

## **Making sense of dwelling place: A study among urban amazonian children**

Maria Inês Gasparetto Higuchi<sup>1</sup>

National Institute for Amazonian Research- INPA

Laboratory of Psychology and Environmental Education- LAPSEA

### **Abstract**

This paper discusses the process by which children in a low-income neighbourhood in Manaus, Brazil, develop an understanding of their dwelling place. Data were collected using a cognitive mapping technique. Analysis of the data revealed that children's ideas of a dwelling place vary in physical extension of the areas, from limited narrow milieus to larger ones. Specifically, data showed a distinct pattern of spatial organization, which begins with the house, gradually continues into the garden/patio, the street, the cluster of neighbouring houses, and finally the larger neighbourhood. These physical features coincide with the type of relationships that occur in that particular place, from the more intimate and domestic realms to the more collective and public ones. Therefore, it is difficult to determine how much the notion of dwelling place is related to the child's relationships with others inhabiting those places and how much it is about the place *per se*.

**Key-words:** dwelling place, children's living space, place identity, place cognition

## **Construyendo nociones de espacios de convivencia: un estudio con niños de una zona urbana en la Amazonia**

### **Resumen**

Este artículo trata del proceso a través del cual, niños de un barrio de nivel socioeconómico bajo en Manaus, Brasil, construyen la noción de espacios de convivencia. Los datos se recolectaron usando la técnica de mapa cognitivo. El análisis de los datos reveló que las ideas de espacios de convivencia en los niños varían en la extensión física de las áreas, yendo desde un estrecho y limitado milieu hasta milieus más amplios. Específicamente, los datos mostraron un patrón de organización espacial, que empieza

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<sup>1</sup> Av. André Araújo, 2936 – Petrópolis. 69.011-970 – Manaus-AM - Brazil. mines@inpa.gov.br

con la casa, sigue gradualmente con el jardín/patio, la calle, el grupo de casas del vecindario, y finalmente con el vecindario. Estas características físicas del espacio coinciden con el tipo de relaciones que ocurren en ese lugar en particular, desde los espacios más íntimos y domésticos hasta los más colectivos y públicos. Por lo tanto, es difícil determinar hasta que punto la noción de espacios de convivencia se debe a las relaciones que los niños tienen con los otros que habitan esos lugares o a los lugares *per se*.

**Palabras clave:** espacios de convivencia, espacio habitado por niños, identidad del lugar, cognición del lugar

## Introduction

There is a persistent discussion about the most effective ways to develop educational programs that provide a safe, healthy, and stimulating environment for children, especially for those of low income families that live in precarious livelihoods (Satterhwaite & colleagues, 1996). In order to develop such programs it is necessary to understand many dimensions of the children's environment, including their own way to understand the places and spaces they live in, i.e., their dwelling place. Various studies have pointed out that the expressive character of dwelling places encompasses spatial relations, which include the immediate realm of the house to the larger-scale milieu. However, these realms are not simply understood as discrete sequential physical or geographical structures. Instead, place recognition, identification, and description always imply certain social relationships that take place within some physical boundaries (Corraliza, Martín; Berenger and Moreno, 2002; Higuchi, 2003; Ingold, 1992; 1995; Silva, 2000; Storey, Farias and Higuchi., 1994; Toledano, 2005).

Higuchi (1999) showed that in Manaus, Amazonas State in Brazil (Manaus-AM/Brazil), people's ideas of kinship, socio-economic status, gender, and morality are all involved in ideas of dwelling places and shape people's relationship to one another. At the local level, place and space are not only existential categories, but they are also aspects of how people think about themselves and others. Dwelling places thus have a distinctive significance in the formation and interpretation of people's identity. In a way that social distinction is based on both, the ideas about the place where people live and the relationships with the people to

whom that place belongs. There is also a general idea that people have a distinct nature as a function of their homeland origins (Silva, 2000). In the continuum of place-based classification, dwelling place's differences are commonly taken to show that, for instance, urban and rural residences are taken as an expression of status' differences (see Ching and Creed, 1997; Lima, 1992; Carsten and Scheper-Hughes 1995; Wagley 1985).

