CHILDREN'S CONCEPTIONS OF SPATIAL APPROPRIATION:
AN ASPECT OF SOCIAL KNOWLEDGE

by

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ABSTRACT

The purpose of this exploratory study was 1) to identify and illustrate a number of components of a scheme of interpretation used by children to comprehend and act according to social rules and conventions governing the appropriation of space, and 2) to develop and test a model for examining qualitative differences in such a scheme of interpretation, within and between various age groups.

The model was based on two propositions: first that knowledge of the social structure and the social organization of space are two components of a scheme of interpretation, and second that such a scheme of interpretation will become more abstract, differentiated, and integrated with age.

In the final study fifteen children were interviewed, including ten six year olds and five twelve and thirteen year olds. The interview focused on the children's awareness of and justifications for social rules and conventions governing access to and use of private, semi-private, and public spaces in the neighborhood, school, and home.

The model was successfully used in the analysis of the children's responses. Various aspects of their conceptions of the social structure and the social organization of space were explored. Their responses were also classified according to four levels posited in the model.

It was found that most of the six year olds had an undifferentiated and concrete scheme of interpretation. They were aware of context-specific rules and conventions. When asked to explain or justify the rules they typically referred to the physical or social characteristics of the setting.

By twelve or thirteen years of age the children had developed a more abstract, differentiated, and integrated scheme of interpretation. They often referred to concepts such as power or ownership to explain or justify
the ability of various individuals to appropriate space.

Thus, the results of this study suggest that an understanding of spatial appropriation involves not simply internalizing a 'catalogue' of social rules and conventions, but rather constructing a more complex scheme of interpretation consisting of knowledge of 1) the social structure, 2) the social organization of space, and 3) the relations between them.
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CHAPTER ONE: INTRODUCTION

1.1 Statement of the Problem

Numerous researchers have argued that the act of defining and defending space is an expression of biological or psychological drives (Altman, 1970; Stea, 1970). The earliest studies of territoriality referred to the spatial behavior of animals in an attempt to explain why human beings establish and defend boundaries (Ardrey, 1966; Calhoun, 1962). It was suggested that human beings, like animals, have an innate tendency to defend "home" territory, especially in conditions of high population density (Galle, Gove and McPherson, 1972; Schmidtt, 1957).

A broader spectrum of spatial behavior research, including studies of personal space, proxemics, and crowding suggests, however, that a narrow psychological or biological explanation for territorial behavior may be inadequate to account for the complexities involved in the process of spatial definition and control. Such a definition does not account, for example, for the demonstrated variation in patterns of spatial behavior across cultures and contexts (Hall, 1966; Sommer, 1969; Stokols, 1978), nor does it give adequate consideration to the process of negotiation which takes place between those who attempt to establish claims to space and those who encounter those claims.

Thus, territoriality has been reconceptualized for the purposes of this study and a new term "spatial appropriation" has been used. Spatial appropriation refers to a multi-dimensional, interactive process of spatial definition and control involving both those who attempt to establish claims to space and those who encounter those claims. It is assumed that this process is governed by a complex system of social rules and conventions, and furthermore that in order to comprehend and act according to the rules and
conventions individuals construct a "scheme of interpretation" (Mead, 1944). For the purposes of this study a scheme of interpretation is defined as a system of ideas and beliefs about how space is or should be used.

Although previous studies have dealt with adults' conceptions of this system of rules and conventions (Hall, 1966;1961; Rappoport, 1972), little information is available regarding the form or content of a scheme of interpretation used by children. As Baldassare (1978) noted in his recent review of the spatial behavior literature "... studies of the socialization of space use and the development of spatial meaning and subsequent responses have been lacking" (p.50).

This study addresses this gap in the literature as it focusses on the content of children's conceptions of rules and conventions governing access to and use of private, semi-private, and public space. It is an exploratory study which is aimed first at identifying and illustrating several components of a scheme of interpretation used by children to comprehend and act according to rules and conventions governing spatial appropriation, and second at developing and testing a framework for looking at the qualitative differences in such a scheme within and between various age groups.

The following research questions were posed:

1. To what extent do children distinguish between private, semi-private, and public spaces and the categories of people who can gain access to those spaces?

2. What are their conceptions of the social roles and relationships which exist between individuals who control space and those who encounter those claims?

3. What are their conceptions of the location and meaning of boundaries?
4. What types of explanations and justifications are used by the children to support their statements in (1), (2), and (3)?

1.2 Background to the Problem

1.2.1 Spatial Behavior Research

It can be argued that spatial appropriation is governed by a highly complex system of social rules and conventions. Although the complexity of this system of rules and conventions has not been dealt with explicitly in the literature, a number of studies suggest that spatial appropriation may be a learned rather than an innate characteristic of human action (Hall, 1966; Stokols, 1976). Furthermore, these studies imply that spatial appropriation is governed by a large number of rules and conventions that are specific to particular cultures and contexts.

Studies dealing with 'personal space', 'proxemics', and 'crowding', for example, demonstrate that many rules and conventions governing spatial behavior vary from one context to another. Edward Hall (1966), an anthropologist who is well-known for his research on 'proxemics' or interpersonal distancing, claims that in conversations friends maintain closer interpersonal distances than strangers. He bases this claim on extensive fieldwork, as well as observations and interviews, with a large sample of middle class, North American adults (Hall, 1966).

Hall has also studied cultural differences in proxemic behavior and has found that in some cultures it is appropriate to maintain closer interpersonal distances than in others (Hall, 1961). Thus, although there may be some universal features of spatial behavior (e.g., the notion that there is a 'proper' distance), the expression of those universals often varies from one context to the next (see also Altman, 1975).

Research concerned with 'personal space' indicates that there are also
context-specific rules and conventions governing the definition and control of spatial boundaries around the body (Ball, 1973; Felipe and Sommer, 1966). Robert Sommer, an environmental psychologist, found in studies conducted in natural settings that the boundaries of an individual's 'personal space' seem to expand or contract depending on the social and physical characteristics of the setting (Sommer, 1969).

Crowding studies suggest that responses to restricted amounts of space, and the resulting close interpersonal distances are related to an individual's perception of the cause of the spatial restriction. Where close interpersonal distance is anticipated and interpreted as a 'normal' feature of the setting (e.g., at a rock concert) individuals will not react negatively to the high densities, and close interpersonal distances. In other settings, (e.g., in a library), where close interpersonal distance is usually considered inappropriate, an individual is more likely to feel 'crowded' (Stokols, 1976).

1.2.2 Social Cognition Literature

As this study involves children, the developmental psychology literature is relevant in terms of the influence cognitive development may have on the form or content of a child's conceptions of rules and conventions governing spatial appropriation.

Based on Jean Piaget's theory of cognitive development (Furth, 1969; Piaget, 1956; Flavell, 1973) studies have been done on the development of different aspects of social knowledge including knowledge of social rules and conventions, the economic system, and the operation of social institutions such as government and stores (Damon, 1978; Furth, 1977; Jahoda, 1978). These studies which involve North American and European children, suggest that at least in these cultures children's understanding of society becomes more differentiated, abstract, and principle-governed with age. Furthermore,
they indicate that the children initially learn situation specific rules and conventions, but with age and experience develop more general 'schemes' for understanding social institutions and events.

1.3 The Theoretical Framework

Much of the territoriality research has been based on a 'stimulus response' or 'behaviorist' theory of human action (Altman, 1970; Stea, 1970). The focus of these studies has therefore been on the relationship between the environmental stimuli and various behavioral responses. It has been argued that a stimulus (e.g., high density) produces a response (e.g., aggressive defense of space).

This study, in contrast, deals with children's conceptions, or their ideas and beliefs about the rules and conventions which govern the definition and use of space. More specifically, it is concerned with identifying and illustrating various components of a scheme of interpretation which is used by children to comprehend and act according to those rules and conventions. The focus on an individual's conceptions or interpretations of social action is associated, on a theoretical level, with the writings of George Herbert Mead (1944). Mead argues that individuals do not merely respond to external stimuli, but rather interpret what confronts them and act on the basis of that interpretation. Mead also suggests that individuals construct 'schemes of interpretation' or systems of ideas and beliefs which allow them to participate in social interaction or 'joint action' (Blumer, 1966).

A concern with the qualitative differences in children's conceptions across various age levels also reflects a 'constructivist' theory of social development (Piaget, 1972; Furth et al., 1976; Damon, 1978). A constructivist perspective can be contrasted with a social learning theory of human development which is based on the assumption that a child is a 'tabula rasa'
who acquires social knowledge as a result of the internalization of adult norms, values and beliefs (Bandura, 1969).

In comparing the two approaches it can be said that social learning theory treats social knowledge as the product of imitation and modelling, whereas according to a constructivist theory social knowledge is gained through the child's active interpretation and definition of social activities and events.

Thus, as this study focusses on the qualitative rather than quantitative aspects of the child's understanding of social rules and conventions it is compatible with a constructivist rather than a social learning theory of knowledge.

1.4 Definition of Terms and Concepts

As the issue of children's conceptions of rules and conventions governing the use of space has not been dealt with extensively in the literature it was necessary to use several concepts from other areas of research.

"Spatial appropriation" was used instead of "territoriality" as it acknowledges the interactive nature of the definition and control of space and therefore calls attention to the social aspects of spatial behavior. The term "appropriation" literally means "to make one's own, to claim or take to one's self in exclusion of others as by an exclusive right; to set apart for or assign to a particular purpose" (Webster's Dictionary, 1973). In this study, the term spatial appropriation refers to an interactive process whereby claims to space are established and maintained by an individual or group within a particular social context.

The term 'scheme of interpretation' refers to a system of ideas and beliefs used by individuals to participate in the process of spatial appropriation. G. H. Mead initially used the term in a more general sense to
refer to a system of knowledge which allows individuals to participate in social action (Blumer, 1966, p. 539).

The framework for looking at the qualitative changes in a scheme of interpretation was developed based on a review of the spatial behavior and social cognition literatures. Two components of a scheme of interpretation were identified and illustrated. The first component is defined as knowledge of the social structure which consists of beliefs about social roles and relationships. The second component is defined as knowledge of the social organization of space which consists of ideas and beliefs about the location and meaning of boundaries defining private, semi-private and public space.

1.5 The Analytic Framework: its Development and Limitations

1.5.1 The Model

A model of children's conceptions of the rules and conventions governing spatial appropriation is used as a tool for exploring the form and content of a scheme of interpretation used by the children at different ages. It is based on two major propositions. First, that knowledge of the social structure and knowledge of the social organization of space are two components of a scheme of interpretation used by children to make sense of rules and conventions governing the appropriation of space; and second, that such a scheme of interpretation will become more abstract and differentiated with age.

The model consists of four levels ranging from no awareness of the social rules and conventions to a highly differentiated understanding of the rules and conventions. At the first level the child is not aware that there are social rules and conventions which prohibit access of certain social categories of persons to certain spaces. The child simply believes that all spaces are equally accessible to all people.
At the second level the child is aware of the rules and conventions but does not construct an explanation or justification for those rules which is based on the relationship between the social structure and the social organization of space. For example, the child will differentiate between the "principal's office" and other "non private" spaces in the school. He or she will recognize that students cannot gain access to the principal's office at will. But, the child's explanations for that distinction will not contain any reference to the relationship between the social roles of the principal and students and his or her capacity to control access to space.

This is not to say, however, that the child does not recognize the relationship between membership in a social category and the ability to appropriate space, but simply that the child does not use that understanding to explain or justify the rules and conventions.

At the third level the child's justifications for the rules and conventions contains an explicit, if concrete and simplistic, reference to the relationship between the social structure and the social organization of space. The child states, for example, that all people can go to the park because it is "public", but that only the people who live in the apartment can use the courtyard. The child does not use concepts such as ownership, or a facsimile of ownership such as renting, to justify that distinction.

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1 It is possible that children at a young age may have developed social knowledge that they do not express due to limited verbal skills.

2 Although a justification for control over space could include "renting" as opposed to "owning" none of the children in the final study mentioned that possibility. Thus, it should be noted that although the children were not encouraged to talk about renting whereas they were probed about their conceptions of ownership, this does not rule out the relevance of the concept of renting to the rules and conventions governing the definition and use of space in a North American context.
At the fourth level the child has developed a more abstract conception of the relationship between the social structure and the social organization of space and is aware that certain social categories of persons have rights and powers which enable them to legitimately establish and maintain control over space. At this level the child justifies the rules and conventions by referring to abstract concepts such as power, status, and ownership. The child might state, for example, that the principal can control access to his office because he is the principal and therefore has more power than the students.

It should be noted, however, that it is not assumed that there are only four levels of understanding of rules and conventions governing the appropriation of space. Obviously, a newborn child has a very limited understanding of the social structure and virtually no knowledge of the social organization of space. Thus, there may be less sophisticated levels than level one. On the other hand, it is likely that adults have developed a more differentiated and complex scheme of interpretation than adolescents have and therefore levels of understanding may extend past level four.

The four levels were used in this study because they were appropriate to children between the ages of six and twelve, the two age groups initially selected for inclusion in the study. The social cognition literature demonstrated that by six years of age most children have some knowledge of rules and conventions, and that by twelve or thirteen they have constructed a more abstract and differentiated scheme of interpretation for making sense of those rules and conventions.

1.5.2 The Development of the Model

The model was developed based on a review of the spatial behavior and social cognition literatures. It was then modified on the basis of a pilot
study and tested in a final study involving interviews with fifteen children.

The spatial behavior literature was first reviewed in order to develop a framework for looking at the process of spatial appropriation. It was necessary to have some understanding of the process of spatial appropriation before developing a model of children's conceptions of that process.

A review of the spatial behavior literature indicated that there was in general a correspondence between the social structure and the social organization of space. It indicated more specifically that the product of spatial appropriation (e.g., the social organization of space) reflected the social roles and relationships (e.g., the social structure) existing between members of a particular social setting.

Although the studies did not deal with this issue, it was clear that the relationship between the social structure and the social organization of space did not exist apart from the actions of individuals. In more concrete terms it was the collective actions of individuals who repeatedly adhered to and enforced boundaries which reproduced the social organization of space.

As there were no relevant studies dealing with the structure of an individual's conception of boundaries it was necessary at this point to formulate a framework for looking at the "subjective" aspects of the process of spatial appropriation.

The physicist, G. Spencer-Brown's definition of a boundary was taken as the starting point for constructing this framework. Brown (1969) defines a boundary as a distinction, a point on a plane. With this definition in mind it was argued that in order to adhere to a boundary an individual would have to distinguish between two categories of persons (e.g., those who could legitimately gain access to a space and those who couldn't) and two categories
of space (e.g., private and non-private space). Thus, the ability to distinguish between two spatial and social categories required some knowledge of both the social structure and the social organization of space.  

In order to go beyond simply identifying these two components of a scheme of interpretation, the developmental psychology literature was consulted. Studies regarding the content of children's conceptions of society were focussed on, and an attempt was made to apply the findings to the model. Two relevant findings were extracted from the social cognition studies. First, it was reported that children's conceptions of society become more abstract and differentiated with age, and second that as children get older they construct more integrated 'schemes' or 'systems of relations' (Youniss, 1978).

A model was then constructed of the children's understanding of social rules and conventions governing spatial appropriation. It was based on the assumption that children's conceptions of the social rules and conventions governing spatial appropriation would be structurally consistent with their conceptions of other aspects of society.

As there were no instruments for eliciting verbal information from the children about their understanding of spatial rules and conventions, it was necessary to construct an interview schedule for use in the final study. Thus a pilot study, involving interviews with fifteen children between the ages of five and fifteen, was conducted.

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3It should be noted however that it is assumed that an individual could choose to disregard a boundary given extensive knowledge of the social structure and social organization of space. Although such knowledge is a prerequisite for adherence to boundaries, simply being aware of the location of a boundary does not constitute a sufficient condition for adhering to that boundary.
The pilot study provided a means of narrowing the focus of the questions to situations which were relevant to the children, and of developing questions which were stylistically and grammatically appropriate to various age levels.

Based on the pilot data, an interview schedule was constructed. The questions focussed on rules and conventions operating in three contexts: the home, school and neighborhood. The questions dealt with the location of public, semi-public and private spaces, the various social categories of persons who could or could not gain access to those spaces, and the children's explanations and justifications for the rules and conventions.

At this point it was decided to limit the age groups in the study to two; one group of six year olds and one group of twelve and thirteen year olds. This was done so as to facilitate comparison between and within age groups. It was anticipated, based on the findings in the social cognition literature, that there would be qualitative differences in the scheme of interpretation used by the children in the two age groups.

1.6 Limitations

This study is exploratory and as such is concerned with hypothesis generating rather than hypothesis testing. As the results of the study are based on interviews with only fifteen children any findings must be seen as tentative and subject to rigorous empirical tests across a wide range of socio-economic and age groups.

Although the model provides a preliminary tool for organizing and classifying the children's responses, the interview schedule requires further specification and testing. As this is an exploratory study, the reliability of the interview schedule has not been established. It is unclear, for example, whether or not the way in which the children interpret the questions is consistent with the interpretation intended by the researcher.
Age differences in the children's comprehension of terms such as 'ownership' may also be problematic. And, finally, the extent to which the questions structure the children's responses should also be examined.

1.7 Rationale

The study of children's conceptions of spatial appropriation has implications for spatial behavior and social cognition research as well as for the planning and design on multiple family housing developments. First, the children's responses provide us with an initial source of information about the components of a scheme of interpretation used by individuals to participate in the process of spatial appropriation. The study also provides an instrument for eliciting information about children's conceptions of their socio-spatial world, and, by virtue of the model offers a means of organizing and classifying that information.

Second, the study is relevant to the current social cognition research which deals with the development of children's understanding of their social world. The study thus provides a complementary source of information about a previously unexplored area of social thought.

Third, the study is relevant to our understanding of children's spatial behavior. The study may, by disconfirming what is currently assumed about children's knowledge of boundaries, lead to an alternate interpretation of their spatial behavior. A practical application of this knowledge can be seen in the case of the design of multiple-family housing. Designers have attempted to change children's spatial behavior by designing more impenetrable and visible boundaries. They have argued that in order to keep children out of private and semi-private spaces all that is needed is to make them aware of the boundary location.

The results of this study may indicate, however, that children in some
cases transgress boundaries simply to aggravate adults or to meet a physical challenge. They may see a fence as a symbol of adult domination or as a "something to climb on." Thus, their lack of adherence to a boundary may reflect rebelliousness or lack of opportunity for physical play rather than their lack of knowledge of that boundary.

Therefore, by exploring children's conceptions and explanations for rules and conventions governing the use of space, it may be possible to discover more about their motives for adhering to or ignoring boundaries. That information should enable planners to predict their spatial behavior and therefore improve the design of semi-public spaces in multiple family housing developments.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature review begins with a discussion of the theoretical and empirical limitations of the concept of territoriality, and moves to a review of crowding, personal space and proxemic studies. This broad spectrum of spatial behavior research is used to develop a conceptual framework for looking at the process of spatial appropriation.

The social cognition literature is reviewed next. A number of Piagetian-based studies dealing with children's conceptions of their social world provide the basis for developing an analytic framework for looking at children's conceptions of rules and conventions governing spatial appropriation.

Finally, related studies are considered. In this section an eclectic mixture of studies in environmental psychology, architecture, history, and sociology are reviewed as they relate to the form and content of children's conceptions of their socio-spatial world.

