

Children's Friendship with Place: A Conceptual Inquiry¹

Sudeshna Chatterjee
North Carolina State University
Raleigh, North Carolina

Citation: Chatterjee, Sudeshna. (2005). "Children's Friendship with Place: A Conceptual Inquiry." *Children, Youth and Environments* 15(1): 1-26. Retrieved [date] from <http://www.colorado.edu/journals/cye/>.

Comment on This Article

Abstract

This paper explores the conceptual possibilities of place friendship, and posits it as a valid form of place relationship that is different from the more widely accepted place relationship concepts typically considered under the broader construct of sense of place. After reviewing the literature on friendship, a framework for envisioning child-friendly places based on six essential conditions of friendship is proposed: mutual affection and personal regard; shared interests and activities; commitment; loyalty; self-disclosure and mutual understanding; and horizontality. These concepts, when translated into environmental terms with the help of literature from the fields of environment-behavior, environmental psychology and children's geography, help to define a child-friendly place from a socio-physical perspective. This definition is in contrast to the broad, rhetorical, rights-based goals of health, education, safety, etc. that currently underpin the UN vision of the child-friendly city. This paper proposes that research needs to investigate the functional and phenomenological possibilities of places that children consider to be their friends in order for child-friendly cities to have any real meaning for children.

Keywords: [affordance](#), [child-friendly city](#), [place relationship](#), [friendship](#), [attachment](#)

The concept of the Child-Friendly City (CFC), backed by internationally agreed-upon policy instruments such as the Convention on the Rights of the Child (CRC), Agenda 21 and the Habitat Agenda, embodies a commitment to create better living conditions in cities for all children by upholding their basic human rights. The CFC thus has the promise of making the world a better place for many children. To realize this promise, we need to move beyond the rhetoric of global visions to a more empirically grounded understanding of environmental child-friendliness. However, before any empirical inquiry takes place, we need to take up the theoretical and terminological underpinnings: Is it possible for children to develop "friendly" relationships with the physical environment?

Background

From a very young age, children develop feelings and emotions about their everyday environments which induce powerful, positive or negative images. The role of affect is not only important in explaining how children learn about the place, but also, as children's place reactions are often very different to those expressed by adults, it provides a pointer to what sorts of environments children find most satisfying (Matthews 1992, 236).

Environment-Behavior (EB) literature includes a range of studies that focus on children's needs and experiences in towns and cities. Several studies produced evidence of emotions and self-regulation in favorite places—children and adolescents attachment to favorite places for restorative experiences (Korpela and Hartig 1996; Korpela, Kytta, and Hartig 2002), and youth's preference for different places, both private and public, for reasons as varied as retreat and social interaction (Clark and Uzzell 2002; Lieberg 1994; Owens 1988; Schiavo 1988). Towns and cities have rich affordances which, through children's exploration, contribute to their repertoires of widening social and cognitive worlds (Bjorklid 1982; Hart 1979; Moore 1986; Torrell and Biel 1985), though gender differences in patterns of exploration and extent of mobility suggest that girls encounter various degrees of constraints in both western and developing societies (Banerjee and Driskell 2002; Hart 1979; Tranter and Pawson 2001; van Vliet- 1983). Other researchers have searched for evidence on social and physical dangers—strangers and street crime (Blakely 1994), traffic (Bjorklid 1994), and pollution (Lyons and Breakwell 1994; Woolley et al. 1999)—that threaten children living in cities.

These multi-dimensional explorations of children's experience of towns and cities have proposed several important place variables—safe and healthy places, favored places, parentally-approved places, educative places, culturally-approved places—that enhance our understanding of what kind of environments cities should be providing to nurture happy, protected childhoods. Some of these empirically derived ideas have been incorporated in the definition of the CFC promoted by the United Nations Child Friendly City international Secretariat based in Florence:

...cities are places where children's right to a healthy, caring, protective, educative, stimulating, non-discriminating, inclusive, culturally rich environment are addressed (Riggio 2002, 45).

At the same time, a search for unifying theory of *place*, which is considered a useful concept for integrating the research traditions in design and in environmental psychology (Groat and Depres 1991), has actually led to vastly different analyses by designers, planners, geographers and psychologists (Groat 1995). However, some correspondence exists between the work of Relph in the field of humanist geography and the work of Canter in psychology. Both authors outlined three components of place: Relph identified *physical features or appearance, observable activities and functions, and meanings or symbols*; Canter identified *actions, conceptions and the physical environment* as components of place. Place researchers agree that interpreting place meaning involves a complex interplay between the perceptual, cognitive and affective responses to the environment (Groat 1995).

The concept of *sense of place* (SOP) has been widely considered to be the meaning attached to a setting by a person or group. SOP has been assigned a higher construct level subsuming other concepts that describe human relationships to places. SOP consists of three phases: the first phase is belonging to a place, the middle phase is attachment, and the third (and most intense) phase is commitment to a place (Shamai 1991). Adopting an attitude framework to empirically assess SOP, Jorgensen and Stedman (2001) selected the most commonly addressed place concepts in environmental psychology: *attachment, identity and dependence*, to represent the affective, cognitive and conative components of attitude towards spatial settings.

Attachment, according to Riley (1992) is the "affective relationship between people and the landscape that goes beyond cognition, preference or judgment" (p.13). In defining childhood place attachment, Chawla (1992) notes "children are attached to a place when they show happiness at being in it and regret or distress at leaving it, and when they value it not only for the satisfaction of physical needs but for its intrinsic qualities" (p. 64). According to Chawla, during the latency years of middle childhood when the strong social attachment to the family base lessens, the physical environment looms large in children's experience. Studies in child-environment research (Hart 1979; Moore 1986; Kytta 2003) have shown that school-age children are the heaviest users of outdoor landscapes, particularly around the home and its surroundings. Empirically, however, very few studies have directly investigated children's place attachment and/or its link to sense of place. Childress (1994) challenges the exclusivity enjoyed by place attachment in the domain of affective place relationships by announcing that it is certainly *one* of *many* possible relationships with place. Childress encourages us to explore the gamut of human interaction with the environment to enrich our vocabulary of place relationships.

Place identity, as posited by Proshansky, Fabian and Kaminoff (1995; 1987; 1983) is a

substructure of the self-identity of the person consisting of, broadly conceived, cognitions about the physical world in which the individual lives. These cognitions represent memories, ideas, feelings, attitudes, values,

preferences, meanings, and conceptions of behavior and experience, which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being. At the core of such physical environment-related cognitions is the 'environmental past' of the person; a past consisting of places, spaces and their properties which have served instrumentally in the satisfaction of the person's biological, psychological, social, and cultural needs (1995, 89).

Broad place identity cognitions allow people to use places for attaining cognitive integration and consistency, anxiety reduction, and self-esteem maintenance (Korpela 2002). Twigger-Ross and Uzzell (1996) explored the extent to which an attachment or affective relationship with place supports and develops key aspects of identity in adults—self-esteem, self-efficacy, distinctiveness and continuity (components of Breakwells' identity process model). This model has potential for understanding *children's* emerging self-identity through affective place relationships as well (Spencer and Woolley 2000).