As other studies have found (Oliveira, 1995; Pred, 1984; Santos, 1997; Silveira and Lopes, 1994), the imagery of modern urban life includes both a distinctive spatial organisation and an individual's organized mental representation of that living environment (Cave, 1998). Most of the work in this area has been based on Piaget's theory, which argues that there is a developmental cognitive sequence (Hart and Moore 1973; Heft and Wohlwill, 1987; Lima, 1989; Higuchi, Farias, Azevedo and Abreu, 1996; Siegel and White, 1975). These studies have demonstrated different frames of reference in coming to make sense of the environment in which an individual lives and in all the constitutive elements that are recognized as part of his or her dwelling place.

Distinctive topographical aspects, such as housing arrangements, disposition and sizes of sites, the layout and condition of streets, the quality of public amenities, the types of shops, number of churches, existence of a medical centre and police station, etc., are understood to be material expressions of the sociocultural dimensions of the people who live there (Bachelard 1964; Blier, 1987; Bloch, 1995; Bourdieu, 1990, Buttimer, 1980; Carsten, 1991, 1997; DaMatta, 1985; Higuchi, 2003; Santos, 1998). Therefore, the physical area and the social life become mutually formative aspects of the person who lives in that neighbourhood. As Santos (1997:44) argues, since the lived space contains socio-cultural processes, it can be said, that place transcends the objective view to embody subjective aspects (Toren, 1990; 1993; 1999).

From the above theoretical assumptions many questions emerge, such as: how the cognitive process of people-environment is developed over time? With this in mind, it is essential to investigate the process by which the ideas about dwelling places are developed in children as it provides further understanding about the process of their social formation (Delval, 1989; Hirshfeld, 1988; Piaget, 1954, 1971; Piaget and

Inhelder, 1967). Knowing children's ideas about their dwelling place gives us information about the world adults are providing to them and how they live and experience this world. At the same time, the notion that urban children experience space constraints is central in this discussion (Castro, 2001). In addition, this is especially important for the debate on environmental awareness and care, as many studies have shown the effects of personal and territorial space on pro-active ecological behaviour (Boff, 1996; 1999; Higuchi and Farias, 2002; Castro, 2002).

### **Study Objectives**

The main objective of this study is to investigate children's ideas of dwelling place, and the process by which these ideas are developed over time. In addition, this study aims to understand the implications of such knowledge in children's social formation.

### **Methodology**

#### **Participants**

One hundred thirty children participated in this study: 63 girls and 67 boys. The size of the sample reflected the number of children attending each of four schools inside or at the boundaries of Vale do Amanhecer (VA). This area can be categorised as a low-income settlement situated in the South zone of Manaus-AM/Brazil. It is located in the district of Petrópolis, having been formed due to intensive occupation by squatters in the mid 1980s. VA comprises a relatively small urban area (about 25 hectares) within a perimeter of approximately 2 km. With a total population of around 6,000 inhabitants (my own survey), VA may be described as congested, especially in comparison with the population density of other districts in the city.

From the number of children attending 6<sup>th</sup> grade on all four schools (1,377), ten percent in each class was randomly selected to participate. The distribution of participating children is shown in Table 1. A randomized sampling strategy (stratified sampling) was used, but some selective factors related to age (ranging from 5 to 14 years of age), gender (boys and girls), and school grade (ranging from preschool to 4<sup>th</sup> grade, thus 6 different classes) were observed.

**Table 1. Distribution of the participants arranged by age and gender**

Age	5+	6+	7+	8+	9+	10+	11+	12+	13+	14+	Total
Girls	7	8	6	7	6	7	6	6	6	4	63
Boys	7	6	9	5	6	8	9	8	4	5	67
Total	14	14	15	12	12	15	15	14	10	9	130

### Procedure

A cognitive mapping technique (Lynch, 1997) was used and a subsequent interview (Delval, 2002; Aragonés, 2000) completed with information from a participant's observation. Thus, drawings and explanations are meant to be a single and inseparable technique, but for analytic purposes on certain occasions, I emphasise one over the other but do so without treating it as isolated information.

The systematisation of the data gathering procedure was based on a previous pilot study that was carried out to assure a proper research design (that is, arrangement of the class, time of day, type of material used, specific instructions and subsequent interview placement and content). The pilot study was carried out with 40 school children from a nearby neighbourhood with a similar environmental and socio-economic background.