2.2 Spatial Behavior Research

Over the past decade the issue of 'territoriality' has been prominent in the spatial behavior literature (Altman 1970; Baldassare 1978; Edney 1974). Numerous researchers have argued that territoriality, the act of defining and defending space, is an inherent characteristic of human behavior. In the earliest studies of territoriality, ethologists suggested that territorial behavior was necessary to insure the survival of species, forced to compete for limited amounts of space (Calhoun 1962; Christian, Flyger & Davis, 1960; Hediger 1964).

Social scientists extrapolated from these ethological studies and used the concept of territoriality to account for increasing social pathology in urban areas. They suggested that increases in crime, disease, and suicide
could be attributed to the inability of individuals and groups living in high density environments, to establish and maintain claims to space (Galle et. al. 1972; Schmidt 1966). Although there has been some disagreement about the extent to which it is possible to generalize about human behavior from research with animals, a common assumption in most of the studies is that territoriality is an expression of inherited biological or psychological drives (Ardrey 1966; Altman 1970; Stea, 1970).

Several sub-areas in the spatial behavior literature, including the proxemic, personal space and crowding research, can be subsumed under the conceptual umbrella of 'territoriality'. Although these sub-areas have not in the past been conceptually linked with territoriality, they are all focussed on the same general issue - the definition and defense of spatial boundaries.

"Personal space" studies, for example, have been concerned with the definition and defense of boundaries around the body which, unlike the territorial boundaries, are conceived of as being mobile rather than fixed (Altman, 1975; Sundstrom 1975; Sommer 1969). 'Proxemics', the study of interpersonal distancing, has dealt with the establishment and regulation of boundaries between two or more persons (Aiello & Jones 1971; Hall; 1966). Finally, crowding studies have examined the psychological and behavioral responses to environmentally produced conditions of restricted interpersonal distance (Freedman Klevansky and Ehrlich 1966; Hutt & Vaizey 1966; Stokols 1976).

In these sub-areas, contextual and cultural variation in patterns of spatial definition and control have been reported. Edward Hall (1961), has shown that in face-to-face interaction, the amount of space claimed by individuals varies across cultures. Some cultural groups maintain closer interpersonal distances in conversations than do others. Hall explains the
differences in proxemic behavior by referring to macroscopic conditions such as population density. He argues that individuals who grow up in higher density environments feel more comfortable interacting at closer interpersonal distances.

Hall (1966) has shown that 'proxemic' behavior is also influenced by social factors and thus is not simply an inherited characteristic of human behavior. He found in experiments involving North American adults, that distances adopted in conversations in the laboratory and in naturalistic settings, vary depending on the social relationship existing between two or more persons. Friends, he found, maintained closer interpersonal distances than strangers. Studies similar to those done by Hall have been widespread over the past fifteen years. In fact, Altman (1975) estimated that there were over 200 published studies dealing with the determination and consequence of spacing among dyads. Researchers have examined the influence of countless social, environmental, cultural, and psychological factors on proxemic behavior.

Numerous studies have also demonstrated that the definition and defense of 'personal space' boundaries varies depending on the physical and social features of the setting (Leibman 1970; Sommer 1969). Barasch (1973) has shown for example, that the length of time which spatial claims will be defended is influenced by the apparent status of the invader. Students in a library setting defended their personal space more aggressively when the invader was dressed as a student as opposed to a faculty member.

In studies of spatial behavior conducted within institutional settings such as hospitals and libraries, Robert Sommer (1969) found that the physical arrangement of furniture influenced the nature and duration of social interaction. Although the findings may not be generalizable to all settings, the argument can still be made that boundaries of personal space expand and
contract depending on the social and physical characteristics of the setting.

Although Freedman et. al. (1971) originally declared that 'crowding' necessarily caused negative responses in humans, Stokols (1976) has recently argued that responses to high density and close interpersonal distances vary depending on the individual's perception of the cause of the spatial restriction. At a party, for example, where close interpersonal distances are anticipated and are often seen as being a 'normal' feature of the setting, an individual will likely not react negatively or feel 'crowded'. In other situations, such as on an uncrowded bus where close interpersonal distance is unexpected and inappropriate, the perception of 'crowding' is more likely.

When considered collectively, the personal space, proxemic and crowding research cited demonstrates that spatial definition and use is not simply an expression of biological and psychological factors. Rather, the establishment and maintenance of claims to space is governed by a highly complex system of social rules and conventions. As the spatial behavior research illustrates, these rules and conventions are context-specific. The amount of space claimed, the non-verbal cues used to establish and maintain claims to space, and the effects of reduced amounts of space all vary depending on the social, cultural and physical characteristics of the setting.

The notion that spatial behavior is governed by context-specific rules and conventions is an important element of Roger Barker's (1968) theory of ecological psychology. Barker developed the concept of the 'behavior setting' which accounted for the synomorphy or similarity in structure between environment and behavior. Behavior settings consist of 1. non-behavioral factors such as time and space, 2. standing patterns of behavior or the complex but stable patterns of behavior which characterize the setting, and 3. a relationship between behavioral and non-behavioral factors (Gump; 1974).
An example of a behavior setting used by Barker is a music class; as it occurs at a particular time at a particular place, it has associated with it particular patterns of behavior including playing instruments and discussion, and it is characterized by the interrelationship between the organization of the physical environment (e.g., the arrangement of chairs and tables) and the standing patterns of behavior (e.g., discussion and instrument playing).

According to Barker (1968) standing patterns of behavior, or the rules of the game according to which people and things are arranged, underly the synomorphy between the physical environment and social behavior. In a classroom for example, the teachers and students behave according to 'standing patterns of behavior' which structure their use of the environment as well as the organization of the physical features of that environment. The student who is familiar with the classroom setting is aware that the standing patterns of behavior within the classroom include listening to the teacher, and thus the student chooses a desk facing the teacher rather than one at the front of the room.

The idea that spatial behavior is governed by complex systems of spatial rules and conventions is not however, acknowledged in the territoriality research. It has been assumed that territoriality is 'caused' by biological or psychological drives, and thus the complexities involved in the context specific processes of spatial definition and control have been generally of little interest or concern to researchers working in this area.

An exception to this lacuna is, however, a number of urban ethnographies which focus on street gangs and their attempts to define and defend territory in inner city neighborhoods (Suttles 1968; Whyte 1955). Suttles' (1968), for example in his ethnography of a Boston neighborhood observed that street gangs claimed particular areas in a neighborhood: park, women and younger
female children occupied the stoops and porches of houses, and the middle-aged men's 'social clubs' met in the spatially segregated open garages, and rear rooms of local stores. Although Suttles does not make explicit reference to the interrelationship between status and power of particular peer groups in the community, and their ability to control semi-public space, we find evidence in his descriptions to support that claim.

2.3 Symbolic Interactionism: a Theoretical Framework

If we consider a broader spectrum of research, it is clear that the existing unidimensional definition of territoriality is inadequate to deal effectively with the complexities involved in the process by which claims to space are established and maintained. A biological or narrow psychological model cannot account for the cross-cultural and contextual differences in spatial behavior, nor can it account for the correspondence which exists between the social structure and the social organization of space.

Therefore, in the context of this study the term spatial appropriation rather than territoriality is used to refer to an interactive, multi-dimensional process by which claims to space are established and maintained. It is assumed that spatial appropriation is an inherently social process rather than simply an expression of biological or psychological drives in that it is governed by a complex system of social rules and conventions.

Bedrooms, offices and houses are a few examples of spaces that are generally recognized as "belonging to" an individual or group. One of the primary elements of this "belongingness" is that access to the space is regulated by various social rules and conventions, as well as, in some cases, by physical barriers such as doors and locks.

In the case of an office for example, non-occupants are generally expected to knock before entering and wait for permission to enter. However,
an individual who is unfamiliar with the cultural or social context within which
the office and the rules and conventions are meaningful, may enter the office
directly. An individual may also choose to disregard the rule and the boundary
in order to challenge the occupant's claim to the office. In either case
a social rule has been broken and a boundary transgressed.

The act of transgressing the boundary in many cases forces a process of
negotiation to occur between the occupant and the invader. Depending on
several factors, including the distribution of power between the two parties,
the definition of one party about the meaning of the boundary may be enforced
over the objections of the other.

In any case, it can be argued that claims to space are established and
maintained by virtue of an interactive process between those who make the
claim and those who encounter it. Furthermore, in order for the claim to
exist and persist individuals must comprehend and act according to the
relevant social rules and conventions.

This dynamic perspective on spatial appropriation can be traced to
George Herbert Mead's theory of symbolic interactionism. Blumer (1966)
outlines Mead's concept of 'joint action':

Group life takes on the character of an on-going process -
a continuing matter of fitting developing lines of conduct to
one another. The fitting together of lines of conduct is done
through the dual process of definition and interpretation.
This dual process operates both to sustain established patterns
of joint action and open them to transformation. Established
patterns of group life exist and persist only through the con­tinued
use of the same schemes of interpretation; and such schemes
of interpretation are maintained only through their continued
confirmation by the defining acts of others (p. 286).

According to Mead,'joint action' or social interaction involves a process of
interpretation and definition. Patterns of action, or lines of conduct which
allow such joint action, exist because individuals use the same schemes of
interpretation.
In terms of spatial appropriation, the scattering of books and articles of clothing on a desk in a library, or knocking at an office door before entering, are patterns of actions which contribute to the establishment and maintenance of spatial claims. If both the person who is establishing the claim and those who encounter it did not interpret the action in the same way, it would no longer be an effective means of establishing a spatial claim and therefore would fall into disuse.

The second point made by Mead is that schemes of interpretation persist only because they are confirmed by the defining actions of others. So long as individuals continue to define and interpret spatial boundaries in the same way, according to the same schemes, then those schemes will be confirmed in the minds of others and thus will continue to be used.

Thus, spatial appropriation as one example of a 'joint action' exists and persists because participants operate according to a common scheme of interpretation. The question of the form and content of such a scheme still remains unanswered, however.

2.4 Developmental Psychology Literature

As there are few existing studies of children's understanding of rules and conventions governing the use of space, the developmental psychology literature was consulted. Information was sought regarding the potential influence of age on a child's conceptions of rules and conventions governing spatial appropriation.

The psychological literature indicates that the levels of cognitive development, which generally correspond with age, structures a child's understanding of his or her social and physical world (Piaget, 1972; Furth, 1977; Turiel, 1975). Jean Piaget, one of the most influential developmental theorists, posits a direct correspondence between the level of cognitive
development and the growth of knowledge (Flavell, 1973). His 'organismic-developmental' model is based on the assumption that there are logical structures which regulate the acquisition of knowledge. Piaget argues that an individual constructs an understanding of the world through a dialectical process of assimilation and accommodation. That is, an individual interprets the world by 'assimilating' new information into existing cognitive structures or schemas, or 'accommodates' or changes those schemas to resolve inconsistencies. The schemas become more sophisticated with age, allowing for increasingly complex and abstract thought.

Piaget has defined four stages of cognitive development, which although they are associated with particular age ranges are more importantly thought to be consecutive stages (i.e., a child cannot skip a stage but must move from one level to the next). Movement from one stage to the next is contingent upon the development of 'operative' knowledge, or "the operations by which the child transforms parts of the world into reconstructable patterns" (Harland Moore, 1973). The stages are 1) sensory motor 2) pre-operational 3) concrete operational and 4) formal operational.

The sensory motor stage from birth until approximately two years of age is essentially the stage of the 'conquest of the object' (Elkind, 1970) represented by the capability of differentiating between the self and objects in the external environment. During this stage a child becomes capable of internalized thought rather than simply reflex action.

During a pre-operational stage of cognitive development from approximately two to six years of age, the child is in the process of learning a language and is capable of using symbols. The child is thus able to think

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4 It should be noted that the term 'scheme' as it is used in this study is not equated with Piaget's concept of a 'schema'. A 'schema' refers to the content rather than the logical structure of ideas about space.
about objects which are not directly observable. At this stage the child's thought is still egocentric as he or she cannot take the perspective of others.

At a concrete operational stage from approximately seven to eleven years of age the child masters classes and relations and can deal with two elements, properties or relations at one time. The child is now capable of logical thought, albeit at elementary levels. Elementary syllogistic reasoning can be employed and the child can formulate hypotheses about concrete matters.

At formal operational level from approximately twelve to fourteen years of age and beyond, the adolescent is able to think in abstract terms and to differentiate between the self's thoughts and the thoughts of others. The child is able to reason and to make hypotheses about abstract phenomena using hypothetical deductive reasoning.

In terms of this study, there are at least three elements of this theory of cognitive development which are of direct relevance to the study of children's understanding of rules and conventions governing spatial appropriation. They are 1) the idea that a child progresses from an egocentric to a more universalistic cognitive orientation. That is, as the child grows older she is able to decentre and take the perspective of the "generalized other" (Mead, 1944) 2) that there is a progression in an individual's cognitive development from a relatively global stage accompanied by lack of differentiation, to a state of increasing differentiation, articulation and hierarchic integration (Werner 1955) and 3) the progression of cognitive development from concrete to formal operations enabling the child, by the time she reaches formal operations to deal with abstract as well as concrete concepts.
2.4.1 Social Cognition Research

The study of a child's understanding of social situations as opposed to impersonal objects has emerged as a sub-field within developmental psychology over the past twenty years (Chandler, 1977). Prior to the popularization of Piagetian theory in North America, social development research was contained within the realm of social psychology and psychoanalysis. Although Piaget's theory of knowledge is not necessarily restricted to the development of knowledge of physical objects, most of the research using a Piagetian model has been concentrated on the child's understanding of the non-social world (Kuhn, 1978).

In the past decade, however, Piagetian-based social cognition research has flourished. Researchers have dealt with topics such as children's knowledge of social institutions (Furth, 1978), social roles and relationships (Youniss, 1978), the political system (Adelson and O'Neil, 1966), and the economic system (Jahoda, 1978).

An important contribution to the study of children's conceptions of their social world is the work of psychologist Hans Furth (1976). Furth, operating within a Piagetian framework, studied children's understanding of social events such as the operation of stores, schools and governments. After interviewing approximately 200 children between the ages of 5 and 11 Furth claimed that five and six year olds conceive of society as undifferentiated (minimal role and individual differences), personalized (voluntaristic), and operating according to set rules. In his study the youngest children based their explanations for social events solely on their observations. They believed, for example, that all money originated in the change given by the shopkeeper to the customer. If the child's mothers needed money to pay the rent, many of the children believed that she would go to the store.
and ask the shopkeeper for some. They came to recognize social functions and obligations at about nine or ten years of age. They understood then that just as customers pay for goods brought in the store, so shopkeepers also pay for goods delivered to the store. By eleven years of age the children began to use an 'overall system of relations' to check the reasonableness and consistency of interpretations or explanations. This system of relations consisted of differentiated rules about several sub-systems (e.g., roles, the exchange of money etc.).

Gustav Jahoda (1978) extended Furth's study by exploring children's conceptions of the economic system or the 'system of money'. He interviewed approximately 120 children between the ages of 6 and 12. Jahoda argues that while previous studies focussed on children's understanding of a 'concept' of money, what was needed was an understanding of children's conceptions of the functioning of systems within which money plays a crucial role.

His results show that in qualitative terms, children's conceptions of an economic system progress toward an understanding of systems and their inter-relationships. The youngest children interviewed in the study did not understand the relationship between money exchanged between customers and shopkeepers, and the buying and selling of goods. As the children got older, however, they came to realize that the shopkeeper had to pay for his goods and that money for this comes from customers. By about ten years of age the children were more aware of the differences between buying and selling prices, a prerequisite for understanding how the two systems (e.g., buying and selling) are intermeshed.

Jahoda, like many other researchers dealing with social cognition, assumes a 'constructivist' theory of knowledge.

The children were not just repeating something that they had heard at school or had been told at home. They were faced with
questions that were usually quite new for them and they actively tried to fit together whatever information was at their disposal in order to produce an answer. This is the justification for employing the term 'construction' to characterize their efforts (p. 119).

This constructivist position has also been adopted by William Damon (1978) in his study of the development of children's understanding of social rules and conventions including those governing friendship, dress, and eating habits. Damon, who also works within a Piagetian framework, found that children's understanding of social rules and conventions becomes more abstract, differentiated and principle-governed with age. Children at approximately six years of age were generally aware of context-specific rules and conventions (e.g., "eating food with your hands is not allowed at the dinner table"). By about twelve or thirteen years of age the children had however developed a more complex and generalizable understanding of social rules and conventions (e.g., "eating habits are culturally defined, in North America it is not socially acceptable to eat with one's hands").

According to Damon, young children initially learn situation specific rules and conventions by taking the perspective of one other person, such as a parent or teacher. The child must be aware that another individual has a different perspective than his or her own in order to recognize that a rule exists. As the child gets older and is capable of abstract and reflexive thought, he or she is able to take the perspective of the larger society or the "generalized other" (Mead, 1944). Only then is the child able to comprehend and act according to the social rules and conventions which are not context-specific prescriptions for behavior laid out by particular individuals.

Two common themes emerge from these social cognition studies. The first is that social knowledge is constructed given certain cognitive skills and
experiences. The second is that children's social thought becomes more abstract, differentiated, and principle-governed with age. As children get older they construct more complex, abstract and integrated schemes for interpreting social actions and events.

2.5 Related Studies

2.5.1 Children's Use and Conceptions of Space

There are a number of researchers who have attempted to test Piaget's theory of cognitive development in relation to children's developing understanding and knowledge of the physical environment. Hart and Moore (1973) for example examined the development of 'spatial cognition' which they defined as "the knowledge and internal or cognitive representation of the structure, entities and relations of space ... (p. 248)." They argue that children's image of space develops during the pre-operational period. At this stage of a 'fixed system of reference' the child uses a small number of uncoordinated landmarks or places to organize a spatial image. The child seems to be beginning on one hand to differentiate between himself and the environment, and on the other between elements within the environment.

During concrete operations these landmarks begin to be coordinated and the child's cognitive representation of large-scale environments begins to take shape. Upon reaching the formal operational stage the authors found that children were not only able to coordinate mentally the concrete details of the environment, but they were also able to think about concepts such as length and distance abstractly.

Acredolo et. al. (1976) tested Mart and Moors's (1973) model of the development of spatial cognition in their study of frames of reference used by children for orientation in unfamiliar places. They also found that children's knowledge of the environment progresses from an egocentric frame of reference
based on the relation of objects to their own bodies to a fixed frame of reference based on landmarks, and finally to a coordinated and abstract frame of reference.

We must be cautious about accepting these results however without recognizing that there is not necessarily a correspondence between an internal representation and the child's ability to communicate that representation pictorially, verbally, or topographically. It is possible that a child of five or six may appear not to have an internalized image of the spatial environment, because, for example, he or she lacks 'sophisticated' or adult-like drawing or verbal skills.

Given that recognition, however, and the fact that this study is focussed on the child's verbalizations of knowledge about their socio-spatial world, we can extract from these studies support for the idea that children as they get older will at least display increasingly abstract and coordinated knowledge of the socio-spatial environment, even though their knowledge might have developed at an earlier age.