Place dependence is concerned with the appropriate fit between settings and achievement of specific behavior goals. This concept answers the question, "how does this setting compare to others for what I like to do?" Stokols and Schumaker (1981, 457) defined place dependence as an "occupant's perceived strength of association between him or herself and specific places." Place dependence differs from attachment in two ways. Dependence can be negative when a place limits achievement of valued outcomes, and the strength of association experienced by an actor in a setting may be purely based on specific behavior goals rather than affect (Jorgensen and Stedman 2001).

According to Korpela (2002), place identity, place attachment, privacy regulation, and restorative outcomes of favorite places are all inter-related phenomena within self- and emotion regulation. For example, the phenomenon of anthropomorphizing a favorite place (the act of ascribing humanlike qualities through nicknames, etc.) serves several purposes. Entering such a place enables the person to block negative feelings and emotions after a disappointing or stressful situation. Being in this place also reinforces positive feelings through the humanlike nurturing and ameliorating dimensions ascribed to a familiar favorite place.

However, Jorgensen and Stedman (2001) found that the concepts of identity and dependence were less synonymous with the SOP factor than attachment. The authors, while empirically attempting to clarify the substantive content of place meaning by integrating diverse concepts, realized that the construct validity of the sub-constructs of dependence, identity, and attachment are questionable as attitude components, especially in the domain of place relationship. For example, place attachment is considered to be implicit in the place identity construct (Korpela 2002) as attachment to places fulfills people's emotional needs and helps people to develop and maintain their identities (Kaiser and Fuhrer 1996).

Reviewing the great basket of place-centric literature, the question, "do these diverse (and divergent) concepts somehow construct environmental child

friendliness?" remain unanswered. Friendship, like attachment, has a strong affective component and is a common form of human relationship. By the same token, children should be able to form friendship with place just as they are attached to favorite places. Perhaps child-friendliness is a new construct rooted in children's friendship with place, and is different from the more prevalent place relationship construct, place attachment, found in EB literature. Of all the other forms of relationships with the living environment as discussed above, friendship with places has not been subjected to scholarly inquiry. However its wide application in global rhetoric—child-friendly city, child-friendly environment, etc.—certainly merits just that.

This paper inquires into the concept of place friendship as a valid form of place relationship in childhood. Like attachment, the concept of friendship has a strong affective component, and is considered a tool for building connectedness with peers just as attachment is considered a tool for building connectedness with family in school-aged children (Smith 2004). Hence the conceptual model for place attachment, which is perhaps the most developed place relationship concept in environment-behavior studies, both becomes a model for conceptualizing place friendship and a point of departure for defining the uniqueness of this new place relationship concept. As a first step, this paper reviews the literature on childhood friendship and then compares it with the construct of attachment in childhood, thus laying a foundation for differentiating between place attachment and place friendship. Place friendship is then situated within the broader SOP framework to provide new insights for research and theory in place relationships. Lastly, the potential of place friendship in defining, and empirically investigating *child-friendly places* is explored.

Children's Developing Ideologies of Friendship

Friendship is a process of mutual selection by which a child chooses and is simultaneously chosen by another as a preferred friend (Doll 1996). The essentials of friendship, according to Hartrup (1991) are reciprocity and commitment between individuals who perceive each other as more or less equal (note that this is different than interaction between child and adult, which often reflects a dominant-subordinate dynamic).

The friendship ideologies of children change as the child grows older. Selman (1980) proposed a model of children's reflective understanding of friendship based on their development of social perspective-taking abilities at different ages (see Table 1). This model makes clear that the developmental age of the child is important in reflecting upon friendship. However, the overlapping age ranges in each level of friendship also suggest that the perspective-taking abilities of each child differ. The age flexibility of this model allows consideration for socio-cultural, economic and ecological influences in understanding children's developing philosophies of friendship as diverse, socially constructed phenomena.

The emerging themes of friendship relations based on Selman's model and other friendship literature reveal that in *early childhood*, friendship is understood by affiliation, common interests, proximity and attractiveness of the activity (Hartrup

1991; Ramsey 1991) through relatively momentary and purely convenient play episodes (Doll 1996).

Table 1. Selman's (1980) five-stage model of children's developing philosophies of friendship

Stage and Name	Age Range	Concept
Stage 0: Momentary Physical Interaction	3-7 years	Children conceive friendship solely on propinquity and proximity
Stage 1: One-way Assistance	4-9 years	Friendship entails the notion of friend-as-helper and knowledge of his/her dislikes. Friend as someone to play favorite games.
Stage 2: Fair-weather Cooperation	6-12 years	Friendship involves an awareness of reciprocity and mutual adjustment but the relationship is still defined via the play moment, and cooperation around incidents and issues. Relationships tend to break up over arguments.
Stage 3: Intimate and Mutual Sharing	9-15 years	Friendship involves an awareness of the continuity of the relationship and of the affective bond. Possessiveness and jealousy often characterize this stage.
Stage 4: Autonomous Interdependence	12 years to adult	Friendship entails the awareness that friends <ul style="list-style-type: none"> • Must rely on each other • Draw strength from each other • Gain a sense of self-identification through identification with the other as a significant person with whom one has meaningful relations • Accept the other's needs to establish relations with others and to grow from such experiences

Concept descriptions adapted from Hart et al. 1997; Rizzo and Corsaro 1988.

By *early elementary* grades, children acquire contractual notions of friendship where they have responsibilities to fulfill and expect the same of their friends: mutual exchange of favors and duties; reserving playtime and play spaces for one another; sharing treats; and protecting one another from common enemies. Though longer play episodes are recorded, contractual childhood friendships continue to be transitory as compared to adult friendships (Doll 1996).

By *later elementary* years, contractual friendships become more sophisticated, similar to adult expectations of loyalty and mutual understanding. Later elementary aged children often refer to the purpose of friendship as fulfillment of a need to be liked and supported by friends (Selman 1979; 1980).

Negotiation skills for achieving intangible favors and concessions characterize *middle childhood* friendships (Doll 1996). Adolescent friendships set aside the contractual nature of friendship in favor of mutuality (Brown 1989; Jones and Dembo 1989). Intimacy and loyalty are considered to be the purposes of friendship (Selman 1979; 1980).

Doll's (1996) integrative review of developmental definitions of friendship revealed six essential elements across the developmental range of childhood:

1. *Mutual affection and personal regard*, by which each friend demonstrates a caring responsibility for the other (Hinde 1979)
2. *Shared interests and activities*, representing the friends' investment of time and intention to have fun together (Hartrup 1989a; Youngiss 1980)
3. *Commitment*, or the intention on the part of both friends to continue fostering the relationship over time (Asher 1995; Hartrup 1989a; Hinde et al. 1985)
4. *Loyalty*, that is the intention of both friends to protect the interest of the other (Hartrup 1989a; Hinde 1979)
5. *Self-disclosure and mutual understanding*, by which each friend acquires and contributes to an uncommon understanding of the other (Hartrup 1989a)
6. *Horizontal*ity, such that friends share power in the relationship (Hartrup 1989a; Hinde 1979)

Friendship vs. Attachment

Hinde (1976) suggested eight dimensions for characterizing relationships. These are:

1. Content of component interactions
2. Diversity of component interactions
3. Reciprocity vs. complementarity of interactions
4. Qualities of the component interactions (meshing, mutual goal alignment)
5. Relative frequency and patterning of component interactions
6. Multidimensional qualities such as "affectionateness" that cannot be described in terms of any one dimension such as warmth or possessiveness
7. Each partner's level of moral or cognitive functioning
8. Penetration or degree of mutual disclosure, openness, and intimacy

Several of these points reveal qualitative differences between attachment and friendship.