With the major concerns solved through the pilot study the task was presented to the children who were the primary subjects of this study. The research tasks were carried out during two months, after ten months of intensive participant observation within their homes and schools. The mapping tasks were done in the classroom, separating children to prevent systematic copying. For the drawings, children were given a pencil and an A4 sheet of white paper with the instructions in Portuguese: "on this sheet of paper, try to draw, as best you can, the place where you live. Please, draw nicely all that is there."

When they had finished their drawings in the classroom, they were invited to go one by one, to another room to comment on their own drawings. The interview was conducted to allow the child to talk freely to get relatively unstructured information about their ideas related to dwelling place (Delval, 1989; 2002). At that time, they were engaged in a conversation about what they had drawn, such as: "tell me about the place you live that you've just drawn"; "What kind of place is that?" "Who are these people?" "What are they doing?" "What do you like most about this place?" and so on.

## **Content Analysis**

The analysis of the data, using both qualitative and quantitative methods, was conducted to form the categories of knowledge that emerged and then to discover whether there were any patterns or regularities across children's data. The data were also analysed to show the different degrees of statistical significance for children, whose nature varied according to age and gender.

## **Results**

Using the content analysis of all drawings and commentaries, distinct characteristics were found. These characteristics were grouped into five categories that represent children's ideas of dwelling place. These five categories were named to express the spatial and social variations that characterised the main idea: the house, the house garden, the street outside the front door, the cluster of neighbouring houses in the block, and the larger neighbourhood. Here the places represent the number of settings depicted by the child as her or his home-place. Dwelling Place Type I, for instance, shows the house as the primary and only spatial construct, which has its own set of objects and people. In the Type II, the house is still the central focus, but it shares significance with the immediate surrounding represented by the house's boundaries, the garden or the patio. Type III focuses on the house, its outdoor area and the street outside the front door. In the Type IV, the core house shares a similar area with the neighbouring houses in the block. Type V represents the core house, now overseen by the landscape of the more extended milieu of the neighbourhood. The five categories or patterns of spatial organisation that emerged from the analysis of the cognitive maps and the comments the child provided can be described as follows:

### **Type I – The house realm**

Children who have reproduced this type of cognitive mapping have given exclusive emphasis to the house as the main spatial realm of a dwelling place. Children that used such mapping depict the house structure and explain that it encompasses kinspeople and the domestic objects they use and share. It is a space that is almost exclusive to the co-residents. At this cognitive level, children give little or no acknowledgement of the outside world and demonstrate great concern

with activities performed within the house boundary. The child's accounts of household objects manifest specific kinship relationships through acts of eating, amusement, sleeping, working, talking, helping, studying, and resting. Despite the tendency to represent these objects in utilitarian terms, it is obvious that some of them offer a material framework for the differentiation of household members from each other. The physical structure of the house itself conveys endurance and protection to different degrees, which may be related to the material the house is made of and to the people with whom they live. Associated with the image of the single house are the relationships between parents and children, and close kinspersons such as uncles, aunts, cousins, grandmother, and grandfather. The house as their unique and exclusive dwelling place is thus the principal site of close kin relationships (See Figure 1).



Figure 1. Place Type I - The house realm.

### **Type II - The garden/patio realm**

Here the idea of the dwelling place conveys both interior and outdoor spaces of the house. Yet the spatial reach does not go beyond the limits of the site. It is, however, literally and figuratively an extension of the

exclusive familial domain. With the garden/patio realm, the child appears to gain more space and incorporates a domain that is less exclusive to human household members. The garden/patio is not opposed to the house, but a complementary space for specific relationships that transcend the indoor niche. The indoor and the immediate outdoor space become integral dimensions of a dwelling place that allows the inclusion of pets in the relatively close membership of the human household. It is an interstitial zone, which may work as a gate to the immediate outside world. Although this near outdoor area is referred to as property attached to the house, it functions as a space less private than the house. It is still not collective in a broad sense, however, besides the household residents, only friends can make use of it. The garden/patio spatial representation works as an intermediary space for relationships with the outside world, thus broadening the child's social horizons. Children talk about the garden/patio as a place where they meet simultaneously their friends and siblings. It is a place reserved for those who know each other because they reside close to one another or because they are members of the same kin group (See Figure 2).