Thornberg (1973) was also interested in studying the evolution of Piagetian stages in children's conceptions of space. He had children build places to live in out of clay blocks. Three to five year olds built solid massive forms with no distinction made between the container and the contents. Concrete operational children built enclosed spaces and were inclined to identify places according to their functional potential. The eight and nine year olds were concrete in their conceptions of places to live in and although they did show some evidence of abstract thought they had difficulty linking the thought with the manipulation of the material. Formal operational children demonstrated an experimental attitude toward the construction of places to live in, and were able to describe their buildings at a level of physical and social
Rand's (1972) study of the development of children's pictorial and social images of houses also documents the influence of cognitive development on children's conceptions of their socio-spatial world. When he asked children to draw and describe the houses they lived in he found that the five and six year olds viewed the house as a collage of objects although they understood the fundamental spatial rules which operated in the house such as rules about access to and uses of different spaces. Boundary markers such as fences, doors and landscaping were conceived of as play objects. Eight and nine year olds on the other hand recognized the general properties of the social organization of the family and had developed an awareness of the local neighborhood. Children at ten and eleven years of age had fully assimilated the rules associated with the socio-spatial order of the home and family. The older children were also able to generate abstract and systematic rules regarding appropriate behavior over a wide range of situations.

Another important study by Wolfe and Laufer (1974) on children's concept of privacy treats cognitive development as a factor which determines the structural organization of a child's understanding of socio-spatial concepts. The authors interviewed approximately 287 children between the ages of 5 and 17 and asked them to define privacy. The authors found that the children's concepts of privacy in general became more complex and differentiated with age. This finding is consistent with other studies dealing with socio-cognitive development.

The authors found that the use of 'alone' as a definition of privacy increased with age, paralleling the development of self-object differentiation, and that with increasing age the children were able to give more 'operative' concepts of privacy based on abstract principles such as control.
Wolfe and Laufer point to the importance to both the child's cognitive capacities and their experience, in the development of social knowledge. They argue that a conception of privacy is influenced by 1) the age at which the child develops a sense of psychological self which has implications for autonomy and control 2) the ways in which adults in the child's immediate milieu perceive, react to and define the child's desires for privacy, rights to privacy, and rights to freedom from invasion, 4) the extent and type of interaction with others and 5) the child's general abilities and emotional maturity.

The relationship between the larger social and cultural context and children's conceptions of the socio-spatial world is an important feature of Wolfe and Laufer's study. They do not take a strictly psychological perspective on the development of social knowledge but rather assume that the children's conceptions will reflect the social context. For example, the authors argue that the beliefs held by adults about the child's "right" to privacy will influence the extent to which the child can actually control access to private spaces such as bedrooms, and bathroom. Thus, the social attitudes regarding children will indirectly shape the child's conception of, or desire for, "privacy".

The argument that social knowledge reflects not only psychological factors but also environmental social, and cultural patterns is a central feature of Urie Bronfenbrenner's ecological theory of human development (Bronfenbrenner, 1979)\textsuperscript{5}. In the introduction to his book Bronfenbrenner defines the ecology

\textsuperscript{5}see also McGurk, 1977; for a discussion of an ecological approach to human development.
of human development as:

... the scientific study of the progressive, mutual accommodation between an active growing human being and the changing properties of the immediate settings in which that developing person lives, as that process is affected by relations between the settings and by the larger contexts in which the settings are embedded. (p. 21).

There are a number of assumptions underlying this ecological perspective which are central to the model of children's conceptions of rules and conventions governing spatial appropriation. These assumptions are the grounds upon which Bronfenbrenner's model and the model presented in this study can be compared, and at the same time differentiated from other current theories of human development and human action in the psychological and sociological literatures.

First, in contrast to traditional psychological models which focus on processes such as perception, motivation, thinking and learning, an ecological model advocates a focus on the content of social knowledge (e.g., what is perceived, thought about and acquired as knowledge). Second an ecological model examines how the psychological material changes as a result of the person's exposure to an interaction with the social-physical environment.

An ecological perspective differs from current psychological theories of development (e.g., Piaget, 1967) in terms of the importance placed on "context". Although Piaget's theory of cognitive development is based on the assumption that knowledge is constructed out of an individual's interaction with the physical and social environment, he and his colleagues have focussed primarily on the non-social or "decontextualized" aspects of knowledge. Bronfenbrenner, on the other hand stresses that development never takes place in a vacuum, and that it always is embedded and expressed through behavior in a particular environmental context. He refers to Kurt Lewin's (1936)
premise that behavior evolves as a function of the interaction between the individual and the environment. Bronfenbrenner argues that research on human development has focussed too heavily on genetic propensities and physical characteristics and has not given the environmental side of the equation its due. To counteract that limitation Bronfenbrenner suggests that a developing human being is affected not only by the environmental, social and psychological systems operating in the immediate setting, but also events occurring in other settings and in the larger context in which the settings are embedded.

Thus, Bronfenbrenner's theoretical framework offers support for the argument that children's conceptions of the rules and conventions governing the appropriation of space will reflect various aspects of the socio-cultural system in which they live. Although this issue has not been dealt with extensively in the spatial behavior literature, there are several unrelated studies which can be referred to at this point to illustrate some of the ways in which social and cultural conditions may structure children's ideas and beliefs about the appropriate definition and use of space.

2.5.2 Impact of the Socio-Cultural Context

Phillipe Aries (1962), a social historian, has explored the development of the idea of "childhood". Based on historical records he argues that the idea of "childhood" as a distinct period in life did not exist prior to the middle of the sixteenth century. He notes that children in the medieval period were treated as "small adults" and after the age of seven or eight were accorded the same rights and privileges as were adults. It was only with the rise in education and religious idealism in the seventeenth century that children were recognized as a distinct social category.

Thus, Aries' social history of childhood suggests that children's con-
ceptions of rules and conventions must be seen as an artifact of the socio-cultural context. More specifically Aries would argue that in so far as the social definition of childhood influences the range and type of experience children have, it will structure their conceptions of the social world of which they are a part.

Danzinger (1970) also argues that children's conceptions of their social world is a function of their socio-cultural milieu. He states that:

the child is socialized by ... his [sic] school, peer group as well as the mass media and the position which his parent's occupy in the social structure. He is also socialized by virtue of belonging to a particular culture at a particular stage in history (p. 18).

A study by Fry and Willis (1971) demonstrates how the social definition of childhood influences adults' reactions to the spatial behavior of children. The authors examined the reactions of adults to the invasion of personal space by children of different ages. They found that five year olds received a positive reaction, eight year olds were ignored and the ten year olds were negatively sanctioned in a similar fashion as would an adult in the same situation. The authors argue that norms for privacy and intrusion are defined differently for children of different ages and as such reflect adults' perceptions of whether or not the child is an independent being capable of being responsible for his or her own actions.

Numerous studies have also shown that the parents restrict the 'home range' or the territory of children depending on their age and sex (Andrews 1973; Hart 1979). Coates and Brussard (1974), for example, studied children's spatial behavior in a moderate density housing development and found that while four and five year olds stayed within fifty feet of the dwelling unit six to nine year olds travelled to their friend's houses which were often located outside of the cul-de-sac. The boys also were allowed to go off the site to stores and 'wild areas' while girls of the same age were restricted
to on-site locations. Parents were much stricter with girls than boys, and with younger as opposed to older children. Thus, the social definition of childhood displayed by the spatial restrictions set by the parents influences the range of children's environmental experiences. As the social definition of childhood structures the child's experience it should therefore have an impact on their conceptions of the socio-spatial environment.

The belief that children are socially incompetent members of society who are not responsible for their own actions, is one which seems to be current in our culture. The assumption that children transgress boundaries, for example, because they don't "know any better" has been expressed in several different literatures. For instance, a discussion of "trespassing children" was found in the California Law Review (Prosser, 1957):

Children, as is well known to anyone who has been a child, are by nature unreliable and irresponsible people, who are quite likely to do almost anything. In particular, they have a deplorable tendency to stray upon land which does not belong to them and to meddle with what they find there (p. 427).

The author, William Prosser, assumes that children are socially incompetent individuals who continually fail to heed social conventions and rules of proper action. He implies that children transgress boundaries and invade "private property" because they are not "civilized".

Sheri Cavan (1974), as well known sociologist, on the other hand draws attention to the belief held by adults that children are unaware of boundaries and the rules and conventions which govern access and use of private, semi-private and public space. She writes:

The characteristics of childish behavior as opposed to adult or mature behavior revolves primarily around the notion that the child does not have a complete sense of other people's privacy, or the limits of his own individual area. Children are pictured as intruding and protruding at will (p. 55).

A number of planners and architects have recently pointed to the problems
generated in multiple family housing developments by children's lack of adherence to social rules and conventions governing the use of space. According to a number of studies, one of the major problems associated with higher density housing is the difficulty in establishing and maintaining privacy (Cooper-Marcus, 1972; United Way, 1972). Children, due to their tendency to invade private spaces have been identified as one of the primary sources of the dissatisfaction experienced by adults (Beck 1977; Becker, 1976; Cooper, 1975). An assumption underlying these studies is that children's failure to adhere to boundaries is a reflection of their lack of awareness of the social rules and conventions regarding use and access to space, and in more general terms their lack of awareness of boundaries between private and public space.

Although the study will not investigate children's spatial behavior, or the effectiveness of various types of boundaries, it may contribute to an understanding of the children's motives for transgressing boundaries. By exploring their conceptions or ideas about rules and conventions which govern use of and access to space, it may be possible to develop a better understanding of their spatial behavior.
3.1 The Analytic Framework

A review of the spatial behavior literature indicates that the unidimensional concept of territoriality is inadequate to deal with the complexity of the process by which claims to space are established and maintained. Therefore the concept of spatial appropriation has been introduced. Spatial appropriation is defined as a multi-dimensional, social process which involves both the individuals who establish claims to space and those who encounter those claims. The literature on personal space, proxemics and crowding suggests that spatial behavior in general, and the process of spatial appropriation in particular, is governed by a complex system of context-specific rules and conventions.

The notion that individuals construct a scheme of interpretation in order to comprehend and act according to these context specific rules and conventions is based on G.H. Mead's theory of "joint action". Mead (1936) argued that in order for patterns of social action or 'joint action' to exist and persist individuals must use common schemes of interpretation. As spatial appropriation involves a process of interpretation and definition, and can therefore be defined as a joint action, it can be argued that individuals are able to participate in the process of spatial appropriation because they use a common scheme of interpretation.

The social cognition literature, based on Jean Piaget's theory of cognitive development, provides a framework for looking at how individuals construct schemes of interpretation. The social cognition studies suggest that children do not simply internalize a set of rules and conventions regarding the use of space, but rather construct an understanding of those rules based on an interaction between their cognitive skills and experience.
These studies also suggest that although children may initially learn context-specific rules and conventions, with age they construct more abstract and integrated schemes from which they can derive situation specific prescriptions for proper action.

Finally, the environmental and social historical studies reviewed suggest that children's conceptions of their socio-spatial world is an expression of the social, cultural and historical context in which they live.

3.2 The Model of Spatial Appropriation

The model of spatial appropriation provides an analytical tool for dealing with some of the complexities involved in the process of spatial definition and use while still retaining a focus on the dynamic, multi-dimensional processes involved.

Four assumptions underly the proposed model of spatial appropriation. First, it is assumed that the establishment and maintenance of claims to space is a learned aspect of human action rather than an expression of inherited biological or psychological drives. This means that individuals do not appropriate space out of any physiological "need" to have and control territory, but rather that they learn the cultural and context-specific rules and conventions regarding the appropriate definition and use of space, and act on the basis of their understanding of those rules and conventions.

The second assumption is that spatial appropriation involves a dual process of interpretation and definition. Both the individuals who are establishing a claim to a space and those who encounter that claim are seen as being co-participants in the process of spatial appropriation. In contrast to the assumption associated with territoriality, that the definition and defense of space is an independent action committed by individuals or groups, the model of spatial appropriation assumes the interrelationship between those who attempt to claim a space and those who directly or indirectly
encounter that claim.

For a space to be successfully appropriated, not only must the boundaries be recognized, but the individuals who encounter those boundaries must accept the claim as legitimate. Otherwise, the boundary will be ignored and the claim will be up for negotiation. For example, a theater-goer's attempt to establish and maintain a claim to a seat by leaving a jacket on the seat at intermission will only be successful if other theater-goers first interpret the jacket as a symbol of a boundary and second accept the legitimacy of the claim. If the other theater patrons simply remove the jacket because they do not accept the notion that seats can be "saved", or if they sat down because they did not interpret it as a boundary marker, the attempt to appropriate that space would fail. That is, unless the jacket owner defended his claim and enforced his definition over the objections of the new occupant the attempt to appropriate the theater seat would be unsuccessful. Thus, it is argued that both parties participate in the process of spatial appropriation according to a dynamic process of interpretation and definition.

The third assumption is that spatial appropriation is a multi-dimensional process. The arrangement of the physical environment, the actions of individuals within that setting, and the interpretation of both the social and physical definition of space by the participants are three major dimensions of the process of spatial appropriation. Thus, as opposed to the unidimensional concept of territoriality, which is defined as simply a biological or psychological phenomenon, the model of spatial appropriation acknowledges the interrelationship among physical, social and psychological factors.

The fourth assumption is that spatial appropriation reproduces the interrelationship between the social structure and the social organization of space. That is, the product of spatial appropriation (e.g., the social
organization of space) reflects the social roles and relationships (e.g.,
the social structure) existing among members of a particular social setting.
The social structure is defined as the composite of social roles and rela-
relationships which exist between members of a particular setting, and the social
organization of space is defined as a classification system which is used to
differentiate one geographical space from another (e.g., a spatial heirarchy
from private, to semi-private and public space).

3.3. Model of Children's Conceptions of Spatial Appropriation

The model is based on the premise that individuals construct a scheme
of interpretation in order to make sense of the complex system of rules and
conventions governing the use and definition of space. There are two secon-
dary assumptions regarding the form of such a scheme of interpretation. The
first is that a scheme of interpretation consists of two interrelated com-
ponents, knowledge of the social structure and knowledge of the social organi-
zation of space. The second assumption is that a scheme of interpretation
will become more abstract, integrated and differentiated with age, and that in
a more mature form it consists of an understanding of the interrelationship
between the social structure and the social organization of space.

3.3.1 Components of a Scheme of Interpretation

i. knowledge of the social structure

Knowledge of the social structure is defined as a system of ideas and
beliefs about social roles, relationships and social organization. Knowledge
of the social structure can range from a simplistic and concrete understanding
of social roles to a more complex and abstract understanding of social
organization. The level of understanding may vary depending upon a number
of factors, one of which is age.

At a simplistic level, knowledge of the social structure involves making
a distinction between two categories of persons. With respect to the issue of spatial appropriation, a relatively simplistic understanding of the social structure of a particular setting would be displayed by the ability to differentiate between those who are allowed access to a particular space (social category A) and those who are not (social category $\bar{A}$). At a more complex level, knowledge of the social structure is displayed by a more abstract understanding of the underlying dimensions of social organization such as power, status, and authority.

i. Knowledge of the social organization of space

The second component of an understanding of spatial appropriation is knowledge of the social organization of space. The social, as opposed to legal, organization of space is defined as a culturally specific classification system used to differentiate one geographical space from another. In our culture the social organization of space consists of a hierarchy of discrete categories from private, to semi-private and public space.

At a simplistic level an understanding of the social organization of space consists of knowledge about the location and meaning of boundaries. More specifically it involves recognizing that a boundary exists and therefore that there is a distinction between one space (A) and another ($\bar{A}$). At a more abstract level, knowledge of the social organization of space consists of an understanding of the social meaning of the distinctions between private, semi-private and public space. (eg. a dwelling is a "private" space in that the occupant may legitimately control access and use of that space).

3.3.2 Levels of Understanding

According to the social cognition literature it appears that by approximately six years of age children have a concrete and relatively simplistic, context-specific understanding of social rules and conventions. With age
and experience they construct, however, a more abstract and integrated scheme of interpretation consisting of knowledge of the social structure and social organization of space and the relations between them. An example of a 'concrete' conception of a rule would be that "the workmen can go in the park any time they like because they built it", whereas a more abstract conception would be "anyone can go into the park because everyone owns it and it is public".

A scheme of interpretation at the first level is characterized by some awareness of social roles with no understanding of the rules and conventions governing access to space. It was decided that "no understanding" at the first level would be characterized by a statement that everyone had equal rights of access to "private spaces" such as the principal's office at school or a private dwelling.

At the second level the child would be aware of the rules and conventions but would not be able to formulate an explanation which took into account the relationship between an individual's social role or position in the social structure and his or her ability to gain access to a particular space. The child's explanation would consist of descriptive statements concerning the attributes of the social category of person (eg. "children can't go into the staffroom because they might spill milk"), or categories of space (eg. "students can't go into the principal's office because the door is locked"). Or, the child might simply indicate that he or she did not know why the rule existed.

At the third level the child would display in his or her explanation some understanding of the relationship between the social structure and the social organization of space. The child would, for example, explain a rule by making an explicit comparison between two social categories of
persons (eg. teacher's can go into the staffroom because they are older and bigger than students), or between two categories of space (eg."I can play in the park because it is public, but I can't go into the apartment courtyard because I don't live there").

At the fourth level the child's explanation would simply be more abstract and integrated than at the third level. The child would explain a rule or conventions by referring to concepts such as power, status, or ownership which underly the relationship between the social structure and the social organization of space (eg. students can't go into the principal's office "because he is in charge and has more power than the students", or "strangers can't come into our house because our family owns it and we have the legal right to tell them to leave").

It should be noted that these levels of understanding are meant to represent points on a continuum rather than discontinuous "stages". Each level is characterized by a certain degree of understanding of both the social structure and the social organization of space.

Because the levels do not reflect absolute quantities of knowledge, but rather relative degrees of understanding, the classification of responses can be problematic. For instance, when a response contains reference to both the social structure and the social organization of space, it may be difficult to ascertain whether or not the individual is aware of the relationship between the two components. The inclusion of ideas about both components in one sentence may imply an understanding of the relationship when in fact no such understanding is present. Thus, care must be taken in classifying levels two and three as some conception of the relationship is being formulated at level two, but it is not explicitly stated until level three.
Table I: Levels of Understanding

<table>
<thead>
<tr>
<th>Categories</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. knowledge of the social structure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b. knowledge of the social organization of space</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c. knowledge of concrete relations</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>d. knowledge of abstract relations</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
3.4 The Interview

3.4.1 Respondents

Fifteen children were interviewed in the final study, ten six year olds and five twelve and thirteen year olds. The six year olds were all in grade one while the twelve and thirteen year olds were either in grade six or seven. Of the younger children six were female and four were male, while of the older children one was female and four were male. To protect the anonymity of the respondents all of the names used in this report are fictitious.

All of the children attended False Creek Elementary School, a relatively small school with an enrollment of approximately one hundred students. The school is located in an urban setting, approximately two miles from the downtown core and is part of the False Creek Housing Development. All of the children were either living in the False Creek Development, or had done so until one or two months previous to the study. As the development was completed only three years prior to the interviewing this means that there is a control for length of residence.

Although no demographic data was formally collected, informal interviews with the principal suggest that the respondents form a relatively heterogeneous group. As the population of False Creek as a whole is 'mixed' with respect to income, education and ethnicity (Vischer-Skaburskis Planners, 1980), it is assumed that the children interviewed in this study were also from a range of socio-economic, religious and ethnic backgrounds.