The *content* of an attachment relationship is security regulation, in which the attached person seeks and the attachment figure provides security (Bretherton 1985). In contrast, the content of friendship has many dimensions, which (as shown in Table 1) differ with the developmental age and social perspective-taking ability of the child.

An attachment relationship is a *complementary* one, where the behavior of each partner differs from but complements one another. Friendship, on the other hand, is a *reciprocal* relationship where the partners show similar behavior, either simultaneously or alternately. Bowlby (1982) suggested that the roles of attachment figure and playmate are distinct. In close personal relationships most people have a complex pattern of needs that can be best met by someone with some similar and some complementary characteristics (Hinde 1979), which is why it is possible to have a caregiver as a friend or a friend as an attachment figure in later years. However, not all attachment figures are friends and not all friends are attachment figures. In order for the relationship to have some reciprocal and some complementary interactions to satisfy complex needs, understanding the frequency and nature of interactions across the full range of the shared exchange is important. In studying this shared range of interactions, the relative predominance of attachment and play components may vary to tilt the relationship toward the predominance of either attachment or friendship.

It seems that as children age, the two types of relationships, attachment and friendship, take on opposite curves of intimacy and visible strength. Attachment behavior is most conspicuous in early childhood, when security is a primary concern. As children's affective-cognitive development progresses, they become better able to assess the intentions and motives of the attachment figures, and children develop improved coping skills (Bretherton 1985). In older children, attachment becomes very visible only in stressful situations or in moments of high personal achievement and social recognition.

A strong expression of an attachment relationship in early childhood wanes to specific expressions of attachment behavior with age. The strength of friendship, however, in terms of interdependency, mutual sharing and doing things for the other grows with developmental age. The intense shared play moments of early childhood are replaced over time by interdependency or greater mutual understanding. In fact, Hartrup posited that as very young children venture out of their secure caretaker attachments, it is peer friendships that draw them into the ever-widening social worlds (Hartrup 1989a; 1989b; 1991).

It would seem that attachment relationships are crucial for young children to develop improved coping skills, whereas friendship relationships are important for gradually learning to recognize interdependence in a shared world. Hartrup (1991) identifies three functions of friendship:

1. *Emotional resources*: friendships provide children with the security to explore their surroundings, meet new people and solve new problems. Friendships also protect children and adolescents from the adverse effects of negative events (Heller and Swindle 1983; Ladd and Oden 1979), such as family conflicts, terminal illness, school failure, or parent's unemployment. (In both of these respects, friendship functions are somewhat similar to attachments.)
2. *Cognitive resources*: friendships enhance problem-solving abilities, provide unique contexts for transmitting information from one child to another, and aid knowledge acquisition and mastery of certain tasks.

3. *Social resources*: friendships provide contexts in which basic social skills such as social communication, cooperation, and group entry skills are acquired and elaborated. They also provide the templates for subsequent relationships; new relationships are never the same as old ones in all respects, but the organization of behavior generalizes from old to new relationships.

Measures of friendship show strong relationships to a child's immediate experience of well-being (Doll 1996). Moreover, children's ability to get along with other children has been considered the best predictor of adult adaptation (Hartrup 1991). Friendships in childhood become a secondary source of a range of support that were previously provided by the family—companionship, recreation, personal guidance, and emotional support (Asher 1995). Friendship provides the space for children to develop as independent and competent social agents (Hartrup and Laursen 1989; Sluckin 1981; Sutton-Smith 1971). The task of growing up becomes easier if children have friends with whom to share emotional hazards and to ask for assistance when faced with stressful situations (Heller and Swindle 1983; Ladd and Oden 1979). Just being with a friend changes how peers treat the child. There is also a difference in the nature of conflict resolution between friends and non-friends, with gentle cooperative solutions being more common among friends than non-friends (Hartrup 1989a).

Despite strong evidence suggesting developmental outcomes such as positive self-attitudes or self-regard, and enhanced relational functioning in sibling, peer, and romantic relations, Hartrup (1991) cautions that these developmental outcomes are not exclusively attributable to having, making and keeping friends. He suggests that, should friends be unavailable, other relationships (including attachments) may be flexible enough to serve friendship functions. This is also true of attachment; if an attachment figure is absent, other relationships (including friendship) can fulfill security-seeking needs. Hartrup's advice is to view friendships as developmental *advantages* rather than developmental *necessities*.

At this point it is worth making a comment about possible destructive effects of peer relationships, which may lead to complex abusive behaviors such as bullying in schools (Banks 1997; Lyznicki et al. 2004). Reviewing the literature on friendship, it does not appear that friendship produces destructive effects. Rather, the lack of it does (as in the case of children who are isolated and rejected by peers), just as lack of other close inter-personal relationships—including attachment to family—produces loss of self-esteem and emotional distress. Children without friends tend to dislike school more, or are vulnerable to a wide range of destructive personal and interpersonal outcomes including substance abuse, gang involvement, teen pregnancy and other forms of violence at school (Doll 1996; Smith 2004). The concepts of friendship and attachment are valuable tools to build a sense of connectedness between youth and peers as well as youth and family. Building such connectedness, according to Smith (2004), is the most positive approach to preventing violent behavior.

Place Friendship

One of the most widely accepted values of place attachment is that it assists children in gaining their personal identity (Spencer and Woolley 2000; Twigger-Ross and Uzzell 1996). This paper proposes that *place friendship*, like place attachment, supports development of self-identity in relation to the physical world.

The basic premise for conceptualizing childhood place friendship is that children share affective relationships with favorite places that cater to a range of developing friendship needs and ideologies. In an inclusive, non-discriminating environment as proposed by the CFC initiative, a place should be able to cater to the whole range of developmental friendship requirements (including adult friendship) to be truly considered a "friendly place."

This implies we need to understand the basic requirements of a place to be considered a friend. According to Selman's model (1980), once children move beyond their egocentric system of reference, friendship relations are defined through mutual reciprocity and adjustments. This is an important distinguishing feature of place friendship, one that distinguishes it from place attachment in putting equal emphasis on the child's role in reciprocating in some way to show commitment, regard and loyalty to the place. The construct of place friendship also enriches the vocabulary of place relationships and sense of place and allows us to develop a wider repertoire of human interaction with the living environment.