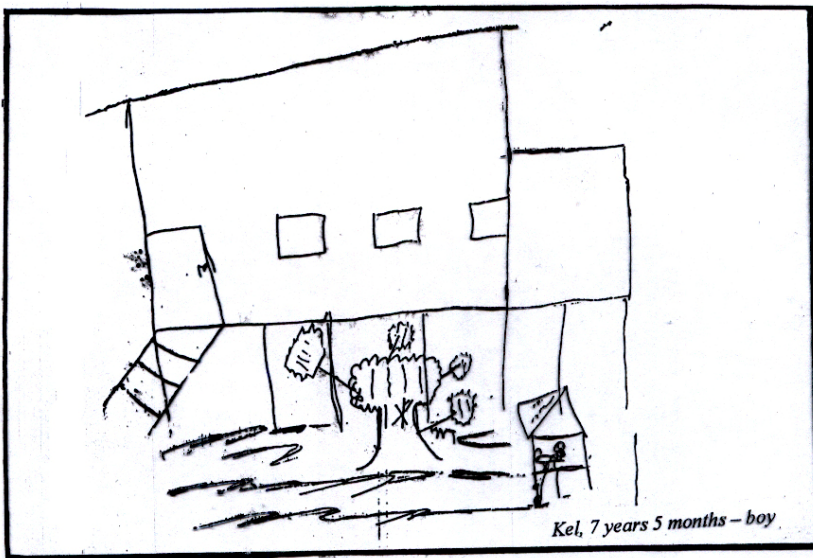


Figure 2. Place Type II - The garden/patio realm.



### Type III – The street realm

The dwelling place is expressed at this level of cognitive mapping, essentially in terms of spaces for collective use, where the street figures as a key feature. It is a multipurpose locus of distinct patterns of behaviour, among which playing is the most important. As a setting of social relations the street provides communication paths to friends' houses, to school, to church, and to nearby shops. The inclusion of street space is significant as it mediates a number of social relations, which may figure as good or bad, adequate or inadequate, frequent or rare, intimate or distant depending on particular purposes and times (See Figure 3).

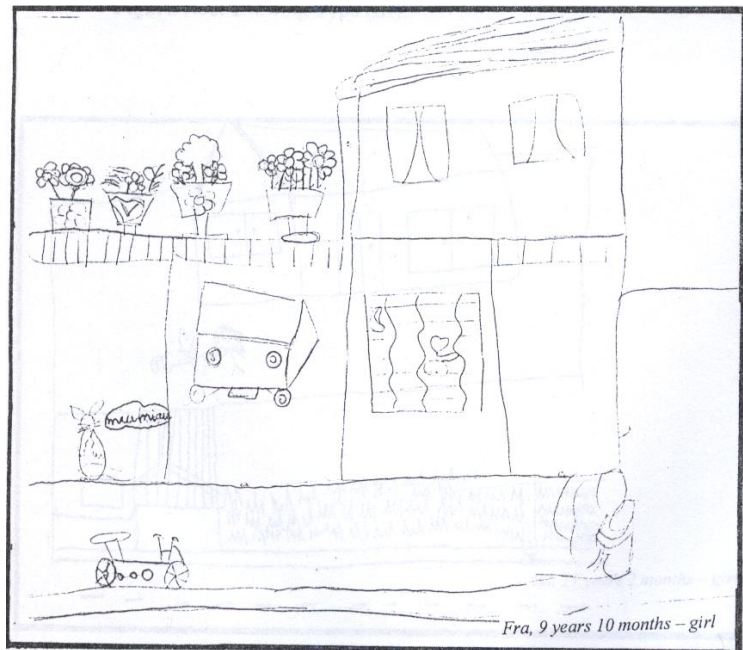


Figure 3. Place Type III – The street realm.

The street mediates the exclusive domain of house and garden/patio and the public space along where anyone may pass. The street has an intrinsic communal use for different neighbouring households, implying thus, a certain degree of restriction of individual liberties as it is considered to be a more public arena. The street also provides

communications with people that children do not like and who make them feel insecure.

The intermingling of distinct people with different ways of life can only be dealt with within the street space - never in the house space. The street allows for diversity and heterogeneity, whereas in the house it is homogeneity that is valued.

The street is a transitional place that provides the diversity the house or kinship is not supposed to entail. It is not a matter of ranking one space superior or inferior, but being of a different nature. Children gain the knowledge that the street is not a space for people only, but also for vehicular traffic, and it is not in any way mutually exclusive to the nearby residents, in the same way that it is not a private space for a single household. Nevertheless it holds special meaning for those who use and live in that particular street. The amount of organised routines balances the diversity and facilitates interpersonal contacts that may develop closer or more distant relationships between the neighbouring residents where the street acts as the channel for that.