No information was gathered, however, regarding the previous residential history of the respondents. As children who have grown up in single family housing would have had less exposure to semi-public spaces in a residential context and therefore would be less familiar with the rules and conventions
governing use of that space, this variable should be controlled in further studies. Also, as ethnicity may be relevant to the content of a child's conception of the rules and conventions governing spatial appropriation, it should also be taken into consideration in future research.

3.4.2 Rationale for Age Groups Selected

Although it would be interesting and informative to study children's conceptions of rules and conventions governing spatial appropriation at all ages, for the purposes of this exploratory study it was decided to limit the age groups to two. This was done to allow for comparison within and between age groups.

Six and twelve year olds were chosen as the two age groups for several reasons. First, the cognitive development literature indicated that there were considerable differences between the two age groups in terms of levels of cognitive development. The research indicated that most children by six years of age are aware of context-specific rules and conventions although they don't understand the social function of those rules; by twelve or thirteen years of age however most children have developed relatively abstract and differentiated schemes for understanding the social rules and conventions and interpreting social activities and events. By this age most children not only understand context-specific rules and conventions but they also understand something about the underlying social functions of those rules and conventions.

Second, the cognitive development literature indicated that children younger than six years of age often are not able to verbalize their knowledge of social rules and conventions due to lack of verbal skills (Piaget, 1929). Thus children younger than six years of age would have had difficulty with the interview format. It was decided therefore to limit the lower age level
to children six years of age.

Third, it was argued that children from False Creek Housing Development would be the most appropriate respondents for this type of exploratory study as they would have had exposure to a range of spaces. Thus, as it would have been more difficult and time-consuming to recruit the children from the community through personal contacts, and as the support of the principal at False Creek School had been obtained, it was decided to recruit the children from the school. Therefore, considering the cognitive development findings, and the availability of respondents, the two age groups, six and twelve year olds, were chosen. Due to the small number of grade seven children enrolled in the school the older age group had to be extended to include both grades six and seven, or both twelve and thirteen year olds.

3.4.3 Recruitment

After obtaining the principal's and the School Board's approval, letters were sent home with the children to solicit their parents' consent (see Appendix E). The response rate for both age groups was approximately thirty percent. The low response rate could have been due to the fact that the study was carried out in the last two weeks of June and therefore the parents were inundated with school forms. This low rate could also be attributed to the fact that False Creek is a proto-typical housing development and thus its residents have been exposed to an inordinately high number of research projects.

3.4.4 Format of Interviews

The interviews were tape recorded and lasted approximately thirty minutes.

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6 This was corroborated in the pilot study interviews. Children at four or five years of age were not able to answer the questions.
Each child was interviewed separately in a small storage room in the school. Each child was called for, at his or her classroom, greeted warmly and asked to accompany the interviewer to the interview room. Although some of the grade one children seemed a little nervous, they all seemed at ease once the interview got underway. The interviews took place in a storage room which was cluttered with musical instruments and sports equipment. Two small chairs (placed about four feet apart) were used, and a table for the tape recorder.

Children in both age groups seemed comfortable with the interview format and with the tape recorder. They seemed self-assured and were generally able and willing to express themselves. The relaxed and informal setting typified by the cluttered storage room, may have diminished any fears the children may have had about the interview.

Prior to the beginning of the interview the children were engaged in informal talk about the school. As the questions could be answered easily they provided a way of 'loosening' up or making the child feel more at ease. In many cases however this exercise was unnecessary as the children talked continually. During the interview, questions were asked which required more than a "yes" or "no" answer, and in all but one case this format was successful for eliciting sentence type verbal responses (see Appendix A).

In addition, in some cases, especially in the case of the younger children, they asked to draw a particular place to indicate where they lived or played. This request seemed to come near the middle of the interview period, perhaps as a result of the child's restlessness. However, in these instances, the drawing served to provide a 'break' and also allowed the child to clarify his or her statements.

One of the children continually referred to events unrelated to the
topic and in several instances was reminded of the question and asked to give an answer.

The length of the interview did not seem to be troublesome for the children although they did become more restless toward the end of the session.

3.5 The Interview Schedule

The interview schedule consisted of questions relating to rules and conventions in three different socio-spatial contexts, the school, home and neighborhood. Within each of the contexts questions dealt with: 1. their awareness of rules and conventions and 2. their explanations and justifications for those rules and conventions (see Appendix A for a copy of the interview schedule).

Questions dealing with their awareness of rules and conventions included open-ended questions such as "Where can or can't you play in your neighborhood?", or more structured questions such as "Can you go in the principal's office any time you like?".

More specific questions were also asked including, for example, "When can you go to the principal's office?" or "When can a policeman come into your house?".

The second type of question involved asking the children to explain why certain individuals or groups could control access to space, or alternately why some individuals were excluded (eg. "Why can't students go in to the staff room any time they like?" or "Why can't strangers come into your yard and play any time they like?").

The first type of question was meant to elicit information regarding children's ideas about who controls access to space and alternately who can and cannot gain access to particular private, semi-private, and public spaces. Through these questions the children's conceptions of social roles...
and relationships including those of authority figures such as teachers, parents and policemen were explored. In addition the questions were intended to elicit information about the children's conceptions of the social definition and use of private, semi-private and public space.

The children's explanations and justifications for the rules and conventions were used to assess their level of understanding of the relationship between the social structure and the social organization of space.

Although the analysis of the levels of understanding included reference to all three contexts, an emphasis was placed on the scheme of interpretation used by the children to make sense of rules and conventions applying to neighborhood space. The children's understanding of the concept of ownership, the relationship between rules and conventions and ownership, and their explanations and justifications for that relationship, were focussed on in particular.

3.6 Transcription and Editing Procedures

The tapes were transcribed verbatim, except in two cases where the response to a particular question was excessively long and unrelated to the topic. Following the transcribing, the responses were categorized according to groups of similar questions. The responses were then compared and contrasted in order to discover similarities and differences in the form and content of the children's conceptions.

The responses were chosen for inclusion in the text based on their representativeness as well as their usefulness as an illustrative tool. Overall, the children's verbatim accounts were used, even when the child's confusion or uncertainty made the response less comprehensible (see Appendices B and C for transcribed interviews).
3.7 Physical Characteristics of the False Creek Development

The False Creek Housing Development Group, a team of architects, planners and engineers, was hired by the City of Vancouver in 1974 to develop a design concept for False Creek. The terms of reference were for a family-orientated, residential community with a mixture of households, income levels, and tenures. The City retained part of the site for a public park. Thus, unlike most multiple family housing developments the design concept included a complete range of spaces, from public, to semi-private and private space.

A number of co-operative and other non-profit sponsor groups were solicited to work with the Development Group. The design scheme and overall site plan for each 'enclave' was developed by architecture firms chosen by the sponsor group (see Appendix E for a map of False Creek).

Each 'enclave' consists of a circle of dwelling units surrounded on the outside by public space and looking inward on a semi-private courtyard. The design guidelines which stated requirements imposed on the design of each of the individual enclaves specified three types of open space. Land owned by the developers or 'public' space; neighborhood or semi-public space and private space. The language of the design guideline on the demarcation of public and semi-public space clearly implies a cultural context that makes boundary symbols meaningful:

Enclave gateway: All points of entry to an enclave should clearly differentiate between public and neighborhood territory. It is necessary to give a sense of territoriality to the enclave open space, to make it belong to the residents. This is not necessarily a 'gate' but a series of clues such as paving changes, archways, steps, trellises etc. that indicate a change of territory. (p. 46)

As False Creek Development includes a range of spaces it provided an ideal setting for investigating children's conceptions of rules and conventions governing access to private, semi-private and public spaces.
Table II: **Enclaves by Housing Type and Sponsor Group**

<table>
<thead>
<tr>
<th>Enclave</th>
<th>Type of Housing</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>66 units market rental</td>
<td>Limited Dividend Program</td>
</tr>
<tr>
<td></td>
<td>66 units senior's rental</td>
<td>Kiwanis Club</td>
</tr>
<tr>
<td>2</td>
<td>83 units market rental</td>
<td>Limited Dividend Program</td>
</tr>
<tr>
<td></td>
<td>46 units senior's rental</td>
<td>Bertha O. Clarke Society</td>
</tr>
<tr>
<td></td>
<td>53 units market condominiums</td>
<td>Stanzl Construction</td>
</tr>
<tr>
<td>3</td>
<td>30 units market condominiums</td>
<td>Stanzl Construction</td>
</tr>
<tr>
<td></td>
<td>56 units controlled leasehold</td>
<td>Creek Village</td>
</tr>
<tr>
<td></td>
<td>market condominiums</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>48 units market condominiums</td>
<td>Stanzl Construction</td>
</tr>
<tr>
<td>5</td>
<td>82 units Co-operative Housing</td>
<td>False Creek Co-op</td>
</tr>
<tr>
<td>6</td>
<td>88 units Co-operative Housing</td>
<td>False Creek Co-op</td>
</tr>
<tr>
<td>7</td>
<td>35 units market condominiums</td>
<td>University Non-Profit</td>
</tr>
<tr>
<td></td>
<td>24 units for physically handicapped</td>
<td>(Now called Marine Mews)</td>
</tr>
<tr>
<td></td>
<td>50 units controlled leasehold</td>
<td>Marine Mews</td>
</tr>
<tr>
<td></td>
<td>market condominiums</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>126 units non-profit rentals</td>
<td>Netherlands Society</td>
</tr>
</tbody>
</table>

**based on information reported in the Vischer Skaburskis (1980) post-occupancy study.**
IV Results

4.1 Introduction

This chapter is divided into two sections. In the first section the focus is on identifying and illustrating two components of children's conceptions of spatial appropriation. These are: 1. conceptions of the social structure (e.g. social roles and relationships) and 2. conceptions of the social organization of space (e.g. location and meaning of boundaries).

Although it is assumed that knowledge of the social structure is embedded in conceptions of the social organization of space, an attempt is made to look at the two components independently.

The analysis of children's conceptions of the social structure focusses on their ideas and beliefs about who controls space, and alternately, who can gain access to private, semi-private and public spaces in the school, neighborhood, and home. Children's conceptions of social roles and relationships including those of adults, and children; authority figures such as policemen and teachers, as well as strangers and friends are explored.

The second section of this chapter contains an analysis of the children's explanations and justifications for rules and conventions governing spatial appropriation. As mentioned earlier, it was expected that children's conceptions of rules and conventions governing spatial appropriation would range from a concrete and undifferentiated understanding, to a more abstract and integrated understanding.

The purpose of this second section is to illustrate the various levels of understanding as displayed in the children's responses, and by doing so explore the structure of the scheme of interpretation used at each level. Four levels of understanding were defined and the children's responses were used to illustrate each level.
The first level is characterized by some understanding of social roles with no understanding of the rules and conventions governing access to space. The second level by a context-specific understanding of rules and conventions with no understanding of the interrelationship between the social structure and the social organization of space. The third level is characterized by a relatively simplistic and concrete understanding of the interrelationship between the social structure and the social organization of space, while the fourth level is seen as consisting of a more abstract and differentiated conception of the rules and conventions displayed by an understanding of concepts such as power, status and ownership.

An emphasis in this section is on the children's conceptions of spatial appropriation in the neighborhood, or rules and conventions governing access to private, semi-private and public property. More specifically, the analysis is concerned with the children's conceptions of ownership, the relationship between rules and conventions and ownership, and their explanations and justifications for that relationship. (As mentioned earlier, although other concepts such as "renting" were not excluded intentionally, none of the children mentioned rights associated with renting as opposed to owning.)

4.2 Components of an Understanding of Spatial Appropriation

4.2.1 Conceptions of the Social Structure

i. beliefs about adults and children

All of the respondents except one six year old were aware of the rules and conventions governing access to private spaces such as the principal's office and staffroom at school, their own houses, as well as semi-public spaces such as courtyards and public parks. Their conception of the social roles of adults and children was an essential element of their understanding of the rules and conventions governing spatial appropriation. As children
act within an environment controlled by adults, whether at school, at home or in the neighborhood, it is understandable that their conceptions of spatial appropriation circle around their beliefs and ideas about the social roles of adults and reciprocally, about themselves as children in relation to adults.

The children's conceptions of adult and child roles may be best illustrated by their conceptions of rules and conventions governing access to the staffroom and principal's office in the school. The ability of the principal and teachers to appropriate space in the school contrasts sharply with the lack of ability of students to appropriate space within that setting. The children were aware of this distinction in spatial rights and often explained or justified the related rules by referring to what they believed to be the typical behavior of adults and children.

In many cases the children explained the fact that they weren't allowed to go into the principal's office or staffroom by stating that 'children' would behave inappropriately and thus should be excluded. Angela, for example, uses a characterization of typical 'childish' behavior to justify the rule restricting access to that setting.

(Could you go to the staffroom to eat your lunch?)
You can't
(Why not?)
Because if you go up there you might spill something and all the children spill milk up there and things.

Angela 6 years old

"Spilling milk" can be seen as an action which, in common sense terms, displays awkwardness and lack of social skills. It is also an action which is often committed by children. Hence Angela, who has probably been sanctioned for "spilling milk", displays her social knowledge by first associating such action with 'children' and second, using that understanding to justify rules
governing access to 'private spaces' within the school.

Several of the children extended their explanations beyond a description of the roles of either children or adults, to make a comparison between the two roles. Their comparison directs attention toward the social relationship which exists between children and adults. Sara, for example, has some concrete ideas about the differences between the social roles of adults and children and has used those ideas to construct an explanation for rules regarding access to the staffroom.

(Why do you think a teacher could come and eat lunch in your lunch room but you couldn't go and eat lunch in the staffroom?)
Cause they are big people and little children can't cause they aren't big yet but when they get older and work ...
Sara 6 years old

Sara explains the different spatial rights of children and teachers by referring to their physical appearance as well as their respective social roles. According to Sara 'big people' or adults work and are older, and thus can legitimately control access to space, while 'little people' or children cannot.

ii the manager

Another salient role relationship for many of the children is that which exists between themselves and the apartment manager who enforces rules and conventions applying to semi-public spaces such as the courtyards in their neighborhood.

One six year old respondent gave a very clear definition of the role the manager plays in the enforcement of boundaries within a multiple family housing development.

(What would happen if you walked into the courtyard and started playing?)
If the manager saw you he would tell you to go out, he would ask you why you were in there and would ask you if you were living there.
Shawn 6 years old
Shawn points to the role of the manager in enforcing rules and suggests that the rules do not apply to all people in all situations. He suggests then that the rule works in such a way that residence and purpose for entering the semi-public space are taken into account.

iii. strategies

Just as children actively construct social knowledge, they also actively develop strategies for dealing with adults. Many of the children discussed strategies they used for avoiding sanctioning by adults for breaking rules and transgressing boundaries. Carol, a twelve year old respondent, described how she and a friend dealt with an older woman who attempted to sanction them for transgressing a boundary.

...this was a couple of days ago we were down in the pond and you are allowed to go there but some people think you aren't. Like this old lady she came up and I was playing in my dingy and we fell and we started splashing and this lady started yelling at us. She started telling us to get out and I told her we didn't have to cause it wasn't private property and there wasn't any sign saying we had to get out. She said you'd better get out except in bad language, "I'm going to kill you." So I said, "Why don't you come in after us." and then she just left. She was one of those old crabby ladies with black hats...

Carol 12 years old

The pond described by Carol is located in the public park (see Appendix E). It was not intended for swimming, judging from the shallowness of the water and the presence of ducks etc. There are not, however, any signs which indicate that there is a formal rule prohibiting swimming.

This segment of the interview is interesting for two reasons. First, it provides a description of the respondent's conception of the social relationship which exists between herself and the 'old lady'. According to Carol the old lady did not have the authority to sanction her for swimming in the pond. Because it wasn't 'private property' Carol and her friend had a right to access and use of that space.
Second, Carol's characterization of the woman as a "crabby old lady with a black hat" who yells at children, swears and threatens to kill them, is one which reminds me of similar conceptions of adults I maintained as a child. It could be that, in a child's eyes any adult who attempts to invoke a negative sanction without the authority to do so will be characterized as 'evil'. One way for a child to justify lack of adherence to the demands of an adult whether it is a manager, or a crabby old lady is to descredit them by characterizing them as deviant. Thus Carol's statement that the old lady "threatened to kill them" can be interpreted as an attempt to embellish the characterization rather than a statement of fact. This quotation therefore displays not only a twelve year olds conception of a rule governing access to public property, but also the criteria used to define and respond to authority in adults.

A playfulness regarding the transgression of boundaries was exhibited in a number of the older children's responses. In many cases the children stated that they were aware of the rules restricting access to a particular private space but ignored them "just for the excitement of getting caught". Here is such an example.

(Is there anywhere in the school where you can't go any time you like?)
... you can't go to the boy's washroom but we always do. Sometimes we go running through from the back door to the front door because they are always unlocked at the back, so we run through screaming.

Carol 12 years old

In this case the taboo surrounding sex-segregated washrooms probably made the penetration of that space especially tantalizing. The game of running through the washroom was obviously one which delighted this respondent and probably the rest of her classmates.

This response also emphasizes the difficulty in drawing the assumption
that children transgress boundaries because they don't know they exist. As was indicated in the literature review, this assumption is used by architects and planners as the justification for building higher fences and walls in order to insure that children recognize where boundaries are located. These architects should not be surprised when the fences and walls are used as climbing apparatus and the boundaries are transgressed more frequently as they provide a more challenging opportunity for the children to test their skills.

iv social construction of authority

Another aspect of children's conceptions of the social structure was their ideas and beliefs about the spatial rights of various social categories of persons including teachers, police officers and mail carriers. The children were asked questions specifically about the rules and conventions governing the spatial behavior of these social categories of persons. As one indicator of 'authority' or 'power' is the ability to establish and maintain claims to space, or at least gain access to spaces which are for others inaccessible, the children's beliefs about the spatial rights of policemen as opposed to mailmen, or teachers as opposed to students can be seen as displaying some aspects of their conceptions of authority.

Most of the children believed that policemen could come into their house any time they liked but a mailman could not. While the younger children did begin to differentiate between the spatial rights of these two social categories of persons, they did not indicate that the rights to invade private space were related to the occupational status of the policemen. Chris, for example justifies the different spatial privileges as follows:

(How about the mailman can he come in?)
No
(How about the policeman?)
Yeah
(Why can the policeman but not the mailman?)
Cause he's not a stranger
(Why does that make a difference?)
Cause he wouldn't steal anything.

Chris six years old

This excerpt illustrates a six year old's attempt to construct an explanation to account for the regularities in behavior as posed in the question. Her understanding of the social role of the policeman is limited, although she does assume that the policeman is "honest" as he doesn't steal.

The Vancouver Police Force has been carrying out public relations programs whereby police officers spend time talking to school children, and perhaps this familiarity with policemen lies behind Chris's statement that policemen are "not strangers". Also, Chris, along with most of the six year olds equated strangers with "bad people". Thus perhaps her statement that policemen are "not strangers" simply implies that they are not "bad". This image would certainly be upheld in the media (eg. "cop" shows such as "Starsky and Hutch").