In close inter-personal relationships, both attachment and friendship are needed to satisfy a complex pattern of needs (Hinde 1979). Similarly, children use both place attachment and place friendship in order to maintain a balance between manifest behavior in the environment and regulation of the self. Moreover, place friendship provides a developmental advantage to children by affording better cognitive and social outcomes in addition to emotional ones. This enables children to have a wider repertoire for having fun and adapting to stress. Though there are overlaps in conceptualizing friendship and attachment in terms of the nature of some interactions, the difference in the frameworks is most distinct in childhood.

Theoretical Perspectives

One of the most consistent criticisms of place relationship studies is the lack of "robust analysis of the physical attributes of place" (Groat 1995, 7). As discussed above, place-child reciprocity is at the core of the construct of place friendship. Therefore the core question incorporates this duality: How does a child form friendship with place and how does the place respond to the child's friendship? If one adopts a Gibsonian ecological perspective to studying children's relationship to places, the starting point will be the embodied activity of the child in the environment (Preston 2003) where the child will be seen as an active agent continually engaging with the surrounding in a selective manner (Heft 2001). The assumption is that "organisms are inevitably immersed in physical surroundings that provide both the context and the possibilities for the activities in which they engage" (Preston 2003, 60). The Gibsonian position equally privileges the child/organism and the environment by departing from the modernist separation of the mental and physical worlds. Gibson's theory of affordance played a pivotal role

in moving the understanding of cognition from something that happens inside the head to something that happens in the world/environment through individuals' active participation (Gibson 1979; Reed 1996; Preston 2003).

The following section considers how others have built upon the concept of affordance to develop a vocabulary for studying the meaningful features of the environment.

Meaningful Features of the Environment: Affordance, Tools, Artifacts, and Representations

An affordance is a property of the environment that has perceived functional significance for an individual, a relation between some structural and/or functional attributes and the individual's intentions (Heft 2001). For example, "walkability" is an affordance of flat, relatively smooth surfaces, but children will assess this opportunity in relation to their weight, strength and desire to walk. Moreover, if the context of the path is a cordoned-off area out of limits for pedestrians, the path is no longer perceived as a surface to walk on even though it has otherwise appropriate attributes. The variable quality of affordances is due to the relative compatibility or fit between people and their environment. This makes it a controversial descriptor of the environment (Heft 2001). However, there is a growing recognition that environments and their elements are experienced not only as configurational settings (Matthews 1992) but also as places that afford opportunities for intentional action (Chawla and Heft 2002; Kytta 2003).

Heft (1989) suggested that *potential* affordances are properties of the environment, whereas *actualized* affordances become individual relationships with the environment. Chawla (1992) refers to the potential affordances of the physical environment as *intrinsic qualities* which are responsible for helping children develop place attachment. The notion of actualized affordances of places makes it possible for children to engage in a continuous and changing relationship with the environment. Actualized affordances include different degrees of actualization: affordances that have been perceived, affordances that have been utilized, and affordances that have been shaped (Kytta 2003). These degrees shift the affordance base from being part of the material world to the inner world of individuals. This shift in base toward the individual allows knowing the environment as meaningful.

Heft (2001) elaborated that the meaningful features of the environment include not only affordances but also *tools*, *artifacts* and *representations* as other forms of storing distributed intelligence and social knowledge. He claimed that these meaningful features of the environment

comprise a tangible, publicly accessible repository of knowledge gains by those who have come before, and each individual subsequently sustains and contributes to this fund of ecological knowledge. In this way meaningful environmental features are maintained and often transformed (Heft 2001, 369).

Sustainable development principles are echoed in this statement on how perceptual ecological knowledge of the environment is learned by each generation and passed on to the next.

To facilitate the accretion, preservation and transfer of knowledge, durable tools and artifacts—which embody information about possible tasks built into their structure, and representations—which symbolically express information, need to be created. A *tool* is found in the environment and is selected for its possibilities for extending and aiding action. An *artifact* is a tool that has been designed to carry out various tasks. The knowledge stored in artifacts is more than just how they are used as implements. It also includes knowledge of aspects of daily life, techniques, social history, and rituals.

Tools and artifacts, though they have distinct definitions, share a common function of being a mediator between child and task through their affordances. Additionally, when the artifact is a designed place, it codifies knowledge of not only possible behavior but also the social and historic context of its production. In other words, knowledge about the environment, social and cultural processes of its creation, and its transformation and preservation are distributed as embodied intelligence in the affordances of artifacts and tools in the environment.

Representations, according to Heft (2001), create possibilities of storing knowledge in the inanimate environment rather than in the more fragile form of biological traces. Representations allow information to be publicly available in a more self-conscious attempt to shape the future of humankind. In the context of child-friendly environments, found tools (naturally-occurring places and attributes) and artifacts (specially designed places and attributes) have potential affordances which, when actualized by children, will result in place knowledge. Constructions by children in the environment such as dens and play forts, and other conscious attempts to define special places, such as graffiti and inscriptions, provide representations of their territories.

The mediating role of tools, artifacts and representations have a great potential for understanding place relationships between the child and the tasks that they will help the child to perform. If we understand how children and settings transact, we will learn what places have to offer to children in order to be considered their friend.

Place as a Mediator of Action in Child-Environment Relations

In keeping with Hartrup's idea of attachment securing the base for friendship to flourish in childhood, it is possible that when a person is in a complementary place attachment relationship, the attached place becomes the starting point for further exploration and possible friendship through its many potential, nested and sequential affordances.

The place has a mediating or two-way relationship with the child and the task or behavior. A child interacts with place to fulfill some need. In order for the child to prefer that specific place to others, the place has the responsibility to satisfy those

needs, to create a fit between action and the environmental features affording those actions. When there is compatibility between the child's needs and the recognized affordances of the place, the child transacts with the environment to actualize the affordance and fulfill the need. When the socio-ecological context for this affordance actualization is supportive, children may develop strong affective feelings toward the place.

In his empirical research on restorative qualities of adolescents' favorite places, Korpela found that his adolescent subjects often went to their favorite places to relax, to calm down, and to clear their minds after threatening or emotionally negative events (Korpela 1989; 1991; 1992). This is an example of using favorite places as a secure base or attachment place for seeking security. But in addition to these attachment needs, the subjects also reported beauty, control, freedom of expression and escape from social pressures. These latter experiences represent some of the essential elements of friendship in childhood such as proximity and attractiveness of the activity (Ramsey 1991) as a starting point for sharing interests and activities—the experience of beauty of a place is a starting point of a relationship with the place based on the attractiveness of its intrinsic qualities or affordances. Experiences of control, freedom of expression and escape from social pressures resonate the idea of horizontality in developmental friendship (Hartrup 1989; Hinde 1979) where place and child share power in the relationship. Korpela's empirical findings follow Hartrup's (1989; 1991) idea of using the attachment base to venture out and explore the widening social world by forming friendships with peers. This also is an affirmation that the same place can fulfill attachment and friendship needs.

Referring back to the Hidalgo and Hernandez (2001) study on place attachment at the home, neighborhood and city scale, the findings of weakest level of attachment at the neighborhood scale despite a large literature theorizing strongest attachment to neighborhoods, could be explained by the fact that the needs for exploration within the neighborhood were friendship needs and not necessarily attachment ones. Due to the lack of a construct such as place friendship, all other place relationships need get subsumed under place attachment.