#### **Type IV – The cluster of neighbouring houses realm**

This type of cognitive mapping includes the cluster of houses in the block, in which relatives, neighbours, and close friends live as the dwelling place. One or another neighbouring institution may also appear together in this cluster. The cluster is presented as a set of complementary social relationships to the child's home environment. Children assert the existence of people and places with which they establish daily contact by virtue of living close to them. Children draw and talk about physical proximity and the disposition of a few houses, which form a singular niche representing certain relationships between them. The specificity of each cluster provides the child with distinct spaces of use and different degrees of involvement with neighbours. The drawings show the individual houses and their distinguishing physical appearances in order to display certain inequalities between the co-residents. The cluster of neighbouring houses provides a group of relationships that complements those of the house and in many ways legitimates the relationships produced within the limits of the house. The boundaries between households are of a more open or closed nature depending on the existence of other overlapping relationships. Children recognise the

intense interaction that is developed across households when the neighbour is also a kinsperson (See Figure 4).

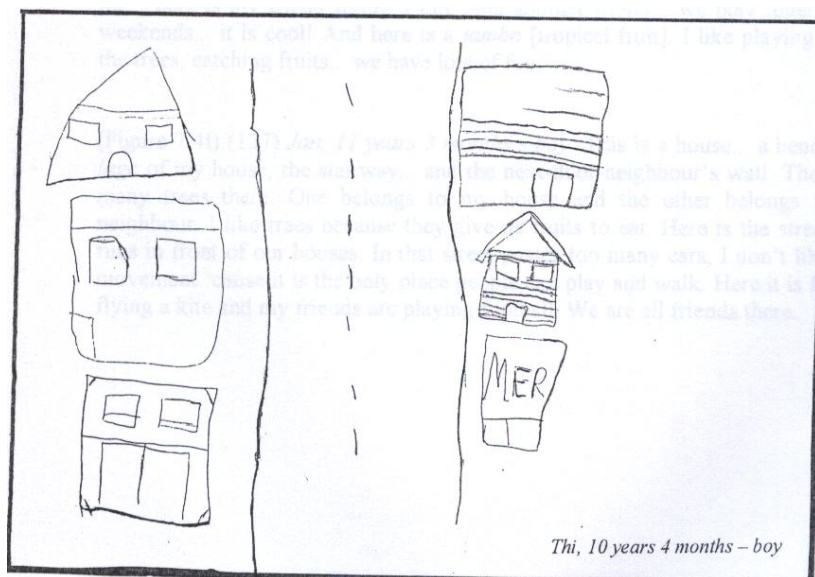


Figure 4. Place Type IV – The cluster of neighbouring houses realm.

#### Type V – The large neighbourhood realm

In this type of cognitive mapping children acknowledge the dwelling place extended to the whole neighbourhood. It conveys a larger scale place where their houses develop vis-à-vis other clusters of houses and institutions. The overall location of these houses, the streets and the institutions represent complementary modes of experiences exercised on a daily basis, such as that of a worker, student and churchgoer. Although the children have not drawn accurate maps, they have talked about and included the main features of the neighbourhood; i.e., the main roads, the school, the church, the shops and leisure places and urban resources, such as transport and amenities, as integral elements of their dwelling place. The house they inhabit is only part of what they consider their dwelling place. The horizon is broadened out to include public spaces, which they do not necessarily frequent but which may be resources for the use of other people, co-residents or not. The dwelling boundary transcends the immediate space of the block to include relatively more

distant areas of the neighbourhood that are accessible by others in addition to the co-residents. It becomes more explicit that children are concerned with the topography and the resources offered by the location and how people make collective use of them. The physical identity comprises a wider milieu and the social relations coalesce to embrace collective interactions through institutions and public spaces. The individual houses, the institutions and the principal facilities, therefore, are the main features of this pattern of spatial organisation. Public and domestic activities are delimited in space and are confined to distinct parts of the same area (See Figure 5).