A number of the younger children did, however, recognize that the spatial rules which apply to various social categories of persons are related to their occupation or social role. A number of children explained that policemen can enter private spaces at will because "they save people" or "they trap robbers". Most of the six year old children believed however that mailmen can't enter private household space because they are "people we don't know so they are strangers". Even though both the police officer and the mail carrier may technically be strangers to the child, the police officer is seen as having spatial rights which the mail carrier doesn't have. Perhaps conceptions about spatial rights are one aspect of the child's developing understanding of authority as an attribute of a social role.

v.strangers
Another justification for spatial rules and conventions dealt with the perceived characteristics of 'strangers'. All of the six year olds characterized a 'stranger' as a 'bad' person, and many of them used that image to explain why there are rules which prohibit access of strangers to private property:

(Why do you think strangers can go in the park but not on your porch?)

...They might steal something, they might be wearing masks and pretending they are someone we know and they might make a mask and they get in and steal things.

Gunter 6 years old

The social categories of 'friends' or 'good guys' and 'strangers' or 'bad guys' seemed to be an important distinction for the younger children, judging from the number of times the children used it to describe and explain rules and conventions. The distinction between the social category of non-stranger or friend and stranger was less salient for the twelve year olds. They did not refer as often to the broad social category of "stranger" but rather broke that category down into various sub-groups (eg. "other tenants", "prowlers"). This can be seen as an indication of their more highly differentiated level of social knowledge.

vi. beliefs about teachers and students

There was a substantial difference between the older and younger children's conceptions of the social roles of teachers and students. The older children believed that the spatial rights of teachers and the principal were related to their jobs and thus their social status within the school setting. The younger children on the other hand, gave much more personalized and concrete explanations for the teacher's ability to appropriate space in the school.

Many of the younger children, for example believed that they could go to the principal's office to "ask him something". These types of responses reflect their conceptions of the social identity of the principal and
teachers. Angela, for example, conceives of the principal as a benefactor rather than as a disciplinarian.

(Can you go into the principal's office any time you like?)
No, only when you're sick or when you get hurt, when you're outside and fall off things and he comes and gets you and puts you in his office and tells you what happened.

Angela 6 years old

The older children were more aware of the administrative role of the principal within the school and the relationship between his social role and his ability to establish and maintain claims to space. Carol, for example, clearly understands the relationship between the principal's role and his ability to control access to his office:

(Why do you think the principal can come to your school classroom any time he likes but you can't go into his office any time you like?)
Because he's pretty busy and he has got a lock on his door and he has an extension line that goes out into the hall. He sort of shuts people off from coming in if he wants to and he makes important phone calls to the School Board and he finds out things like field trips and special lunches and things.

Carol 12 years old

Carol's response reflects her more differentiated and sophisticated understanding of the social structure within the school. She conceives of the principal as a "busy man" who is responsible for planning various school functions. She describes him in ways that emphasize his superior social status. For example, he has an extension line and a lock on his door which enables him to control access to his office, and he makes important phone calls to the School Board.

While the six year olds seem to orient to the rules and conventions governing access to the principal's office in terms of "seeking help", the older children often stated that a student had to have a "good reason", such as an appointment, to gain access to the principal's office.
(Is there anywhere in the school where you can't go any time you like?)
In the staffroom and the principal's office, the roof ...
(You said you weren't allowed to go to the principal's office any time you like.)
No, we have to ask our teachers and we aren't allowed to use the phone unless we have a good reason.

Ted 12 years old

The differences in orientation to the rules between the two age groups may be attributed to the way the two groups of children are actually treated by the principal and teachers. Rather than simply having a more sophisticated understanding of rules and conventions, the twelve year old's responses may accurately reflect the existing situation. The older children may not be allowed to go into the principal's office unless they have an appointment or a "good reason", whereas access by younger children may be less strictly monitored or sanctioned.

Based on informal observations from the outer office where I waited for the principal, this explanation seems unlikely, however, given that the secretaries monitored the behavior of both age groups and questioned them about their purpose for entering the outer or "General Office" before they got near the principal's office.

Another explanation for the differences between the conceptions of the two age groups may be that while the older children differentiate between the principal's office and the outer office the younger children did not. Here is one example of a six year old's explanation which clearly illustrates his rather undifferentiated conception of the two spaces:

(Why can the teachers go to the principal's office and the secretaries can, but not the kids?)
Because she works there and the principal he does too.

Shawn 6 years old

Although architecturally speaking the principal's office and the outer office are segregated by doors and walls, in the younger children's
mind the "principal's office" included the space where the secretaries sat as well as the place where the principal sat.

The younger children's responses in general reflect therefore, on one hand their relatively undifferentiated conception of space, and on the other their personalized and concrete conception of the social roles of the actors within the school setting.

The older children in contrast had a more differentiated understanding of both the organization of space within the school, and the social roles of the various categories of persons.

4.2.2 Conceptions of the Social Organization of Space

In the context of this study the social organization of space is defined as a culturally-specific classification system used to differentiate one geographical area from another. In North America the social organization of space can be seen as consisting of a hierarchy from private to semi-private and to public space.

In the context of this study private space is defined as space which is claimed by one individual. Private dwellings, interpersonal distance in conversations, and the 'principal's office' at school, can be seen as examples of private space. Semi-private spaces are those which are defined and controlled by a small group of people. Courtyards in the center of the enclaves are the primary type of semi-private space discussed in this study. Finally, public spaces are those which are accessible to all social categories of persons. The large public park is the most important type of public space in the False Creek Development.

Knowledge of the appropriate definition and use of private, semi-private and public space involves 1. knowing who controls access to the space and reciprocally who is restricted, 2. knowing where the boundaries are
located and 3. being aware of the conditions upon which access may be ob-
tained, and the gestures such as knocking which are used to request access.
(Although the knowledge of who controls access to space is relevant to
the social organization of space, that issue was dealt with in the first
section and thus will not be focussed on here). The first issue which
will be explored in this section is children's conceptions of some of the
conditions upon which access to private, semi-private and public space can
be gained.

i. conditions of access

Many of the children recognized that the purpose for entering a private
space was an important condition under which legitimate access could be
gained or denied. In a number of cases the children reported that in
order to gain access to 'private property' they would have to know the
occupant of that space. The children were aware of an implicit social rule
which states that strangers are generally not allowed access to private
space. One six year old stated for example that anyone who lives in a
house is allowed access to that space. She argued that her uncle could come
into her house because he "lived there", while the mailman couldn't because
he didn't live there.

Another condition described by the children was the use of rituals
such as knocking to gain access to private spaces such as a friend's house
or a stranger's house. As one six year old child responded "you're not
supposed to walk into people's houses without knocking, that's a rule". Another six year old stated that access to his friend's house was contin-
genent upon their invitation:

(Where can you go any time you like in your neighborhood?)
Sometimes my friends let me and I go to their house.  
Conrad 6 years old
Another unique conception of the social organization of space comes from a six year old who believed that access to and control of space should be based on reciprocal agreement. She argued that if the other children come into her yard then she should be allowed to go into their yards.

(What if you wanted to play on someone's porch, would that be okay?)
No, but if they came to play there we could go and play at their place too, we should be able to.

Pia 6 years old

Several of the younger children did not believe that there were rules prohibiting access to private space but rather thought that regularities in spatial behavior were due to the "personal preference" of the actors. When asked if the principal could eat lunch where they (the students) ate lunch one six year old responded "yeah, no he has to stay in the office". When asked if there was a rule or some other reason why he had to stay in his office she replied "he doesn't have to stay in the office all the time but he always likes eating in the teacher's room".

This response again suggests that the respondent does not differentiate between the teachers room and the principal's office, and that the principal's behavior could be explained by referring to personal preference. Conrad, another six year old also explained why he couldn't go to the principal's office to eat lunch by stating that "he never wanted to do that".

Several of the children based their explanations for rules prohibiting access to private property on a fairly pragmatic notion of personal preference; people restrict access to private property because it is more convenient, less disturbing or simply because they "want to".

(Why do you think strangers can play in the park but not on your porch?)
Um because the park is for everybody and people want to have private property and the porches are private property cause they wouldn't want to move the plants or anything.
Shawn also uses the concept of personal preference as a justification for the restriction of access to private property, rather than the concept of ownership. He does however qualify his statements with the observation that people want to protect their 'possessions' such as plants and fences. His response displays his understanding of the social justifications for rules and conventions prohibiting access to private property.

According to a number of anthropologists and environmental psychologists, interpersonal distance is regulated by implicit social rules and conventions. One such rule regarding interpersonal distance in our culture is that strangers should maintain further distance than friends. Studies have shown that individuals orient to this rule in so far as they back away when approached within three feet by a stranger. Hence questions were asked regarding the children's conceptions of rules and conventions governing interpersonal distance. The purpose of these questions was to discover first if the children could articulate social rules governing proxemic behavior and second to see if their conceptions of these rules was consistent with the conception found in the literature. Here is a quote which illustrates a six year old's understanding of rules regarding interpersonal distances in conversations.

(Suppose somebody was coming to sell some raffle tickets and your mom and dad wanted to buy some, where would they sit?)
They'd talk in the living room.
(Would they sit close together or far apart?)
My mom and dad would sit close together and my mom and the stranger would sit far.
(Why is that?)
The strangers we don't know very well.
(What if your friend came over and you were going to talk in the living room, where would you sit?)
We would sit beside each other and sometimes after we get into a fight we hug each other cause she's my best friend.
(What if somebody you didn't know came over would you sit beside them?)
No.
(Have you ever ridden on a bus and sat beside somebody you didn't know?)
Yes.
(Why would you sit beside someone you didn't know on a bus but not in your living room?)
Cause if the seats are all filled up and that's the only place I can sit you can sit there.
(Is that OK?)
Yeah but I don't talk to the stranger I just look, but I don't like sitting with strangers very much, I like sitting with my father.

Linda 6 years old

In this case Linda is aware of rules governing proxemic behavior. Note that she stresses that her mom and dad would sit close together but her mom and the stranger would sit far apart. Her response displays an informal rule which regulates the physical proximity of unacquainted males and females. As numerous studies have demonstrated, same sex pairs of strangers tend to maintain closer interpersonal distance than an opposite sex pair of strangers (Hall, 1966; Altman, 1975). Whether or not such a convention is salient in our culture, it is clear that Linda is aware of rules governing proxemic behavior of 'friends' as opposed to 'strangers'.

When asked about seating arrangements on a bus Linda responded that it was appropriate to maintain close interpersonal distance from a stranger as long as she didn't talk. This seems to be a very strong social rule which operates in public settings such as buses. Linda also states, with a greater degree of openness than one would expect of an adult, that she doesn't like sitting next to a stranger and would rather sit beside her father. Because fully socialized members of our culture are expected to maintain 'civil inattention' (Goffman, 1963) or appear to be blind to the actions of others in a public setting, it would be less likely that an adult would admit to
being influenced positively or negatively by the proximity of a stranger. That is, such an admission would constitute breaking a social rule of proper action in a public setting.

iii social versus architectural definition of space

It was discovered during the study that some discrepancy existed between the architectural definition of the semi-public space in the housing enclaves and the social definition and use of those spaces. According to the respondents, in some cases the boundaries of the semi-public courtyards were clearly defined and defended by the residents of that enclave while in other cases the courtyards were treated as public space in that the boundary was neither clearly defined or defended. Children from all enclaves could apparently gain access to and use these courtyards.

The University Non-Profit Enclave (UNP) was one example where the courtyard was defined socially as semi-public space insofar as the non-residents, and non-resident children in particular, were prohibited from accessing or using the courtyard. The courtyards in the False Creek Co-op Enclaves (FC) on the other hand were used consistently by non-resident adults and children without sanctioning from residents.

Although the differences between the two developments in terms of architectural design or social organization could be responsible for the differences in the social definition of space, that issue will be dealt with only in so far as the children discuss it. Rather, what is more important in the context of this study, is that the children were aware of the social definition of space in their residential environment. In fact, as a non-resident and therefore an outsider, I was not aware of any discrepancy between the social and architectural definition of space until informed by the respondents. Also, judging from the architect's diagrams of the enclaves
they also were not cognizant of the possible variation in social treatment of semi-public space.

All of the children indicated at some point that the FC courtyard was accessible to everyone, while access to the UNP courtyard was prohibited for non-residents. The boundary between the courtyard and the public space outside the enclave in the UNP co-op was physically demarcated by signs and fences. The residents took an active role in enforcing that boundary. According to the children the courtyard of the FC co-op was accessible to non-residents and residents alike, and there was no sign of a boundary surrounding that space. Here is an example of a typical response to questions about the two courtyards:

(Who can go to the FC courtyard?)
Anybody can go there.
(Who owns the land there?)
The People who own False Creek, but anybody can go anywhere that they want except the places that say PRIVATE PROPERTY KEEP OUT!
(Where are they?)
They are down there, there is a big sign there by the gates and they say private property.
(Why aren't you allowed to go there?)
Because the people who live there, if we go there we would be trespassing on private property cause you have to go right past these patios and these patio doors.

Ted 12 years old

Ted indicates that the FC courtyard is socially defined as public space. He assumes that the residents of the co-op do not own the courtyard but rather that the people who own the entire development also own the courtyard. He spontaneously states that access to the private property areas is restricted and indicated that on the map of False Creek that he was referring to the UNP co-op. Ted accurately describes the boundary markers of the co-op courtyard. There are large private property signs, and in contrast to most of the other enclaves, gates which enclose the courtyard area. He used the term 'private property' in his justification for the rules prohibiting
access to the UNP courtyard. Although in both co-ops all of the residents legally have some interest in the courtyard space Ted assumed that in one case the courtyard was 'private property' and the other 'public property'.

Also Ted suggests that the architectural features of the UNP co-op make it a more 'private' place. He notes that the UNP co-op is more private because to gain access to the courtyard entails walking past patio doors. To walk into the courtyard of the UNP involves walking by patio doors while in the FC co-op the entrances are raised one level above the courtyard.

Another respondent, a twelve year old boy who lived in the high rise apartments in False Creek, was also aware of the difference between the social definition of the two courtyards.

(Could you go into the FC courtyard?)
Yeah
(How come you can go there but not the UNP courtyard?)
Well most of my friends live over there, in the FC co-op. So if any kids go there they know you are friends, even if people go there cause its sort of a co-op - you're allowed to go into it. Jim 12 years old

Jim was aware of the social distinction between one courtyard and another but did not give an explanation to account for that distinction. The difficulty in providing an explanation is understandable given the complexity of the legalities involved in co-operative ownership.

iv definition and use of semi-public space

The children's perception of the difference between the U.N.P. enclave and False Creek courtyard (enclaves 5 and 6) was supported by a recent post-occupancy study completed by Vischer-Skaburskis Consultants (1980). These researchers interviewed approximately one half of the residents of False Creek development and found that differences existed in the use of the various courtyards. Some courtyards, such as Enclave 2 which included senior citizen and market condominiums, were not used by residents or non-
residents. Only 6% of the residents of enclave 2 reported that they used
the courtyard as compared to 43% of the residents of enclave 5 and 32% of
enclave 7.

Two factors which were identified as having some bearing on this dif­
ference in use were 1. the management of enclave 2 enforced rules which
prohibited use of the courtyards by residents and non-residents alike, and
2. the heavily landscaped character of the courtyard in enclave 2 prohibited
use. It was reported in the Vischer study that the resident manager "turned
the sprinkler on anyone who attempted to sunbathe in the courtyard" and
that the "Private Property - Do Not Enter" signs at the entrance to the
courtyard had been erected by the manager.

The only other enclave which attempted to control access to non-residents
through the use of 'private property' signs was enclave 7 (the UNP enclave).
(The decision to put up the signs was made by the Council of Residents).
According to Vischer et. al. (1980) the residents of enclave 7 put up the
signs because they were "attempting to protect the exclusivity of their
shared open space, much as they would in a conventional strata title develop­
ment, or they felt that the environmental design had failed to discourage
access by the general public" (p. 235).

However, the sensitivity of the residents of enclave 7 to intrusion by
children was clearly indicated in some of the open-ended questions posed in
the Vischer study. For example it was found that the residents of enclave 7
"perceived strangers in the semi-public spaces" more often than residents
of other enclaves. Only 8% of the residents indicated that they never
were aware of strangers, as opposed to 40% in enclave 5, and 25% in enclave
6. Furthermore, a number of UNP residents felt that children should be
excluded from using the space in the courtyard so that "it would look nice
and be peaceful". Four of the residents indicated that they wanted to erect fences or somehow restrict access by other residents, and particularly non-resident children.

In enclaves 5 and 6 (False Creek Co-op) most of the residents were not bothered by strangers in the courtyard. Five of the residents in enclave 5 wanted to make the courtyard more usable for children. None of the residents commented on the perceived intrusion of the courtyard by resident or non-resident children.

iv location and meaning of boundaries

A third element of knowledge of the social organization of space is the location and meaning of boundaries. Bob, a thirteen year old who lives in the UNP co-op describes how the boundaries of the private space are defined and defended in his enclave.

we have private gardens, they have fences around four feet high. (So that is private there?)
Yes that's their very own, and the whole thing is owned (So can anyone who lives in your section go into those gardens?)
No cause that's privately owned by the individual.
(What would happen if somebody didn't know and walked into their garden?)
Not much if they didn't know, they would say sorry this is private property.
(Are there rules about that in your section?)
There aren't any rules exactly, none that are posted or anything.

Bob seems to have a clear idea about the location and meaning of boundaries surrounding the private space of the gardens. The fences are used to demarcate that boundary and negative sanctions by the 'owners' are used to enforce that boundary.

The social definition of public space is another aspect of children's conception of spatial appropriation. All of the children believed that the park was 'public space' in that access to the park was not restricted. Most
<table>
<thead>
<tr>
<th>Enclave</th>
<th>Building Type</th>
<th>Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>eight storey apt. building - three storey senior's apartment building</td>
<td>large grass area with path across it</td>
</tr>
<tr>
<td>2</td>
<td>six storey market rental apartment - three storey senior's apartment bldg. - high rise condominium</td>
<td>three landscaped areas, some heavily planted</td>
</tr>
<tr>
<td>3</td>
<td>nine townhouse condominiums - one high rise apartment building</td>
<td>treed area and grassy open area</td>
</tr>
<tr>
<td>4</td>
<td>townhouses</td>
<td>small landscaped area, with trees and shrubs</td>
</tr>
<tr>
<td>5*</td>
<td>townhouses and three storey apartment bldgs. at end of enclave</td>
<td>small landscaped play area with equipment, road and parking area</td>
</tr>
<tr>
<td>6*</td>
<td>townhouses</td>
<td>large balconies &amp; walkways children's play area, road and parking lot</td>
</tr>
<tr>
<td>7**</td>
<td>townhouses - twenty-four unit residence for handicapped</td>
<td>grassy area, playground landscaped area with fountain and walkways</td>
</tr>
<tr>
<td>8</td>
<td>townhouses and three storey apartments</td>
<td>landscaped area and small playground</td>
</tr>
</tbody>
</table>

* False Creek Enclaves (FC)

** University Non-Profit Enclave (UNP)
of the younger children either did not know who 'owned' the park, or believed that the "manager of the school" owned it, or the "workmen" or the people who built False Creek owned it.

Their ideas about ownership can be understood if we consider that the only people they probably observed regularly occupying that space were the workmen. As the school is located right beside the park it is also understandable that if a child assumed that ownership was associated with occupancy, that the jurisdiction of the manager of the school should extend to the park.

Many of the children believed that whoever occupies a space also controls access to that space. One of the ramifications of such a belief is that no one should be allowed to permanently occupy public space. Although the children believed that temporary occupation of the park was permissible, permanent occupation such as building a house, was "against the rules".