Place attachment has an inward pull, drawing the child in to provide security and helping the child to cope with stress and anxiety. When the place to which the child is attached for its qualities as a secure base, and opportunities for security seeking are lost, the separation causes anxiety in the child (Bowlby 1982). This place to which the child is attached also becomes a base from which the child moves away to explore the environment but comes back to when faced with fearful and stressful situations. In early to middle childhood, before interdependent friendship ideas are formed, an attachment place holds the child in a secure base to venture out into the wider environment and other places, to make friends for sharing interests and activities in order to develop environmental competence. Through continuous, reciprocal interaction with the everyday environment children learn to co-exist in a shared world (Chawla and Heft 2002). This vision of children exploring the environment from a secure base to seek out friendly places embodies the principles of Agenda 21 from the Earth Summit, the Habitat Agenda and the Convention on

the Rights of the Child—the three international policy instruments guiding the idea of the Child Friendly City—in promoting the idea of our interdependence with each other and our interdependence with our place (ibid).

Defining the Child-Friendly Place

What makes an environment child-friendly—is it the place or the experience? Will the act of providing settings according to a checklist of empirically determined child-friendly features and settings truly generate a child-friendly environment? Or do the reflexive meanings of the range of children's experiences with and in places constitute child-friendliness?

From a phenomenological perspective, understanding of meaning happens through the act of indirect cognition (Heft 2003) or by stepping outside of the ongoing flow of immediate perception-action events. The awareness of a relationship does not sink in when one is immersed in direct experience with the relationship partner. Only by reflecting on the experience itself will children learn the meaning and value of their relationship with a place. According to Heft this is because:

Awareness sinks to a minimum [during immediate experience] to such an extent that encounters with the world seem nearly automatic and habitual, and the experience of a boundary between the self and the world is negligible. We are 'simply' immersed in situated doing and being (Heft 2003, 151).

By selecting and isolating particular portions of this on-going perception-action experience and lifting them up for closer scrutiny, we heighten our awareness for analysis and categorization through a reflexive process. Indirect cognition allows us to reflect on the experience with place, and determine the nature of our relationship with the place through the experience. This process of reflexive, second-order mode of knowing allows more than just understanding relationship links between the setting and the nature of actions afforded by the setting. It is only through our understanding of our relationship to places that we are either drawn toward or repelled by them. We start valuing a place when it serves to satisfy some of our complex needs.

It is worthwhile to bring back the six definitions of friendship that emerged from Doll's integrative review of elements of developmental friendship to see how the conditions of peer friendships can be translated for place friendships (see Table 2).

Table 2. Criteria for Friendship with Place

Criteria for friendship (Doll 1996)	Conditions of friendship	Proposed conditions for place friendship	Emerging concepts
Mutual affection and personal regard	Criteria by which each friend demonstrates a caring responsibility for the other (Hinde 1979)	Children will care for a place that: <ul style="list-style-type: none"> • holds them from harm when given the opportunity to maintain the place in some way (Hart 1997)- • provides a safe environment from traffic, pollution, crime, abuse (Spencer and Woolley 2000), and discrimination (CFC initiative) • allows the child to satisfy physical needs (Chawla 1992). 	<i>Environmental care:</i> Children participate in caring for and maintaining places that are safe, and provide different opportunities for favorite activities, play and interests
Shared interests and activities	Represent the friend's investment of time and attention to have fun together (Hartrup 1989a; Youngiss 1980)	Place and child share a wide range of activities and interests through affordances or intrinsic qualities of the place (Kytta 2003; Chawla 1992)	<i>Place-child exchange:</i> A place that affords the favorite activities of the child will be sharing them with the child
Commitment	The intention on the part of both friends to continue fostering the relationship over time (Asher 1995; Hartup 1989a; Hinde et al. 1985)	A place that supports a diverse range of environmental resources (Moore 1986), allows actualization of affordances and provides the opportunity to create new ones over time (Kytta 2003) will continue to hold the interests and activities of the child.	<i>Learning and Competence:</i> Through continuous, reciprocal interaction with the everyday environment children create new affordances by discovering and manipulating nested and sequential affordances of features and settings. The direct and indirect

			experience of place leads to environmental learning and competence (Matthews 1992).
Loyalty	The intention of both friends to protect the interest of the other (Hartup 1989a; Hinde 1979)	A place that is available to the child over a long period of time and allows the child to own or defend the place from other interest groups will secure a loyal relationship (Childress 2004).	<i>Control:</i> Place allows creation of identifiable territories over time that can be defended.
Self-disclosure and mutual understanding	Criterion by which each friend acquires and contributes to an uncommon understanding of the other (Hartup 1989a)	A place that allows the exploring and shaping of its many affordances by the child enables the child to create special places for security and privacy needs, and exploratory activities (Sobel 1993).	<i>Feelings and emotions:</i> Place allows child to create secret places by manipulating its affordances and features and protects those places. This process supports sense of self by regulating feelings and emotions in and about place.
Horizontality	Friends share power in the relationship (Hartup 1989a, Hinde 1979)	A place that promotes the fields of free and promoted action by allowing actualization of its affordances and minimizes constraints to action (Kytta 2003) will enjoy an equal power relation as a friend.	<i>Freedom of expression:</i> Place exists in a field where children do not feel inhibited in exploring and actualizing all the perceived affordances of the place at will.

The friendship ideologies described in the third column of Table 2 were interpreted using a vocabulary borrowed from EB, geography and environmental psychology literature. The correspondence between the conditions of friendship and environmental concepts is not a direct translation but an interpretative translation between two domains—psychology and environmental studies. The emerging concepts in column 4 are thematically linked to the conditions in column 1 of Table 2 and have to be interpreted in the context of the discussion. The six emerging environmental concepts provide a framework for proposing a working definition of a child friendly place from a socio-physical perspective based on the child's friendship

with place. I propose the following working definition of a child-friendly place based on the above thematic analysis:

A child-friendly place is an environment that promotes exploration and actualization of its many affordances for different activities and social interactions; offers opportunities for environmental learning and competence by shaping physical characteristics of the place through repeated use and promoting children's participation in care and maintenance of the place; allows children to express themselves freely in creation and control of territories and special places; and protects the secrets and activities of children in these childhood places from harm.

In the vision of the child-friendly place described above, personal, imaginative creations of meaning of the child's friendship with place will be based on the individual child's experience as well as culturally shared images or schemas. Childress, in his analysis of "form of place," concluded that the notion of place was not simply derived as uniformly perceived characteristics of physical or social entities, but from "information beyond that which is present [*culturally shared schema*] in the immediate [*personal experiences*] and objective world [*physical characteristics*]" (Childress 1994).

The proposed definition also promotes child-friendliness as an integrative concept that assumes mutuality in child-environment interaction both in a functional and phenomenological sense. Functionally, the child-friendly environment allows the child to actualize the potentials of its features and settings. Phenomenologically, these interactions with action mediators in the everyday world allow the child to develop feelings and emotions about the place and envisage new roles for places and themselves through repeated use and affordance actualization. In the words of Merleau-Ponty:

Habit expresses our power of dilating our being in the world, or changing our existence by appropriating fresh instruments (Merleau-Ponty 1963, 143).

