suppose home-range was to receive the attention it has been denied: That may make Moore and Young's observation -- i.e. that no satisfactorily generalizable index of it has been attempted -- seem like a compelling challenge. Before taking up such a challenge, though, it may help to know how one research team considered and then dropped such an endeavor:

> "We did not attempt to measure the child's area of movement, because to be useful this complicated assessment would then have had to be weighted by traffic density and other neighborhood factors, and the whole operation seemed over-particularized for our purpose" (Newson & Newson, 1976, 89).

Thus any attempt at a home-range index should entail a pondering of its necessity. It may be attainable, but would it be worth it?

Next, one must consider the practical side of home-range: How useful can it be to policy and design? Uses of home-range data for neighborhood planning have been sparse. An excellent indication of this is Moore (1986). This rigorous field study goes into great detail about home-range; and yet in the accompanying policy and design recommendations, which are extensive, there is no mention of home-range! We will not know the utility of home-range data until we take steps toward utilizing it.

Lastly, what of the severe shrinkage in home-range itself as experienced by children? Will there even be enough left of it for us to conceptualize? On this scenario Moore and Young have this to say:

> "At smaller scales, where the density of behavior makes differentiation between "path" and "place" impossible, range concepts are no longer operational" (Moore & Young, 1978, 92n).

Yet is this necessarily true? Behavior may be observed along an extensive -- almost infinite -- continuum. Thus even if one child's home-range consists of a single square of sidewalk, that is enough for study; indeed, in such a case of small home-range, it becomes all the more important to discern the experience of such precious exposure, as well as such subtle variation as a trip around the corner or retreat to the doorway. Of course, this is not home-range in its intended *areal* sense, but it resonates readily with the intended *experiential* sense of environmental exploration. Even if there exists no home-range longer than what a single length of tape measure can cover, let us work with that; there need not be high mobility for there to be home-range. The very term "home-range" is derived from animal ecology; perhaps environmental psychologists applied the term to children with an image in mind of children roaming their neighborhoods like buffalo. That image is now obsolete; but does that mean we are ready to substitute for it one of children as caged birds?

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