(Can anybody go to the park that wants to?)
Yeah.
(Could I go there to play?)
Yeah.
(What if I wanted to build a house there could I?)
No cause you have to find a house first and some people are moving, if you build a house there people will get mad and if you make a tent that's ok at night.
(Why is it ok to have a tent at night?)
Cause if you don't live there and just see how it looks like with a tent everything outside, people dotthat, I never would do that.
(Why don't you think I could build a house on the park?)
Because maybe people want to come and sit and too much people go there and people go there on bikes and they might run over cause bikes are too heavy on the grass.

Angela 6 years old

Angela displays her knowledge of the social-organization of space in her explanation for rules prohibiting building a house on public property. She argues that people "would get mad if" someone built a house in the park and then suggests that there wouldn't be enough room for people to "sit on the
grass" if a house were built there. She is aware that the social definition of the park is that of public space and therefore that all social categories of persons should have equal opportunities for access to that space.

4.3 Levels of Understanding

4.3.1 Introduction

In this section the children's responses are categorized according to the proposed model. The model consists of four levels of understanding ranging from a relatively simplistic, concrete, and undifferentiated understanding at the first level, to a more complex, abstract, and integrated understanding at the fourth level.

The first level is characterized by some knowledge of the social structure with no knowledge of the rules and conventions governing spatial appropriation. The second level consists of a context specific understanding of rules and conventions with no understanding of the interrelationship between social structure and the social organization of space. The third level involves a relatively concrete understanding of the interrelationship between the social structure and the social organization of space with a more differentiated understanding of each component. Finally, the fourth level involves a more abstract understanding of the interrelationship between the social structure and the social organization of space displayed by knowledge of concepts such as power, status and ownership according to which the two components are interrelated.

It should be noted that the proposed model may apply to children under the age of six and over thirteen. It is likely that children at four or five years of age have a level one understanding and that children at one or two years of age may have less knowledge of the social structure and the social organization of space, and therefore would have what could be called
a level 0 understanding. Furthermore it may be that children up to fifteen
ten years of age or older have a level four understanding or some variation on
that theme.

The four stages were proposed only as an exploratory tool to allow for
the analysis of qualitative differences in the scheme of interpretation used
by children, within and between age groups. The levels were constructed
based on the assumption that all of the children's responses would be classi-
fiable according to the model, and furthermore that there would be only a
few, if any, cases at level one.

As mentioned in the introduction, the analysis in this section will
focus on children's conceptions of rules and conventions governing spatial
appropriation in the neighborhood. Specifically, the focus will be on
1. children's understanding of the rules and conventions governing access to
'private property' 2. the relationship between those rules and the concept
of ownership, and 3. their justifications and explanations for that relation-
ship. Although some data regarding children's conceptions of rules and
conventions operating in the school or home will be used to supplement this
analysis the main concern will be with the children's conceptions of rules
and conventions governing access to private property.

4.3.2. Level 1

As was expected, most of the six year olds and all of the twelve year
olds displayed some knowledge of the rules and conventions governing access
to private, semi-private and public spaces. One of the six year olds did
not, however, display in her responses that she was aware that there were
rules which prohibited access to private household space.

(Who can come into your house any time they like?)
Anybody.
(What about someone you don't know, could they come in any time
they like?)
Yeah if they were my friends or my mom's friends or if I just met them.
(What if they were somebody that nobody knew?)
I could just become friends with them and tell them they could come in.

Cindy 6 years old

Cindy displays her confusion about the rules and conventions in her statement that "anyone" could come into her house followed by her suggestion that only people who are "friends" could come in. She goes on to say that even someone whom she just met qualified as a friend, and thus could be "invited" in.

Thus, although Cindy seems to relate the rules and conventions governing access to household space to certain social categories of persons (e.g., friends can come in, people who are not friends cannot), she appears to be confused about the social definition of friendship. She is uncertain about finer distinctions in the relationship between various levels of intimacy and rules and conventions governing access to private space.

Although this interview only provides a limited amount of information it does suggest that not all six year olds necessarily have gathered enough information about the social structure to enable them to comprehend social rules and conventions governing access to private, and semi-private space.

4.3.3 Level II

Eight out of ten of the six year olds, and one of the twelve year olds were classified as having a level two understanding. This means that while these respondents had developed some ideas about the social structure and the social organization of space, they did not display an understanding of the relationship between the two components.

The analysis focuses on the children's justifications for rules and conventions governing use and access to "private property".
In North America, a property-owner is one category of person who has the legal right to control access to and use of space. (Although "renters" also have the legal right to restrict access to their dwelling while they are a tenant, the relationship between "renting" and rights to control access is very complex and will not be dealt with here.) Thus, in common sense terms justification for rules and conventions prohibiting access to 'private property' would be based on the principle of ownership.

Ninety percent or 9 out of 10 of the six year old children in the final study did not have a clear understanding of the relationship between rules and conventions and ownership. Their explanations and justifications for the rules and conventions display their attempt to construct a scheme of interpretation from which to understand spatial appropriation.

When asked where they weren't allowed to go in their neighborhood they replied "we're not allowed to go to the 'private property houses'", that 'only friends and family can enter our house without knocking", and "anyone is allowed to play in the park but only people we know can play on our porch". When asked why this was the case they either stated they didn't know or referred to the social or physical characteristics of the setting.

As was discussed in the first section of the analysis, a common explanation for rules and conventions governing access to private property dealt with the social role of the actor or the physical arrangement of the environment. Many of the children believed that strangers weren't allowed access to their house because "they might steal things", and that they weren't allowed to go into the neighbor's house at will because the "door was always locked" or because the "fence was too high".

The following segment of an interview illustrates the confusion experienced by many of the younger respondents, about the relationship between rules and
conventions and ownership. Although Linda is aware of the rules and conventions governing access to private property in her neighborhood, and has some understanding of the concept of ownership, she has difficulty integrating these components in order to construct an internally consistent scheme of interpretation.

(Who owns the park?)
The person who built it, the whole thing belongs to them.
(So can just those workmen play there or can anybody play there?)
Anybody.
(Why do you think it is OK for strangers to play in the park but not on your porch?)
Because it's somebody's porch and the park belongs to anybody
(Why does that make a difference?)
It's somebody's house and you have to ask before you can play on other people's houses, there might be something delicate and if you tip it over it might break
(Could the workmen or whoever owns the park tell people to get out?)
No, they never say things like that, they let anybody play in the park, just anybody.
(Why can the principal tell people they can't come into his office but the workmen don't ever tell people not to come into the park?)
Cause the principal owns his office and the people don't own the park, the people that play there don't own the park.

Linda 6 years old

This personalized and concrete conception of ownership was common throughout many of the younger children's responses. Like many of the children, Linda seemed to base her ideas about ownership on her observation of who regularly occupied that space. It could be that she had never observed any particular person regularly occupying the park besides the workmen; and thus she assumed that they must 'own' it.

Linda's confusion seems to originate with the lack of consistency between what she has observed and what she knows about 'ownership'. She is aware that strangers cannot freely enter private property, while they can use the park at will. She has observed that the principal restricts access to his office, while the workmen never sanction people for entering the park. She also believes that ownership is associated with occupancy and thus the principal
must 'own' his office and the workmen must own the park. Although each of the components of her scheme is logically based and internally consistent when forced to integrate the elements in her explanation, she comes up against the inconsistencies and becomes confused.

A number of features of Linda's response were typical of many of the children's responses. The first common feature was the concreteness of the children's conception of ownership. Some of the children believed that anyone who "grew the grass" owned that space, while others argued that ownership was contingent upon living next to a piece of land or habitually using that space.

Most of the children's concept of public ownership centered around the notion that nobody owned that space, or "anybody" owned it. It could be that these children understood much more about the social definition of public space but were unable to articulate their ideas due to their limited verbal skills. They may have used words such as "nobody" and "anybody" instead of more abstract concepts such as "the public".

Another six year old respondent had a somewhat clearer understanding of the concept of ownership but did not appear to understand the relationship between the term 'private property' and ownership.

(Who owns the grass in the middle of your place, the courtyard?) Everybody who lives here.
(What if somebody from another enclave wanted to play there?) They couldn't cause its private.
(What does "private" mean?) It's 'private property' and the manager lives right here, if he sees you, you aren't allowed to fool around with the hose.
(Why is it that nobody can come in if its private property?) Well like you know that kind of little thing with a clowns head and you turn the hose, well you can't do that.
(Why do other people can't come in because...) They can't come in cause some people might want to sit there, there is a little entrance here and a gate right here and ...
(What's the difference between the courtyard and the park?) The whole thing here is private property and park isn't
(What is the park then?)
Just a place where you play at recess
(Can anybody go to the park?)
Yeah.

Frank 6 years old

Based on this segment of the interview it is clear that Frank is developing an understanding of the concept of 'ownership', of rules and conventions and of the meaning of the term 'private property'. He knows for example that all of the residents of the enclave own the courtyard, that there are rules and conventions which prohibit access of non-residents to the courtyard, and that anyone can go to the park. He also believes that the courtyard is 'private property' while the park is called something different.

Although Frank seems to have developed an understanding of the various components, he has not yet discovered how they all fit together. He, for example does not appear to recognize that the term 'private property' has anything to do with ownership. The term 'private property' is used as a label to indicate places where he and others are not allowed to go. He states that the courtyard is 'private property' and then goes on to describe a hose in the courtyard which children are not allowed to play with. He is aware of a context-specific rule which prohibits access to the courtyard, but does not appear to be aware of a more general social rule governing access to semi-public space. Thus, he is able to use the term 'private property' to describe places to which access is restricted but does not understand that there is a relationship between rules and ownership, or between the term private property and ownership.

Many of the children argued that they could prohibit access to their porch or their front yard because it was 'private property', although they could not give an explanation for that belief. It was clear from their responses that they did not have a full understanding of the concept of
ownership. They did not understand first that 'private property' was privately owned land, and second that individuals and groups have a legal right to control access to land which they own. The following segment of an interview with a six year old illustrates these two gaps in her understanding of spatial appropriation.

(Why can kids you don't know play on your porch?)
They can't. It's not their property.
(Why would it make a difference if it wasn't their property?)
I don't know.
(How do you know it's not their property?)
Cause they live somewhere else.
(How do you know where your property is?)
Cause they live there and I live on my own property, if they move from their property then it's their own property.

Sara 6 years old

Here Sara argues that she can control access to her 'property' but does not justify those rights in terms of ownership. Later in the interview she again attempts to justify her right to control access to her back yard and we get a clearer idea of her conception of ownership and the relationship between ownership and rights to control access.

(At your house do you have any grass?)
It's in the back.
(Whose property is that?)
It's our property.
(What if some kids you didn't know wanted to play there, would it be alright?)
They could step on it.
(You couldn't tell them to go away?)
No cause I didn't grow the grass.

Sara 6 years old

One element in this response which is typical of many of the other responses is that children's conceptions of rules and conventions, and the relationship between rules and conventions and ownership, is much clearer with respect to space closer to the dwelling. The respondents seemed much more certain about rules governing access to their house than rules and conventions governing access to the porch or the courtyard. Furthermore,
they believed, as Sara did, that the occupant of a dwelling has a right to control access to a porch but not necessarily the back yard or the property surrounding the dwelling. Thus, it could be that a child's conception of rules and conventions governing spatial appropriation becomes more confused the further she moves from the dwelling. This would be expected as children's range of experience originates in the dwelling and with age expands outward. Thus, younger children should be much more familiar with the rules and conventions applying to household space than space in the neighborhood. Also, considering the design of multiple family housing, and the ambiguity of boundaries separating semi-public from public and private space, it is not surprising that the children's conceptions of boundaries becomes more confused with greater distance from the dwelling.

Only one of the twelve year old respondents indicated explicitly that he did not know if there was any relationship between the term 'private property' and ownership. He stated that he was not allowed to go in any places which were "private property". However, when asked how he differentiated private from non-private property, he replied that he looked for signs that say "Private Property - Keep Out".

(What does the word private property mean?)
I don't know, if you take a simple word like private property you can't think of anything that means that.
(Does it have anything to do with ownership?)
I don't know, that's a tough problem.
(How do people know what is private property and what isn't?)
Usually there is signs up saying private property and if you see something that says "park" there's a sign so you know you can go there.

Jim 12 years old

In other sections of the interview Jim suggested that the government owns the park, individuals own each townhouse or dwelling and that members of the cooperatives own the courtyards. He also believed that anyone could go to the park. He did not however understand that there is a relationship
between ownership and the rules and conventions and thus his response was classified as a level two understanding.

4.3.4 Level III

The response of one of the six year olds and one of the older children fall into this category. At this level of understanding the children have a relatively concrete and simplistic understanding of the relationship between the social structure and the social organization of space. It is at this level that a generalizable understanding of social rules and conventions is first displayed.

Liz, one of the six year olds had a well-integrated scheme of interpretation. She believes, for example, that people own houses that they live in, that all the people who live in the enclave own the courtyard, and that 'everybody' owns the park. She was also aware that there are rules which prohibit access to 'private property', that people are only allowed to go in the courtyard of the UNP co-op if they know someone who lives there, and that private property is land that is owned. Finally, she is aware that a property owner has the legal right to enforce rules and thereby control access to private property.

(Where aren't you allowed to go in your neighborhood?)
In the 'private property' houses, you're not allowed to go there only if you're visiting someone who lives there.
(Is that a rule?)
Yes.
(Who made up that rule?)
The people that own the houses.
(What does that mean private property?)
It means that it is owned, private property, you can't go on it unless we say you can.
(Why do you think strangers can go to the park but they can't come and play on your porch?)
Because everybody owns the park, but not everybody owns the porch.
(Is there any reason why people make up rules like that?)
For people's safety, cause the person who comes on your porch might want to start a fire or something.

Liz 6 years old
This response is classified as a level three understanding because Liz first distinguishes between owners and non-owners, in terms of their ability to establish and maintain claims to space; second she distinguishes between private, semi-private and public property in terms of rules regarding access, and third she recognizes that ownership underlies the interrelationship between the social structure and the social organization of space.

She understands that it is because an individual owns a space that she is able to enforce rules and thereby establish and maintain control over that space. Although Liz does have some understanding of the interrelationship between the social structure and the social organization of space, that understanding appears to be concrete and simplistic. When pressed to justify her belief that rules and conventions prohibit access to private property, Liz reverts to her conception of the personal characteristics of 'strangers'. She argues that rules and conventions are established for people's safety rather than for any social purpose.

A level three understanding is one in which the respondent is aware that, in the context of rules governing access to private property, ownership underlies the interrelationship between social and spatial organization. The extensiveness of their understanding of the relationship between ownership and rules and conventions is what distinguishes a third from a fourth level of understanding. At a third level, the respondent may justify rules prohibiting access to private property by referring to the fact that people "don't own those places" however they are unable to explain why ownership in our society legitimizes control over space. For example, although Carol indicated that people own a space and thus control access to that space her justification did not have anything to do with a legal right to do so.

(Are the apartments private property?)
Yeah because it's people's property, if you were to go up the stairs everybody in the whole building owns those stairs and you are only allowed to go up there if people say you can. (Why is that?) Because some people own the top floor and somebody owns the roof and people downstairs own the bottom floor.

Carol 12 years old

This segment of the interview suggests that although Carol may have developed some concrete understanding of the relationship between ownership and rules and conventions, her understanding of the social basis and function of that relationship is still somewhat unclear.

Although children displaying this level of understanding did not have a fully developed understanding of how ownership underlies the interrelationship between the social structure and the social organization of space, a number of them did refer to the concept of 'privacy' to explain or justify rules and conventions. For example, instead of arguing that the right to control access to space is associated with ownership, they argued that individuals can restrict access to private and semi-private spaces to preserve their 'privacy'.

Using the concept of privacy to justify rules and conventions governing access to 'private property' is not inaccurate but rather displays another aspect of knowledge which is part of a cultural scheme of interpretation. But, in the context of rules and conventions governing access to private property or spaces over which the inhabitant has some legal jurisdiction, the use of the concept of privacy to justify the occupant's ability to establish and maintain claims to that space, is less accurate than the use of the concept of ownership.

The following quote suggests that the concept of ownership would have had more explanatory power than privacy in the context of spatial appropriation in the neighborhood:
(Can people go on anybody else's porch any time they want to?)
They can go on anybody's stairs but not on anybody else's porch.
(What's the difference between the stairs and the porch?)
The stairs lead up to the porch and you can just sit on the stairs
but you can't exactly climb up and sit on the top stair and
go hee hee.
(Why not?)
Cause its private property and you might disturb people who
are inside and if you stood in the middle it would be OK.
Carol 12 years old

This respondent believes that the rules governing access to private property
are related to the establishment and maintenance of 'privacy'. She argues
that she is allowed to sit on the stairs but not on the porch because that
would disturb people. While she may have a fairly accurate view of the social
definition of space in her particular neighborhood or enclave, this under-
standing would not necessarily allow her to generalize to other setting where
rules and conventions governing access to private property were strictly
enforced.

Had she indicated that there were both legal definitions of space and
social definitions, which often time did not correspond, then the response
would have been classified as level four.

4.3.5 Level IV

Four of the older respondents displayed a level four understanding of
spatial appropriation. They understood not only that ownership was related
to the ability to establish and maintain control over space, but also that
ownership gave an individual the legally and socially sanctioned right to
control access to space. To qualify as a level four response they must have
included in their justification reference to the legal rights associated
with ownership.

Also, at this level many of the respondents distinguished between the
social justifications for control over access to 'private space' and the
legal justifications for control over access to 'private property'. They recognized that the right of the principal to appropriate 'private space' in the school was related to his social role within that setting, whereas the appropriation of private property was related to 'ownership' or the equivalent forms of tenure.

Two of the older respondents gave very succinct justifications for rules and conventions governing access to private property.

(Do you think there are any rules about private property?)
No, its your own thing, like if you're in charge, like if you owned your house if somebody came in, or your back yard, you have the legal right to tell them to leave.

Ted 12 years old

(What if some kids you don't know wanted to come and play in your front yard would that be OK?)
I'd say no, because its privately owned, they could go in there but its sort of like breaking a law, sort of but not as bad here.
(What if they asked you why they couldn't go there, what would you say?)
I'd say because its not yours, its ours, we bought it and we have all of the rights to it.

Bob 13 years old

These two segments display the increasing complexity and generalizability of a scheme of interpretation. Although the respondents may argue initially that they are allowed to evict strangers from their back yard because it is 'private property', they also can state, when pressed, that their action would be legitimate because ownership is associated with legal rights to control access to space.

Thus, it appears that a scheme of interpretation originates with limited knowledge of social roles and develops into a catalogue of situation specific rules and conventions. With age and experience the child's understanding of the social structure and the social organization of space becomes more differentiated and eventually the child begins to recognize and understand the interrelationship between the social and spatial structures. It may be
at this point that the scheme of interpretation can be used to generalize from a familiar setting to an unfamiliar one.

The construction of a scheme of interpretation does not stop at this point however. Rather what seems to be the case is that during adolescence and perhaps into adulthood, an individual develops a much more comprehensive and complex system of beliefs, attitudes and ideas about spatial appropriation. Not only will the adolescent become aware of the legal ramifications of ownership vis a vis the establishment and maintenance of spatial claims, but he or she will also have developed a whole set of ideas and beliefs to justify the general relationship between the social and spatial structure.