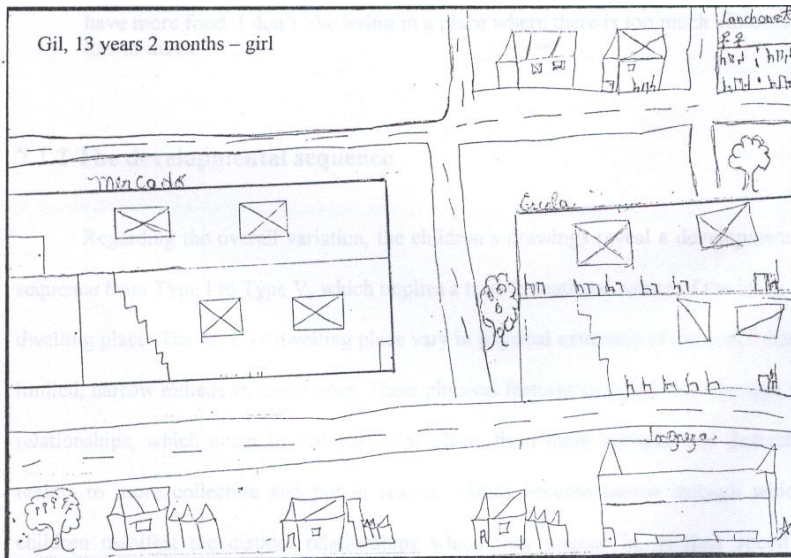


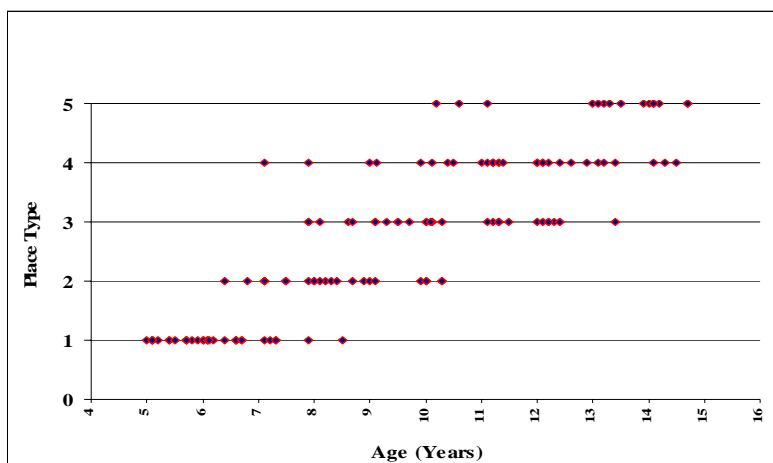
Figure 5. Place Type V - The large neighbourhood realm.

Regarding the overall variation, results reveal a developmental sequence from Type I to Type V, which implies a transformational nature of the ideas of dwelling place. In the same way that it is noticeable from these findings that there is a developmental sequence, there is also an overall coincidence with certain children's age groups that characterises a rhythm within the flux of transformation (see Table 2).

**Table 2. Place Types produced by the participant according to age**

Place	Type I	Type II	Type III	Type IV	Type V	Total
Age	House	+Garden	+Street	+Block	+Neighbourhood	
5 yr+	14	-	-	-	-	14
6 yr+	12	2	-	-	-	14
7 yr+	5	6	2	2	-	15
8 yr+	1	8	3	-	-	12
9 yr+	-	3	6	3	-	12
10 yr+	-	4	6	3	2	15
11 yr+	-	-	6	8	1	15
12 yr+	-	-	6	8	-	14
13 yr+	-	-	1	3	6	10
14 yr+	-	-	-	3	6	9
Total	32	23	30	30	15	130

Taking into account only the most frequent scores, results are as follow: children up to age 6 tend to represent their Dwelling Place characterised as Type I; at ages 7 and 8, the tendency is to produce Type II; at ages 9 and 10, the tendency is to portray Type III; at ages 11 and 12, the tendency is for Type IV, and at ages 13 and 14, the tendency is to depict Type V. These results show that there is a positive correlation between age and the Place Type suggesting that age is indeed significant. A chi-square test of independence was carried out to support this finding, which confirmed the correlation of age and the specific notion of dwelling place was statistical significant ( $p < 0.01$ ) (See Figure 6).