The working definition takes the vital childhood awareness about place-related social dangers into account; provides a vision for transforming place apathy into place ownership by appropriating and shaping the environment to satisfy the emotional, cognitive and social needs of children; and provides the basis for accretion, preservation and transfer of knowledge by storing them in meaningful features of the environment for future generations to enjoy. This vision promotes stewardship of the environment.

Place friendship and sense of place

According to Shamai (1991), the highest sense of place indicator is commitment to a place through investing time, money and other forms of human agency. The concept of commitment is integral to place friendship. Shamai's sense of place scale consists of seven levels:

- 0) Not having any sense of place

- 1) Knowledge of being located in a place: A state of being physically aware of a place but not being emotionally linked to the place
- 2) Belonging to a place: A state higher than just physical awareness of the place, awareness of what is important for the place and respect for the place
- 3) Attachment to a place: A state of emotional attachment to the place; place has personal and collective meaning
- 4) Identifying with the goals of the place: a state of deep attachment to the place that fosters allegiance and loyalty
- 5) Involvement with a place: a state of commitment to a place where one is actively involved by investing in the interests of the place
- 6) Sacrifice for a place: Highest state of sense of place where one is ready to give up personal and/or collective interests for the larger interest of the place.

The three conditions of friendship—shared interests and activities, commitment and loyalty, are very similar in content to SOP factors—involvement with a place, sacrifice for a place and identifying with the goals of the place. All three of these SOP factors account for the construct of commitment to a place. Thus, sense of place literature needs to acknowledge place friendship as a valid form of human interaction with the environment that leads to the highest form of sense of place through commitment to place.

From Child-Friendly Place to Child-Friendly Cities

The CFC initiative envisages the city to be a complex governmental organization that has institutional, legal, budgetary and planning powers to develop strategies for transforming “the living environments of children at the family, neighborhood and the city levels” (Riggio 2002, 45). Creation of adequate physical settings to improve living environments is part of the vision, but not the focus. If anything, it is the part that has received very little policy research attention. From an EB point of view, though, a child-friendly city can only be made up of numerous and interlocking child-friendly places that children themselves explore, engage with and develop emotional and affective relationships with through their own experiences. The word “place” within the EB repertoire has multiple meanings. At the most basic level, a place is a setting for human action. It comes in different scales and sizes—from the front porch to an entire city. It is an intentional environment laden with emotional and cultural meanings, personal and group values that make it stand apart from its context. Childress (1994) noted four consistent themes within the diverse definitions of place: 1) a place is defined and set apart by its own characteristics and the characteristics of adjacent spaces; 2) a place is perceived as an integral whole rather than a collection of component spaces; 3) a place is seen appropriate for belonging to something or someone; and 4) a place is something against which we can orient and measure ourselves. Places may vary in scale and scope, and concreteness and symbolism. We may know some places through our direct experiences and others through indirect experiences and imagination. Having a diverse range of places to choose from in our living environment, allows us to better fulfill our complex web of needs and desires.

Children spend a fair amount of time outdoors within different places in the neighborhood. In fact, children are considered to be the primary consumers of residential neighborhoods (Bryant 1985). However, children's definitions of neighborhood often do not match the boundaries created by city planners (Marcus 1974; Maurer and Baxter 1972). In addition to being considered the primary social context for families with young children (Garbarino and Gilliam 1980), neighborhoods, are also considered the primary context for the development of specialized and differentiated relationships (Bryant 1985). The possible link between citywide strategies and lived experiences of places could be established by providing a diverse range of physical and social settings and ensuring safe access to those settings. These settings should be geographically dispersed, ranging from the immediate environment of the child, to neighborhood and citywide locations. The outward pull of a range of settings will entice children to explore the environment and in the process will enable them to develop a wider repertoire of environmental knowledge and competence. This wider range of environmental possibilities will also fulfill many children's place friendship needs.

The concept of friendship is based on having friends who fulfill different needs that the attachment base provided by parents cannot fully satisfy as the child grows older. Ideally, child-friendly places should be diverse, many and spread out in the living environment of the child, instead of one and unique. We increasingly live in a world with evolving types of families—including children without any families. In her empirical study on sources of support in middle childhood, Bryant (1985) found that when children from smaller families had three or more places that they could independently explore in their environment, they were more accepting of individual differences than children from larger families. In contrast, children in larger families with just one place to go off by themselves were more accepting of individual differences, and found it easier to get along with people than children from smaller families. This indicates that when children lack interpersonal support from siblings, peers and other members in their everyday lives, they compensate for those relationship needs by striking out on their own and finding environmental resources. As small family units characterize the Western industrialized social milieu, and as new forms of families are restructuring the fast urbanizing communities in the global South, we need to change or enrich environmental resources by creating several different socio-physical settings in the everyday environment of children. In other words, we need to provide many child-friendly places in our cities so that children can develop friendship with place.

Child friendliness of environments is not of direct interest to policy makers who are much more interested in knowing the effects of the environment on health, well-being, and education. This is the reason why the CFC initiative has defined child-friendly cities in those terms. However, if we are able to link child-friendly places to variables that policy makers can control and change—safe access to a range of environmental resources for exploration and use; guidelines for adequate, safe and healthy settings for play, living and learning—the research will have useful methodological information about child friendliness in environmental and policy terms. It will also be a critical step in building empirical knowledge on Child Friendly Cities that cities and local governments can more readily use.

Concluding Remarks

Child-friendly places are not an absolute developmental necessity but rather a developmental advantage for children. But the language of children's rights—in addition to ensuring the basic human right to survival and development—includes protecting the “best interests” of children in all aspects of their life. Developmental advantage through provision of child-friendly places promotes that right. If we do not promote such advantages for children through CFC initiatives, our strategies for actualizing child-friendly cities will continue to be preventive in nature, particularly in the countries of the global South. The other point to note about these universal commitments to children is the idea of progressive realization of goals. We need to set the best possible standards for our children's well-being today if we hope to see them implemented in small increments over the years according to the permissibility of state and city budgets, and political will.

Future research needs to examine how different types of places nurture the conditions of friendship, and how the scale and scope of places affect place friendship of children. Do the same principles of place friendship apply to all cultures and children from different socio-economic backgrounds? Is there a difference in thinking about children's affective place relationships if we take a more global structural perspective on childhood rather than a socially and locally constructed one?

Endnote

1. The research for the submitted paper was facilitated by an international fellowship from the American Institute of University Women in 2003-2004.

Acknowledgement

I am very grateful to Dr. Herb Childress for his encouragement when I only had a germ of an idea, and his insightful review of earlier drafts. I also thank the two anonymous referees for their helpful and constructive comments.