The following response will illustrate the beginning of some of those beliefs and ideas.

(What do you think are some of the differences between the principal's office and your back yard?)
I guess his office, he doesn't own it, but he is given it to use so I guess he's an owner for part time, and our back yard for instance its people that stay there that own it and they own it until they have to sell it.
(Well why does the principal tell people to get out of his office?)
Oh because he's the principal of the school and usually the principal is in control.

Tom 13 years old

In some sense Tom takes the interrelationship between the social structure and the social organization of space in the school and neighborhood for granted. He is beginning to associate social status with the ability to establish and maintain control over space. This response displays his knowledge and understanding of a pervasive cultural rule governing spatial appropriation, and foreshadows a scheme of interpretation in which the relationship between the social structure and the social organization of space is seen as a 'natural' or universal human condition.
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CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

5.1 Components of a Scheme of Interpretation

The purpose of this study was to explore the form and content of children's conceptions of rules and conventions which govern the process of spatial appropriation. More specifically, the study was aimed at 1. identifying and illustrating two components of a scheme of interpretation used by children to comprehend and act according to those rules and conventions, and 2. to develop and test a model of such a scheme of interpretation.

An initial review of the spatial behavior literature revealed that spatial appropriation was a common, if poorly-understood feature of human-environment relations. Although there were several studies which dealt with the process by which claims to space were established and maintained, little information was available regarding how individuals, and in particular children, were able to comprehend and act according to the complex system of social rules and conventions which governed that process. G. H. Mead's theory of 'joint action', and in particular his concept of a 'scheme of interpretation' served as a theoretical starting point in the construction of a model of children's conceptions of the rules and conventions governing spatial appropriation. A scheme of interpretation was defined as a system of ideas and beliefs about how space is or should be used.

As the study involved children, the developmental psychology literature was then consulted. It was found that the social cognition studies were consistent with Mead's theoretical framework. In both literatures it was agreed that individuals construct schemes of interpretation rather than highly differentiated 'catalogues' of context-specific rules and conventions, to deal with the complex processes of social interaction.

The social cognition studies suggested that children's conceptions of
social rules and conventions become more generalizable and abstract with age. Although children may initially learn context-specific social rules and conventions, the studies indicate that with age they construct well-organized and internally consistent schemes of interpretation.

Thus, the social cognition literature was used to develop the model of children's conceptions of rules and conventions governing spatial appropriation. A pilot study involving interviews with 15 children between the ages of 5 and 15 was used to refine the model. And, finally, the final fifteen interviews with 10 six year olds and 5 twelve and thirteen year olds served as an initial test of the model.

The final interviews indicated that children's conceptions of rules and conventions governing spatial appropriation could be analyzed in terms of ideas about the social structure and the social organization of space. It was found that the six year olds had a much more undifferentiated and concrete understanding of the social structure. Their understanding of social roles and relationships ranged from the ability to distinguish between two social categories of persons, to an understanding of social roles, including spatial rights and responsibilities associated with those roles.

The twelve and thirteen year olds understanding of the social structure was, on the other hand, more abstract, differentiated and principle-governed. They had constructed an understanding of social roles and relationships and had begun to understand principles such as power, status and authority which underlie the social structure.

Both age groups had constructed a fairly sophisticated understanding of the social organization of space. Most of the respondents were aware of the rules and conventions governing the use of space within the neighborhood, from access to their front yard to the rules and conventions governing access and
use of the courtyards and the public parks.

The respondents also were aware of differences between the architectural and social definition of semi-public spaces in their neighborhood. As, in most cases, their "home range" included the entire housing development, they had discovered which courtyards were defined as semi-public spaces and which were defined as public space. To an outsider, or perhaps even an adult resident of the housing development, these distinctions would perhaps be overlooked. Thus, the analysis did confirm that conceptions of rules and conventions governing spatial appropriation consist of two components, knowledge of the social structure and knowledge of the social organization of space.

Beyond simply confirming this aspect of the model, the children's responses also documented the dynamic process of their construction of social knowledge. Most of the children were in the process of learning about the rules and conventions which govern the actions of children, and of the sanctions which are invoked by adults for breaking those rules and conventions. The children were constructing ideas about "authority" in the sense that they were beginning to discriminate between adults who could legitimately invoke social rules and those who could not. In conjunction with these ideas about the authority of various social categories of adults, the children were also developing ideas of their own about their power as children in relation to adults. Many of the children discussed the strategies they used for dealing with adults, both in co-operative and antagonistic situations.

Thus, children's conceptions of rules and conventions governing spatial appropriation appears to be a very potent aspect of social knowledge. As children's understanding of the process of spatial appropriation is based on their ideas and beliefs about the social structure and the social organization
of space, it provides a useful avenue for exploring their conceptions of their social world.

5.2 Levels of Understanding

The children's responses were classified according to the four levels of understanding posited in the model. Only one of the six year olds was found to have a level one scheme of interpretation while only three of the older respondents were found to have a level four scheme of interpretation. Although most of the respondents were aware of context-specific rules and conventions, most had not developed an abstract and integrated scheme of interpretation which they could use to make sense of rules and conventions governing spatial appropriation across contexts.

In their attempts to construct an explanation or justification for the correspondence between the social structure and the social organization of space, most of the younger respondents referred to either the physical or architectural design of the setting or to the characteristics of the social organization. In general their explanations reflected their attempts to make sense of the social and physical environments in which they operated.

In many cases, particularly at levels two and three, the respondents had constructed ideas about various aspects of the social structure and the social organization of space, but had not yet integrated them into a consistent scheme of interpretation. For example, many of the younger respondents had some ideas about the meaning of ownership and the location of private, semi-private and public spaces, along with some awareness of the rules and conventions governing access to those places. They had not, yet, however, developed an understanding of the relationship between the concept of ownership and the rules and conventions governing access to private, semi-private and public spaces. They did not understand that the rules could be
explained or justified on the basis of ownership.

At the third level the respondents understood that ownership was related to the ability to establish and maintain claims to space, however it was not until level four that they were aware that ownership gave an individual the socially sanctioned rights to control access and use of space. Thus the model of children's conceptions of rules and conventions governing spatial appropriation provides a framework for exploring the form and content of children's conceptions of their socio-spatial environment.

5.3 Implications for Future Research

The results of this study suggest that the model of children's conceptions of social rules and conventions governing spatial appropriation may be a useful tool for exploring a system of beliefs and ideas about space, and furthermore of analyzing the structure inherent in such a conceptual scheme.

The model provides for example, a means of comparing and contrasting the "content" of the scheme of interpretation used by members of different social worlds. The small number of interviews completed in this study suggest that a scheme of interpretation may be developed and maintained by small groups of individuals within a larger cultural group. The children in this study, as one social group, seem to have constructed a particular scheme of interpretation for making sense of and dealing with the social and physical environment in which they live. Other social groups including for example a local police force, a 'ratepayers' association, or a street gang may also develop a unique set of ideas and beliefs about the definition and use of

6 see also Furby, 1978; Beaglehole, 1932; Sullie, 1935; for a discussion of psychological aspects of beliefs about private property and other possessions.
space in their local area.

According to the model developed in this study, such a scheme would include knowledge and beliefs about the location and meaning of particular boundaries in the neighborhood, about the personal characteristics and attributes of members of the community, and about the interrelationship between the social organization of space and the social structure of that particular community.

Further research could therefore involve children from different socio-economic or ethnic backgrounds. The children's beliefs about the social structure and social organization of space in their neighborhood could be classified according to the model and then compared. Thus, information would be gained regarding the similarities and differences in the ideas and beliefs held by different social groups about the organization and meaning of the socio-spatial environment.

The model could also be used to explore cross-cultural differences in the form or content of a scheme of interpretation. Although in other cultures individual's ideas and beliefs about space may be based on a different set of cosmological or religious principles, the model could be used as an initial classification system.

Although the "content" of a scheme of interpretation may vary across cultures, there may be consistencies in the "form" of such a scheme. For example, in North America 'ownership' is one principle which underlies the relationship between the social structure and the social organization of space. Property owners, (or a facsimile such as "renters") are one social

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category of persons who can legitimately appropriate space. In other cultures, however, a scheme of spatial interpretation would be based on principles other than private ownership. For example, in cultures where land is neither bought nor sold, but rather "use" of the space is relegated to certain members of the society in accordance with kinship, religious or cosmological principles, a scheme of spatial interpretation would be based on an understanding of those principles (see Rappoport, 1972, Pennock, 1971, Westin, 1970).

Thus studies involving members of two different cultural groups could be undertaken. The questions would focus on culturally-specific ideas and beliefs about the social structure, the social organization of space and the relations between them. Although the "content" of a scheme of interpretation may vary cross culturally, there may be similarities in the form of those schemes. Thus the model could be used to compare and contrast the form and content of a scheme of interpretation used by members of different cultures.

This study also provides a source of information about children's conceptions of another aspect of their social world. The model provides a means of categorizing and comparing those ideas and beliefs across a range of age levels. Like recent social cognition studies which have dealt with children's conceptions of rules and conventions, social institutions, and social systems, the results of this study suggest that generally speaking, as children get older they construct a "system of relations" (Youniss, 1978) or a more integrated scheme for interpreting social activities and events. In this case, most of the six year old children had some concrete and context-specific understanding of the rules and conventions governing the definition and use of space, while most of the older children had constructed a more abstract and integrated understanding of the relationship between the social
structure and the social organization of space. This knowledge would allow the older respondents to make sense of the rules and conventions operating in diverse contexts.

However, in contrast to findings in a number of the social cognition and cognitive development studies, there were substantial differences within each age group as to the level of understanding or rules and conventions. Some of the six year olds were found to have the same level of understanding as some of the twelve year olds.

Thus, although the differences between the two age groups suggests possible areas of developmental change (e.g., increasingly integrated knowledge of rules and conventions), the differences within each age group suggests that a strict developmental or age related explanation should be used with caution.

While the interpretation of the findings suggests that children do not merely internalize knowledge of a 'catalogue' of rules and conventions, but rather construct a more abstract scheme of interpretation, more detailed research is needed before any developmental hypotheses can be tested. Such research should include a larger sample of children across a wider age range.

Finally, the results of the study call into question the assumption that children transgress boundaries simply because they don't know they exist. Most of the six year old children interviewed in this study were aware of rules and conventions governing access to private, semi-private, and public spaces in the neighborhood, home, and school. Furthermore, both age groups of children were aware of subtle distinctions in the social definition and use of two semi-private courtyards.

Most of the children had constructed a detailed understanding of the social structure and the social organization of space within their residential
environment. Based on that understanding they chose to ignore or adhere to boundaries. Some of the children reported that they transgressed boundaries and invaded private or semi-private outdoor space for the "excitement" or as an attempt to antagonize adults.

Thus, while more detailed study is needed, the results of the study suggest that children may have a more sophisticated and detailed understanding of social rules and conventions governing spatial appropriation than many adults give them credit for. Therefore, the conflict between adults and children in multiple family housing environments may not be lessened simply by increasing the legibility of boundaries, but rather through a better understanding of children's conceptions of the socio-spatial environment.
REFERENCES


APPENDIX A

INTERVIEW SCHEDULE
I School
1) Can you tell me about where you play at school?

2) Can you tell me all of places inside the school where you are allowed to go any time you like?
   Probe: classrooms, halls, bathrooms.

3) Can you tell me all of the places where you can't go inside the school any time you like?
   Probe: principal's office; staffroom.

4) Why can't you go to the principal's office any time you like?
   Probe: are there rules or any other reason; how did you find out that you weren't allowed to go there any time; why are there rules like that.

5) Who can go to the principal's office any time they like?
   Probe: teachers, the principal, secretaries.

6) Why can _______ go and not _______?
   Probe: but the principal can come to your classroom any time s/he likes.

7) Why can't you go to the staffroom any time you like?
   Probe: same as in #4

8) Who can go in the staffroom any time they like?
   Probe: teachers, principal, secretaries

9) Why can the principal go there and not the students?
   Probe: but the teacher's can come to your lunchroom.

II Home

Let's talk about the house you live in now

10) Can everyone who wants to come into your house?
    Probe: who is allowed to come in any time they like (friends, a policeman, mailman, aunts and uncles)

11) Who can't come into your house any time they like?
    Probe: are there rules or any other reason why; how did you find out about that.

12) Why can _______ come into your house and not _______?
    Probe: a friend, relative vs. someone you don't know.

13) Can you tell me about the living room in your house? What do you usually do there?

14) In your living room, where do you usually sit when you are doing _____?
    Probe: where does your mother, father, sibling sit, do they usually sit in the same place, are there rules or any other reason why, what happens if you sit in your _____'s seat, why does that happen?
15) Suppose someone was coming to sell something to your mom and dad and they wanted to buy it, where would they go to talk?
   Probe: where would they sit (distance)

16) What if good friends of yours came over to visit you, where would you and your friend sit to talk?

17) Why would the salesperson sit here and not where your friend sat?
   Probe: but on a bus a stranger sits right beside you.

III Neighborhood

18) Can you tell me where you play in your neighborhood?

19) Can you tell me all of the places where you can go in your neighborhood any time you like?
   Probe: to your own house, to a friend's house, the park, another enclave.

20) Can you tell me all of the places in your neighborhood where you can't go any time you like?
   Probe: inside someone's house you don't know, your neighbor's house, someone else's porch, front yard.

21) Are there any rules or any other reason why you can't go to those places any time you like?
   Probe: how did you find out that it wasn't alright to go there any time you liked, why are there rules like that?

22) How do people know where they can go and where they can't go?
   Probe: where does your property end, how do you know that.

23) Who owns the property in the inside of the enclave?
   Probe: who can/can't play there, what about some kids you didn't know from another enclave/ outside False Creek.

24) What about the park, who can play there?
   Probe: what about your friends/ strangers. Why?

25) Why can strangers play in the park and not on your porch?
   Probe: is that a good idea, why?
APPENDIX B

SAMPLE INTERVIEW (13 YEAR OLD)
Can you tell me first where you like to hang around the school, or play?

Well basically under the covered area where all of the kids hang around, and just up on the steps, and on the field a lot.

Do you hang around there at lunch time or do you go other places?

At lunch time sometimes I'm at home and but alot of the time I'm out there.

Can you tell me all of the places inside the school where you're allowed to go any time you like?

Any time I like?

Uh huh.

Well its different when its recess, especially cause at recess no students are allowed in except for the washrooms downstairs. No you're really not allowed much places, you are allowed the washrooms the library but you have this system where you have a tag and um you're allowed, like I can pretty well get anywhere, I'm not saying that I'm really allowed here but...

Just tell me the places where you're allowed to go.

You're really not allowed to go anywhere because its work time.

So when you're going places where you're not allowed to you're...

Well the only excuses are uh besides lunch and recess are library thats if you're collecting specific information or something, gym and washrooms.

So what happens when your somewhere you're not supposed to go?

Well I really haven't had that experience but I don't know. You'd probably get into trouble. They'd give you a talk I guess and the second time you'd do it you'd get, I don't know exactly what would happen. It would probably be, I do know that some people gotten in trouble, not exactly the same idea, where they had taken out equipment without permission and so they aren't allowed to take out equipment for the rest of the year.

Oh I see. Ok. So can you go to the principal's office any time you like?

Basically yes.

Can you go there to eat your lunch?

No, (Ha Ha)

How come you can't go there to eat your lunch?

The principal's office, because that is the staff room and thats just not allowed.
Oh well why don't you think it's allowed?

Well that's their rooms. Those are the teachers I guess and all that.

What about the staff room can you go there?

The staff room, no that's connected to the office you have to go to the office, that's where they eat actually and no you're not allowed there either. The only place inside the school where you're allowed to eat is in the lunch room which they usually pull out tables in the gym.

Well, why do you think that the principal can go to the gym to eat but the kids couldn't go to the staffroom to eat?

Because I have a feeling that I guess that kids can be a little irresponsible and like goof around or make garbage or something like that or pull out frisbees or something and start throwing them around or it's just the fact that they don't have as much power as the .. I don't know.

OK How did you find out that you weren't allowed to go there any time you liked?

I'd say basically the hard way. Because I was coming back from Toronto the very first day of school and that's when they show everybody the school and tell them what's good so I basically found out that the hard way by actually I had done my work. In the foyer of the gym and the kids were playing frisbee in the gym and we were all called into the office and given a talking to and if we're caught doing that again, even if we were working there, we'd get in trouble something was going to happen, I forget.

Lets see who do you think can go in the staff room any time they like?

Anybody that happens to be not a student, everybody except students and basically I would say the parents or visitors or they'd walk in. But this is what I could do. I could go up to the office, I could go into the staffroom and I could talk to somebody but I just couldn't plop down and start eating my lunch or something nor could a visitor or something like that, anybody else who works here.

OK let's talk a little bit about where you live now. Do you live in False Creek?

Yes.

Do you live in the co-ops, apartments.....

I live about, considering that the doors of the school face north I live at about southwest of the school and its the wood buildings, they're called the University Non-Profit Organization.
Oh yeah, right I've got a map here.

I live right there, the top floor.

Oh right, that's neat, they're co-ops then?

They're not co-ops, that's not a co-op, its the University Non-Profit.

Oh I see so people actually own their houses?

What we did was we got together, university people, who work in the university and they built it. But my mother has some really good friends who are judges or whatever at the university, she managed to get it.

Oh yeah.

And then they had to pick who had to get each house, right, so what they did was say took fifty two cards for fifty two houses they shuffled them handed a card out to everybody and they shuffled another deck and placed it down picked up a card and whoevers card came up first it was their choice first and my mothers was the ace of spades and I forget what the first card was but the second was an Ace of spades so she got what she wanted too. Well she got the second choice of what she wanted but now she's even happier cause after choosing the houses the government made some more changes and all of the houses that were going to be built so.

So that worked out well. Who can come to your house any time they like?

Just walk right in?

Uh huh

I'd say my mother's friends, not my sister's or my friends because its just not right, you know 'kids'. My mother's friends, but they always knock. They basically come any time they like. And the family they can come in any time they like. Not counting my dad, he'd knock because my dad and my mother don't live together any more, my dad's married again.

So he would knock.

Yeah, he doesn't come in though.

OK Who's not allowed to come in any time they like?

Any time? Would they have to knock?

Yes, who couldn't just sort of knock and then come right in?

Oh, I'd say people we don't know really. Our friends are pretty trustworthy our friends don't ___ they always knock but I would say alot of the sellers, or whatever, strangers basically.
Yeah right. How about a policeman could he walk in any time he likes?

I doubt it. He'd knock and then wait.

And how about the mailman? or mailwoman?

No, he just puts the mail through the slot.

Right, well why do you think then people in your family can just walk right in? and a mailman can't?

Well, you don't know the mailman. I think its because you happen to know the other people and just knowing them you know whether they are trustworthy or not. If they are trustworthy then they can be allowed to just walk in, that must be it.

Ok good. Do you think that there's rules about stuff like that, about people coming that you know? Do you think in general that people follow those kinds of rules?

Yes, why not.

Cause you do the same thing when you go to your friend's place too I guess.

Although I have had a slip up when I think its my house and I just walked right in, what happens is that I walk in and oops I'm sorry.

All right

They've done it to our house too, its an accident.

Can you tell me about the living room at your house, do you have chairs and couches.