**Figure 6. Distribution of Place Types by age of the child.**

Looking at the responses given by boys and girls as separate groups, the patterns that have emerged indicate an overall slight variation between them. Breaking each category of Dwelling Place without taking into account the child's age, some differences become more evident. The findings show that, for girls and boys, notions of place and space appear to be predicated on gender differences, which in turn suggests that certain places mediate the process by which children come to an understanding of gender differences (see Figures 7 and 8).

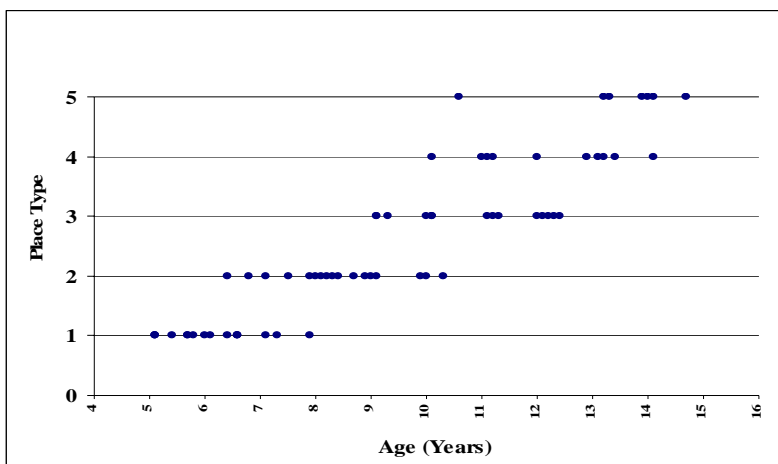


Figure 7. Distribution of Place Types drawn by girls.

Since gender differences were not so clear, a statistic chi-square was carried out to find out how much gender is a factor in defining children's notion of dwelling. Although it was not highly significant regarding the children's sense of dwelling place, it is still important. Here the chi-square test of independence revealed that gender is statistically significant at  $p < 0.05$  level. This result suggests that gender influences the process through which children form their understanding of place and space.

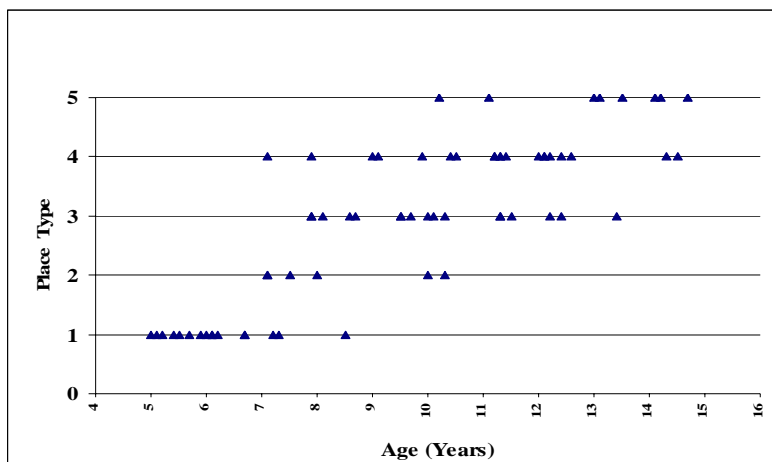


Figure 8. Distribution of Place Types drawn by boys.

Looking at boys and girls separately, and taking age as an interactive variable, allows one to see details that are not apparent otherwise. Figures 7 and 8 show that up to the age seven, boys and girls give similar responses, i.e., their notion of dwelling place is related to the house spatial realm. It is, however, around the age of eight that boys and girls show major discrepancy in their responses. At age eight all the girls (7 out of 12) produced Type II (garden/patio), while boys at the same age produced more Type III. At age nine, boys produced responses of Type III and IV, while girls produced Type II and III. At age ten, boys and girls produced similar drawings (Types II, III, and IV). From age eleven to twelve, it can be noted that boys and girls maintained this pattern of minor differences in their scores. Although they both produced drawings Types III, IV, and V, girls outnumbered boys in producing Type III, while boys outnumbered girls in producing drawings Types IV and V. This pattern continues at ages 13 and 14, in which boys outnumbered girls in producing drawings of a more extended spatial reach.

**Discussion**

The above results indicate that children’s ideas of dwelling place vary in physical extension of the areas, from limited, narrow milieus to larger ones, and each setting is defined according to its own set of social and

ecological characteristics. Though, the boundaries are not so well defined in demarcating exclusive places and spaces, and these place categories are not to be regarded as separated spatial instances. Nonetheless, some particular places stand out in terms of providing space for relatively homogeneous practices that refer to certain kind of social relations which hold significance for the child.