Sudeshna Chatterjee is a Ph.D. candidate in community and environmental design at North Carolina State University in Raleigh, NC. As an architect and urban designer, she has planned and designed living, learning and play environments for children in India. She has also worked as an advocate of child rights to secure the human right to an adequate standard of living for children in South Asia. Her research interests include children's environments in fast urbanizing contexts, globalization and childhood. Her doctoral dissertation examines the meaning of child friendly environments for middle-school children in New Delhi.

References

Altman, I. and S.M. Low (1992). *Place Attachment*. New York: Plenum Press.

Asher, S.R. (1995). *Children and Adolescents in Peer Relationship Problems*. Paper presented at the Annual Summer Institute in School Psychology: Internalizing Disorders in Children and Adolescents, Denver, CO, June.

Banks, R. (1997). *Bullying in Schools*. Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED407154).

Banerjee, K. and D. Driskell (2002). "Tales from Truth Town." In Chawla, L., ed. *Growing Up in an Urbanising World*. London: Earthscan Publications.

Bjorklid, P. (1982). *Children's Outdoor Environment: A Study of Children's Outdoor Activities on Two Housing Estates from the Perspective of Environmental and Developmental Psychology*, vol. 11. Stockholm Institute of Education.

Bjorklid, P. (1994). "Children—Traffic—Environment." *Architecture et Comportement* 10: 399-406.

Blakely, K.S. (1994). "Parents' Conceptions of Social Dangers to Children in the Urban Environment." *Children's Environments* 11: 16-25.

Bowlby, J. (1982). *Attachment and Loss, Vol. I: Attachment*, 2nd ed. New York: Basic Books.

Bretherton, I. (1985). "Attachment Theory: Retrospect and Prospect." In I. Bretherton and E. Waters, eds. *Monographs of the Society for Research in Child Development*. Vol. 50, nos. 1-2. Chicago: The University of Chicago Press.

Brown, B.B. (1989). "The Role of Peer Groups in Adolescents' Adjustment in Secondary School." In J. Berndt and G.W. Ladd, eds. *Peer Relationships in Child Development*. New York: John Wiley and Sons.

Bryant, B.K. (1985). "The Neighborhood Walk: Sources of Support in Middle Childhood." In R.A. Emde, ed. *Monographs of the Society for Research in Child Development*. Vol. 50, no. 3. Chicago, IL: The University of Chicago Press.

Canter, D. (1977). *The Psychology of Place*. London: Architectural Press.

Chawla, L. (1992). "Childhood Place Attachments." In A. Altman and S.M. Low, eds. *Place Attachment*. Vol. 12. New York: Plenum.

Chawla, L. and H. Heft (2002). "Children's Competence and Ecology of Communities: A Functional Approach to the Evaluation of Participation." *Journal of Environmental Psychology* 22: 201-216.

Childress, H. (1994). *The Narrative Form of Place and Place Relationships*. Paper presented at the Banking on Design: Proceedings of the 25th Annual Conference of the Environmental Design Research Association, Oklahoma City.

Childress, H. (2004). "Teenagers, Territories and the Appropriation of Space." *Childhood* 11(2): 195-205.

Clark, C. and D. Uzzell (2002). "The Affordances of the Home, Neighborhood, Town Center for Adolescents." *Journal of Environmental Psychology* 22: 95-108.

Doll, B. (1996). "Children without Friends: Implications for Practice and Policy." *The School Psychology Review* 25(2): 165-183.

Garbarino, J. and G. Gilliam (1980). *Understanding Abusive Families*. Lexington, MA: Lexington Books.

Gibson, J.J. (1979). *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin.

Groat, L. and C. Depres (1991). "The Significance of Architectural Theory for Environmental Design Research." In E. Zube and G.T. Moore, eds. *Advances in Environment, Behavior, and Design*. Vol. 3. New York: Plenum Press, 3-52.

Groat, L.N., ed. (1995). *Giving Places Meaning*. London: Academic Place.

Hart, R. (1979). *Children's Experience of Place*. New York: Irvington Publishers, distributed by Halsted Press.

Hart, R. (1997). *Children's Participation: The Theory and Practice of Involving Young Citizens in Community Development and Environmental Care*. London: Earthscan.

Hart, R., C. Daiute et al. (1997). "Developmental Theory and Children's Participation in Community Organizations." *Social Justice* 24: 3.

Hartrup, W.W. (1989a). "Social Relationships and Their Developmental Significance." *American Psychologist* 44: 120-126.

Hartrup, W.W. (1989b). "Behavioral Manifestations of Children's Friendships." In T.J. Berndt and G.W. Ladd, eds. *Peer Relationships in Child Development*. New York: John Wiley and Sons, 46-70.

Hartrup, W.W. (1991). "Having Friends, Making Friends, and Keeping Friends: Relationships as Educational Contexts." *Early Report* 19: 1-4.

Hartrup, W.W. and B. Laursen (1989). *Contextual Constraints and Children's Friendship Relations*. Paper presented at the Meeting of the Society for Research in Child Development, Kansas City, MO, April.

Heft, H. (1989). "Affordances and the Body: An Intentional Analysis of Gibson's Ecological Approach to Visual Perception." *Journal for the Theory of Social Behavior* 19(1): 1-30.

Heft, H. (2001). *Ecological Psychology in Context: James Gibson, Roger Barker, and the Legacy of William James' Radical Empiricism*. Mahwah, N.J.: L. Erlbaum.

Heft, H. (2003). "Affordances, Dynamic Experience, and the Challenge of Reification." *Journal of Ecological Psychology*. 15(2): 149-180.

Heller, K. and R.W. Swindle (1983). "Social Networks, Perceived Social Support and Coping with Stress." In Felner, R.D., L.A. Jason, J.N. Mortisugu and S.S. Faber, eds. *Preventive Psychology*. New York: Pergamon, 87-103.

Hidalgo, M.C. and B. Hernandez (2001). "Place Attachment: Conceptual and Empirical Questions." *Journal of Environmental Psychology* 21: 273-281.

Hinde, J.S. (1976). "Interactions, Relationships and Social Structure." *Man* 11: 1-17.

Hinde, R.A. (1979). *Towards Understanding Relationships*. London and New York: Published in cooperation with European Association of Experimental Social Psychology by Academic Press.

Hinde, R.A., G. Titmus, D. Easton, and A. Tamplin (1985). "Incidence of 'Friendship' and Behavior Toward Strong Associates versus Nonassociates in Preschoolers." *Child Development* 57: 431-445.

Jones, G.P. and M.H. Dembo (1989). "Age and Sex Role Difference in Intimate Friendships during Childhood and Adolescence." *Merrill-Palmer Quarterly* 35: 445-462.

Jorgensen, B.S. and R.C. Stedman (2001). "Sense of Place as an Attitude: Lakeshore Owners' Attitudes toward Their Properties." *Journal of Environmental Psychology* 21: 233-248.

Korpela, K. (1989). "Place-Identity as a Product of Environment Self-Regulation." *Journal of Environmental Psychology* 9: 241-258.

Kaiser, F.G. and U. Fuhrer (1996). "Dwelling: Speaking of an Unnoticed Universal Language." *New Ideas in Psychology* 14: 225-236.