Our living room is I'd say about fifteen feet wide and about thirty feet long and its a dining room and living room so about twenty feet is living room and the other ten or so is the dining space. We have a big dining table that fits six people. It's round and its got wood chairs and they've got pigskin, and we have a big buffet that matches it and some pictures my mother got given a beautiful picture about eight feet square and its up on the wall and we've got a big couch thats got a Chinese look it doesn't have Chinese symbols on it but all these, it's got a couch and another attachment, sort of a couch without arms on the side but just a back so you can attach it, and we have a glass table with pyramids going down on the bottom and we have brown shag carpet.

Do you have a special chair in the living room?

Not one in particular

Do you watch TV in your living room?

No, right beside our living room is another room, right there is a television in the back set wall, and we have a small love seat and a
wooden chair and there not special chairs although the one singular chair is mother's favorite I guess she always sits on it.

Do you sometimes sit on it?

Her favorite is her chesterfield, its always her favorite.

Thats where she sits usually?

Yeah

What if you sit there.

Usually, uh it costs alot she says and its, we usually sit on the arm rests so you can look out the window and she's afraid that it will break, she seems really afraid of the dirty pants.

Well, what if someone was coming to sell some raffle tackets or a vacum where do you think that your mom would sit and talk to them.

She would probably stand first at the door and talk through the door, have the door open, and talk about it and it depends how interested she gets in it and if she got really into it she would like an interview like we had something like this, with the lady who came over and she comes right in and she sits right on the chesterfield and she makes some coffee and they drink coffee and if its a good friend, social, its wine or martini or whatever and they sit down and talk.

If it was a good friend would they sit in a different place than if it was someone they didn't know.

Not really, the chesterfield, is it that she has, but I suppose if they weren't as much they would probably pull up a chair or just talk standing up or pull up a chair in the kitchen which is a nice table, but one thing about our living room it doesn't have a flat roof.

Let's talk about the neighborhood now. Can you tell me all of the places where you can go any time you like?

The whole False Creek?

Just start with your section.

OK in our section we have a playground and we have grass area where they just recently cut up all of our grass to re-design the playground under the grass and

Is that in the center part?

Yeah get the map and I'll show you. So in that section there is a playground right there, what they are trying to do is level it off. Thats the grass cause it was at a bad tilt
and instead they are putting in more plants in our section so we'll have less grass and there is alot of kids there and I have a feeling, its just terrible cause its going to get wrecked up.

Why?

Kids; and we don't have any gates to lock up out people, who don't live in our section so they can come in freely and they ride their bikes over the plants and that its not too good.

Oh I see, yeah.

and we have a Strata Council which is the bosses and there is a man who quit it but he used to be bad and we didn't have anything we couldn't play in the plants and they didn't like us to play on the grass well what we wanted to do was put water on it you know and make a slide, we're going to do that this summer its the only water fun you can keep yourself cool with, but um they said that we couldn't put on our sandbox, that was the kids sandbox, and we should have been allowed to you know to flood it and make all rivers and dams and that.

Why did they say that?

This was a couple of years ago though tried that this year I think it was not too long ago... I'm too old now but it was fun. I don't know why, I mean where do we get to go to play in our section?

Well what is that space for in the middle?

Its like a back yard thats what it is, the back.

Well then how come kids aren't allowed to play there?

Its, you might call the guy a grouch.

Well so now when they plant things there

Yeah its going to be even worse, they are all just going to get wrecked.

So plants are places where ...

they would have designed it better, they should have designed it so that the kids would have a you know so that they can be there, and another part they just ripped off a chunk of sidewalk which because people in this house don't need that chunk of sidewalk to get over into there, and I always walked up there to the bus or whatever now I wouldn't walk all the way, like if they said that I would have to walk all the way around the other houses to get out, but now they are going to put plants right there thats just going to get trampled.

Well whose property is that?

This is the whole section's property.
Is that right that they can do that?

Apparently so, a majority.

Oh I see, well is there very many kids there where you live?

Well actually the design they didn't design it, the majority decided that they wanted a new design of things.

Well why did they decide that do you think?

Well the plants and the grass were designed poorly they had had quite a few too many plants all around that didn't grow right at certain spots where they wanted it to and the design it was on hills and everything the the last two that's why the grass was already long grown into there or something I don't know but this was terrible for water drainage because the water would flood and kill grass on one area and because it was on a hill and all of the water from the grass on the top would drain away so they would die of lack of water and die or drowning, so it wasn't designed right so they are going to design it level but they are putting extra plants now.

Can you tell me about any other places where you can't go in False Creek in general?

In the marinas.

How come you can't go there?

It has all of these signs of "Private Property" or something sometimes it makes me mad sometimes it doesn't.

Well how do you know that you're not allowed to go there?

Well they have gates up and everything and they have push button special alarm.

Oh, you can't get down there. Can you go in your neighbors houses any time you like?

Nope, unless its like, I don't walk in any time but if I'm rushing home and if I wanted to go an grab something from my house and bring it over quickly I usually walk right into the house and the same with him.

What about to the park, can you go there any time you like?

I can go any time yeah.

Is the park private property?

Um, no its Park's Board.
119.

So, can anybody go there that wants to?

Yeah basically, actually anyone its public.

What's the difference between this park and where you live here?

Well this is private this is owned or co-op owned or something like that but this is Parks Board owned.

Are all of the entrances here blocked off?

No.

Well how do people know that they can't come there? People who don't live in your co-op say.

Well those are co-op owned so they don't have private property signs all we have is little private property signs saying "Private Property"

I see what the difference then between the co-ops here and the land here in the center of yours?

Their's, I don't really understand this but ours was University Non-Profit they just designed it that way and theirs was the construction, like we built our houses and we bought this land all together and we built it and we bought, so we own our own houses but alot of us didn't have enough money like my mother to just build it so what they did was they had the University guys build it and now she pays monthly rates and the co-op was built by a company like _____ or whatever and they grow the grass they buy the the ground they design the inside and when people buy it then they buy the separate house a whole bunch of them don't go out and buy it. They, each one of them buys separately so like its individual so they don't have pieces of property besides their own gardens.

Oh I see, so this is basically is owned by the whole... (UNP)

its private

So really the land there is owned by everybody who lives there buy here they just own their houses so every

so everybody is welcome

I see, thats interesting. So, do you ever go in here to play then'

Not really to play but I have gone in there lots of times.

Well I've been in there too and it was sort of funny because I saw those little fences, but it seems that there's not too clear a dividing line between people's property and the space that anybody can go in, what do you think?

In that section they really don't have their own private gardens, our section does though.
Oh, where are your private gardens?

Our private garden, you mean each person, the upper levels don't have them, only the lower levels and they just have fences around them about four feet high.

Oh, so that's private there?

Yes, that's their very own and the whole thing is owned.

So can anyone who lives in that section there go into the gardens?

No, cause that's privately owned by the individual.

OK well that's the place I walked into because I remember it wasn't too clear where other people's property started and where the center part was. How do you tell?

It starts from, there's a section right in here and another one along here. There's a section right by the garage and there's that section and another section and inside all around in there.

What about the gardens? How do you tell where they start?

The private ones? the inside? they have big fences four feet high.

All of them have fences?

Yeah except some people have them eight feet high.

Well what would happen if somebody didn't know and went in their garden?

Not much if they didn't know, if somebody was there would say sorry this is private property.

Well are there rules about stuff like that in your section?

There aren't exactly rules there aren't posted rules or anything I guess.

Except for the signs.

Yeah, there could be improvements though.

What do you mean, how could there be improvements?

Especially in the garage they have an open garage and this is where people can just walk right in and out, but they have doors blocking off all of the rest so you have to have a key to get in and you can just down the entrance and get in, and we've had a lot of vandalism down there with mom's cars but we had paint dumped all over our enamel hubcaps swiped and gas syphoned out.

Oh dear.
another thing would be a mirror because coming out of that garage I'm surprised that nobody has gotten killed or hurt yet but people just ride their bikes

Ok you know these big apartments over here, are they private too? Can you go into the lobby there any time you like?

I found out that they have a key to get into the lobby.

So why would they have a key.

I don't know, something about the elevators I guess cause they have an elevator there, I don't know much about that.

Whats the difference then between the principal's office and, does he own his office?

That is just his office yes,

Its his office, does he own it?

You mean the ownership? It is the school board's I guess. Its just his to work in just like the desk that I have was mine and my work is mine but I don't rightfully own it if the School Board were to take it away from me.

So what does that mean in terms of your desk and his office.

Thats his, its his private property but he doesn't have the ownership.

So does that make any difference? I mean can you do different things with land that you own as compared to land like his office?

Your allowed to do things with it your allowed to change the appearance, rather as with a rented place same sort of thing as the office he's sort of renting it only he doesn't pay gets paid, but the rentals my friend Glen who has lives ... put a wall up but it is designed only with pressure so that when they have to move out they just have to knock the wall out and it hasn't been nailed in or anything, you can't nail it in because its not owned by them.

Say your desk thats here, why is it yours, I mean what can you do with it because its yours, what does that mean?

Well I can keep my stuff in it, I can't draw all over it or anything.

Why do you have a desk?

Because the taxes is paid for it is used as a tool for education I guess.

Why doesn't everybody just share all of the desks?

In elementary school, I went to a school where that happened at an
elementary school I guess its because the kids just be quite as organized as the high school where you can just carry the stuff around, its just much easier for the kids to have it all in one desk

OK well what if some kids from over here you didn't know wanted to come and play in your front yard, would that be alright?

You mean in the center part.

No in the fenced part.

I'd say no, but there's not much room to play. I'd say no because that's privately owned they could go in there sure but its like breaking a law sort of not as bad but here anyway.

Say they said we really want to go and play in your yard can we? and you said No and they said why not? what would you say then?

I'd say it really isn't up to me but its my mother's yard and you just can't come in and play any time you feel like it.

and they said but why not?

because its not yours its ours we bought it and we have all of the rights to it.

OK well thats sounds like a good explanation. So how do you think that people generally know where they can and can't go?

They learn the hard way because there really aren't rules posted or anything like that and to my knowledge I don't know of any paper that comes out which says these rules besides within Strata Co-op or council within their letters, so I don't really know but I don't think that theres much they just learn the hard way except for law they have books and all that most kids learn the hard way. Like I know alot about law but theres still alot of things like you might think that your doing right because by law its allowed but you could be wrong and I don't know what would happen if you go on the Court Board or something like that you can't explain it if you didn't know.

Maybe you could plead ignorance of the law.
APPENDIX C

SAMPLE INTERVIEW (6 YEAR OLD)
Can you tell me where you play at school?

I play in the playground and I play sometimes in the trolley, I like the slide.

Have you lived here a long time?

I moved here a long time ago, they are kind of houses stuck together, it's not an apartment.

Does it have a back yard and front yard?

No it's on Foundry Quay.

Where abouts inside the school are you allowed to go any time you like?

I'm allowed to go the activity, to the library,

How about the halls and classrooms.

Yeah.

What about the principal's office?

I've only been there once.

Can you go there any time you like?

No.

How about the staffroom can you go there any time you like?

No.

Why do you think you can't go to the principal's office any time you like?

I don't know.

Is there a rule or any other reason why you can't go there any time you like?

No.

How do you know that you aren't allowed to go there?

I'm only allowed to go there in lunch and stuff and recess.

In the principals office?

Yeah.

How come you can go there at lunch?

I can only go there when I have troubles and somebody hurt me I could tell him.
How about the staffroom can you go there for the same reasons?

Yeah I could go there to find a teacher.

Could you go to the staffroom to eat your lunch?

You mean am I allowed to go there any time I like?

Yeah to eat your lunch or something like that.

No.

Why can you go to the principal's office to phone your mom or something like that but not to eat your lunch?

Cause he's busy all of the time.

How about the staffroom how come you can't go there any time you like?

Cause sometimes its busy and I don't know, sometimes people are down there working or doing their art lessons.

OK Who can go in the staffroom any time they like?

I don't know.

Can the teachers go there any time they like?

Yeah.

Principal?

Yeah.

How about the secretary?

Yeah.

Well then why can the secretary go there but you can't go there?

Cause they are older than me.

Does that make a difference?

I don't know.

Where abouts do you eat lunch?

I eat it in the gym with my friends.

So can the principal come and eat lunch in the gym?

Yeah, no he has to stay in the office.
Is there a rule or something like that that says he has to stay in the office?

He doesn't have to stay in the office all of the time but he always likes eating in the teachers room.

I see, so if I was a new person in the school how would I know I couldn't go in the principal's office? Do you think someone would tell me, or I would see a sign?

I think someone would help you out.

Can anyone who wants to come in your house any time they like?

No, only if my mommy is in a good mood or something if she lets my friends in.

Who can come in your house any time they like?

my brother, me, my uncles and aunts and my father and mother.

Who do you think can't come in your house any time they like?

my friends,

How about a mailman?

and the postman can't, and an airplane can't.

How about other people, strangers, can they come in any time?

No, I wouldn't let them in at all and I wouldn't even talk to one, once when I was going to the store a long time ago she said I could go to the store by myself I didn't mean to and there was a stranger and said you shouldn't be going to the store by yourself and I said I know where is is so she took me to the store and when I was going to pay for the stuff she grabbed the money and followed me home and came in my house and my mom got mad and called the police.

Why do you think that strangers can come into your house? but your mom's friends could?

Because um strangers don't know you very well your friends do.

What about somebody who was a stranger who was selling something, do they ever come to your door?

No.

What about your friend _____ when she comes to your house does she knock or come right in?

She knocks.
Why does she do that?

Cause it's not polite to walk in to somebody else's house if somebody's not there and you walk in and do mischief that's not good and I know a joke ...

Can you tell me about the living room at your house?

I have lots of plants and a nice big couch and cushions.

Where do you usually sit when you're in the living room?

On the couch but sometimes on the chair.

Where does your mom usually sit?

She usually sits in her favorite chair.

What's it like?

It's nice and sometimes she lets me sit in it and my father shaved his moustache and he looks different.

Does your dad have a special chair?

Yeah...

What happens when you sit in your mom's special chair?

I sit in it and feel comfortable.

Do you have to move if she wants to sit in it?

No she goes and sits in another one.

How about your dad's special chair?

He does and sits somewhere else.

Suppose somebody was coming to sell some raffle tickets and your mom and dad wanted to buy some where would they sit?

They'd talk in the living room.

Would they sit close together or far apart?

My mom and dad would sit close together and my mom and the stranger would sit far.

How come is that?

The strangers we don't know very well.
What if ______ came over and you were going to talk in the living room, where would you sit?

Me and ... would sit beside each other and sometimes after we get into a fight we hug each other cause she's my best friend.

What if somebody you didn't know came over would you sit beside them?

No.

Have you ever ridden on a bus, and sat beside somebody you didn't know?

Well why would you sit beside someone you didn't know on a bus but not in your living room?

Cause if the seats are all filled up and that's the only place I can sit You sit there.

Is that OK?

Yeah but I don't talk to the stranger I just look, but I don't like sitting with strangers very much I like sitting with my father.

Let's talk a bit about your neighborhood then? So where abouts do you play there.

I play in the sandpile.

So you play in the park mainly, you know in the middle part where there is grass do you play there?

You mean the circle, yeah.

Can you tell me all of the places where you can't go in your neighborhood?

Well I'm not allowed to step over the seawall and go way down to the water or else I'll fall in, there's this caretaker but my father lets me go but this caretaker always screams at me when I go and he's really mean man and he doesn't let me go in the parking lot thing cause he thinks I'll get run over but when I go on my bike and I might go really fast and there's no cars so he tells me to get out cause he thinks that it's dangerous.

That's interesting. Can you go to _____ house any time you like?

No.

How come?

Cause sometimes she's out and sometimes she's sick and sometimes she's eating her supper and having a nice talk with her mother.

How about to somebody's house you didn't know could you go there any time you like?
No cause if I don't know anybody they'd say get out.

How come they'll say get out?

Cause they don't know me very well.

Why does that make a difference?

Cause they are strangers.

How does that make a difference if they are strangers?

I don't know.

Say I just walked up to somebody's house I didn't know and I just walked in, how would they explain to me that I wasn't supposed to be there?

They'd say you shouldn't walk into people's houses if you don't know them without knocking because you have to knock before you walk in if you have a house, and of course everybody has a house, you're allowed to walk in your own house.

And what if I said why do I have to knock?

Because you're not supposed to walk into people's houses without knocking cause thats a rule.

And if I said well who made up that rule?

I don't know.

OK How did you find out where you could go and where you couldn't go?

My mom.

How do you know where your house is?

Cause when I first moved in my mommy showed me.

Do you have a porch at your house?

Yeah.

Do you have any grass, where do you sit outside?

My mommy always spreads a blanket.

Is it cement there or is it grass?

Concrete with pretty little rocks.

You know the place where we were talking about before, the circle is it grass or concrete?
Yeah.
So who owns that property, the grass part?
   I don't know.
Can anybody go there, say kids from another circle?
   Yeah, anybody can go in any circle.
So what happens if somebody who doesn't live in False Creek comes there to play?
   It's okay.
Is there a manager there?
   Yes he lived near the parking lot, he's a very evil man though
Do you think he would tell the other kids they couldn't play there?
   No he doesn't belong to it, it isn't his property.
Whose property is it then, the people who live there?
   It's the people who live there's property.
Is it the people who live in all of the circles property?
   It's just the one circle
So why is it ok for another kid from another circle to come there to play if its not their property?
   Because um, ... it's a circle made for everybody, its property that belongs to people but somebody can come onto it.
What does that mean that its their property?
   I don't know.
How do you know which is your property and which is somebody else's property?
   Cause its near somebody's house its their property.
What about the park who owns the park?
   The person who built it the whole thing it belongs to them.
So can just those workmen come and play there or can anybody play there?
   Anybody.
Why do you think its ok for strangers to play in the park but not on the patio?
Because its somebody's patio and the park belongs to anybody.

I see, well why does that make a difference do you think?

Well its somebody's house and you have to ask before you can play on
the patio because there might be something delicate and if you tip it
over it might break.

So is that any different from the principal's office, is that his property?

The principals office is his property? yes.

How owns that property?

Yes.

So can he tell people to come in or not to come in?

Yes.

Why is that different from the park for instance?

Cause its his office and sometimes he's busy or in a bad mood he says
get out or something like that.

Could the workmen or whoever owns the park tell people to get out?

No.

But they still own that?

I know but they never say things like that they let anybody play in the
park just anybody.

Why can the principal tell people they can't come in but the people at the
park why don't they ever tell people not to come in?

Um... cause the principal owns his office and the people don't own the
park the people that play there don't own the park.

I see well there must be somebody who owns the park?

the workmen.

OK so the workmen don't tell people they can't come in.

No they can't.

So what I'm wondering is why they don't? Why they don't tell the kids they
can't play there if its their property.

Um its hard.

Yeah its a really hard question, I don't know the answer to that either.
APPENDIX D

CONSENT LETTER
APPENDIX E

MAP OF FALSE CREEK DEVELOPMENT
LEGEND:
1 Market Condominiums
2 Market Rental
3 Kiwanis Club senior citizens housing
4 Bertha O. Clarke Society senior citizens housing
5 Netherlands Association non-profit rental
6 False Creek Cooperative
7 Creek Village Condominiums
8 Marina Mews (University Non-Profit) Condominiums
9 Handicapped

north

Enclave ONE

Spruce Neighbourhood

Heather Neighbourhood

false right of way

Sixth avenue

false right of way

Sixth avenue