Korpela, K. (1991). *Are Favorite Places Restorative Environments?* Paper presented at the Healthy Environments, Oklahoma City, OK.

- Korpela, K.** (1992). "Adolescents' Favorite Places and Environmental Self-Regulation." *Journal of Environmental Psychology* 12: 249-258.
- Korpela, K. and T. Hartig** (1996). "Restorative Qualities of Favorite Places." *Journal of Environmental Psychology* 16: 221-233.
- Korpela, K., M. Kyttä and T. Hartig** (2002). "Children's Favorite Places: Restorative Experience, Self-Regulation and Children's Place Preferences." *Journal of Environmental Psychology* 22: 387-398.
- Korpela, K.** (2002). "Children's Environment." In R.B. Bechtel and A. Churchman, eds. *Handbook of Environmental Psychology*. New York: John Wiley and Sons, 363-373.
- Kytta, M.** (2003). *Children in Outdoor Contexts: Affordances and Independent Mobility in the Assessment of Environmental Child Friendliness*. Helsinki: Helsinki University of Technology.
- Ladd, G.W. and S.L. Oden** (1979). "The Relationship between Peer Acceptance and Children's Ideas about Helpfulness." *Child Development* 50: 402-408.
- Lieberg, M.** (1994). "Appropriating the City: Teenagers Use of Public Place." In Neary, S.J., M.S. Symes and F.E. Brown, eds. *The Urban Experience: A People-Environment Perspective*. London: E and FN Spon, 321-333.
- Lyons, E. and G.M. Breakwell** (1994). "Factors Predicting Environmental Concern and Indifference in 13-16 Year Olds." *Environment and Behavior* 26: 223-238.
- Lyznicki, J.M. et al.** (2004). "Childhood Bullying: Implications for Physicians." *American Family Physician* 70(9): 1723-8, N1.
- Marcus, C.** (1974). "Children's Play Behavior in a Low-Rise, Inner-City Housing Development." In D.H. Carson, ed. *Man-Environment Interactions: Evaluations and Applications*. New York: Wiley.
- Matthews, M.H.** (1992). *Making Sense of Place: Children's Understanding of Large-Scale Environments*. Hemel Hempstead, Hertfordshire; Savage, MD: Harvester Wheatsheaf ; Barnes and Noble.
- Maurer, R. and J.C. Baxter** (1972). "Images of the Neighborhood and the City among Black Anglo-, and Mexican-American Children." *Environment and Behavior* 4(4): 351-388.
- Merleau-Ponty, M.** (1963). *The Structure of Behavior*. Boston: Beacon Press.
- Moore, R.C.** (1986). *Childhood's Domain: Play and Place in Child Development*. London and Dover, N.H.: Croom Helm.

- Owens, P.E.** (1988). "Natural Landscapes, Gathering Places, and Prospect Refuges: Characteristics of Outdoor Places Valued by Teens." *Children's Environments Quarterly* 5: 17-24.
- Preston, C.J.** (2003). *Grounding Knowledge: Environmental Philosophy, Epistemology and Place*. Athens: University of Georgia Press.
- Proshansky, H.M., A.K. Fabian and R. Kaminoff** (1983). "Place Identity: Physical World Socialization of the Self." *Journal of Environmental Psychology* 3: 57-83.
- Proshansky, H.M. and A.K. Fabian** (1987). "The Development of Place Identity in the Child." In Weinstein, C.S. and T.G. David, eds. *Spaces for Children: The Built Environment and Child Development*. New York: Plenum Press.
- Proshansky, H.M., A.K. Fabian and R. Kaminoff** (1995). "Place-Identity: Physical World Socialization of the Self." In Groat, L.N., ed. *Giving Places Meaning*. London: Academic Press.
- Ramsey, P.G.** (1991). *Making Friends in School: Promoting Peer Relationships in Early Childhood*. New York: Teachers College Press.
- Reed, E.S.** (1996). *Encountering the World*. Oxford: Oxford University Press.
- Relph, E.** (1976). *Place and Placelessness*. London: Pion.
- Riggio, E.** (2002). Child Friendly Cities: Good Governance in the Best Interests of the Child. *Environment and Urbanization* 14(2): 45-58.
- Riley, R.B.** (1992). "Attachment to the Ordinary Landscape." In I. Altman and S.M. Low, eds. *Place Attachment*. New York: Plenum Press, 13-35.
- Schiavo, R.S.** (1988). "Age Differences in Assessment and Use of a Suburban Neighborhood among Children and Adolescents." *Children's Environments Quarterly* 5: 4-9.
- Selman, R.L.** (1979). *Assessing Interpersonal Understanding: An Interview and Scoring Manual*. Cambridge, MA: Harvard-Judge Baker Social Reasoning Project.
- Selman, R.L.** (1980). *The Growth of Interpersonal Understanding: Developmental and Clinical Analyses*. London and New York: Academic Press.
- Shamai, S.** (1991). Sense of Place: An Empirical Measurement. *Geoforum* 22: 347-358.
- Sluckin, A.** (1981). *Growing Up in the Playground*. London: Routledge and Kegan Paul.

Spencer, C. and H. Woolley (2000). "Children and the City: A Summary of Recent Environmental Psychology Research. *Child: Care, Health and Development* 26: 181-198.

Sobel, D. (1993). *Children's Special Places: Exploring the Role of Forts, Dens, and Bush Houses in Middle Childhood*. Tucson, Arizona: Zephyr Press.

Smith, D.C. et al. (2004). "Toward a Positive Perspective on Violence Prevention in Schools: Building Connections." *Journal of Counseling and Development* 82(3): 287-93.

Stokols, D. and S.A. Shumaker (1981). "People in Places: A Transactional View of Settings." In J. Harvey, ed. *Cognition, Social Behavior and the Environment*. New Jersey: Erlbaum.

Sutton-Smith, B. (1971). "A Syntax for Play and Games." In Herron, R. and B. Sutton-Smith, eds. *Child's Play*. New York: Wiley, 298-310.

Torrell, G. and A. Biel (1985). "Parents' Influence on Children's Cognitive Maps and of Activity Ranges in Residential Neighborhoods." In Garling, T. and J. Valsiner, eds. *Children in Environments*. New York: Plenum Press.

Tranter, P. and E. Pawson (2001). "Children's Access to Local Environments: A Case-Study of Christchurch, New Zealand." *Local Environment* 6(1): 27-48.

Twigger-Ross, C.L. and D. Uzzell (1996). "Place and Identity Process." *Journal of Environmental Psychology* 16: 205-220.

van Vliet-, W. (1983). "Exploring the Fourth Environment: An Examination of the Home-Range of City and Suburban Teenagers." *Environment and Behavior* 15(5): 567-588.

Woolley, H., J. Dunn, C. Spencer, T. Short, and G. Rowley (1999). "Children Describe Their Experiences of the City Center: A Qualitative Study of the Fears and Concerns Which May Limit Their Full Participation. *Landscape Research* 24: 287-301.

Youngiss, J. (1980). *Parents and Peers in Social Development: A Piaget-Sullivan Perspective*. Chicago: University of Chicago Press.