### **The sociality of the dwelling place**

It might be argued that developmental psychology has provided many studies to confirm that the child is an active participant in his/her own construction of knowledge, which it is essentially a social process (Emler, Ohana and Dickinson, 1990). Using a multi methods approach this study shows the transformative character of the process of understanding dwelling place and the meaning embodied in the place where children live. The position which is argued here is that the child is learning that the overall topographical and biophysical features are mutually implicated in the formation of social relationships. That is, places become means through which people manifest the distinct relationships in which they engage, in their specific dwellings.

The process by which children put all of these aspects together to form their ideas of dwelling place is not a linear one. Rather, it takes time for the child to form ideas regarding to the dwelling place that are similar to those held by adults. The findings suggest that children do not form their ideas of dwelling place based only on material references but also on the type of social relations they embody. It is in this way that the understanding of the significance of places has a bearing on the understanding of social relationships. To show an awareness of the predominant social relationships, children depicted certain landscapes, which varied in topography and topology as well.

Social life occurs in a diversity of environments that work as loci for organising specific forms of relationships amongst people, and learning this implies a gradual process in which the child progressively makes sense of particular relationships embodied in the objects and places. More emphasis is given to some objects and places than to others, perhaps because they stand for something meaningful at that particular time and the child wants to emphasise it. These characteristics then form



the means through which a person constitutes him/herself as a particular person and positions him/herself in relation to others (Toren, 1990).

What should be stressed is that, although the children have given special importance to certain places, it does not mean that others are excluded. Rather, what they have drawn and commented upon is what stands as more salient to them at that time. These places are materialisation of certain salient social relations held to be significant for them, exactly because places always imply certain kind of relations that are meaningful to people. The children's ideas of places show, therefore, a singular transformation over time that is closely related to the 'horizon of social reach'<sup>2</sup>.

These elaborations are not simply cumulative but are constructive in their nature. The house forms the basis through which the garden and street, then the block and neighbourhood realms can be constituted spaces for certain kinds of social relationships. It follows that if the oldest children have given priority to depicting places of a larger-scale, it does not mean that the house, or what it stands for, is not taken as the locus for organising kinship life. Rather what happens is that it is embodied in the relations of a more extended social order.

### **How children of different ages and gender learn about these distinct places?**

Even though some differences in place types were observed at all ages in boys and girls, children in the 8 to 12 age-range showed the most notable differences. As early as 7, boys begin to consider dwelling place as a place and space that transcends the domestic realm of the house and its margin, while girls tend to give this response only at age 9. The results show that between the ages of 8 and 10, boys and girls display the most critical differences of what they consider a dwelling place. While girls follow a more gradual sequence in broadening their spatial and social spaces, boys seem to 'jump' from the house directly to broader spaces. This recurrent pattern suggests that boys after the age of 7 seem to understand dwelling place in a broader reaching socio-spatial horizon

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<sup>2</sup> I am borrowing the term 'horizon of reach' from Buttimer (1980). This term defines the movements people perform, taking the home as the central point: 'like breathing in and out, most life forms need a home and horizons of reach outward from that home' (Buttimer 1980:170).

than do same- aged girls. Therefore, for these boys, the ideas of dwelling place begin to be related to larger areas earlier than they do for girls.

Whereas the data show a relatively minor difference between boys and girls in daily routines, Higuchi (1999) observed that for boys the elasticity of the spatial boundaries is far more extended than for girls. These results could be in part explained by the common parental practices noticed during the participants' observation that was carried out during ten months before conducting this investigation. These parental practices can be characterised as exerting more control over girls' mobility outside the home than over boys. Despite their explicit desire to have both girls and boys around the house limits, mothers and also fathers may not reprimand the son for his excursions into the street. The reaction is much more severe if the child is a girl. Mothers often ask their sons to go to the shop to buy a 'bit of this, and a little bit of that', but rarely ask their daughters to do this task.

It is around the age of ten that girls begin to voice ideas that transcend the domestic realm, but this is not because their parents have relaxed their view that daughters should be oriented towards the home. In fact, mothers and fathers show continual concern over the need to control their daughters' movements outside the home, in contrast to dwindling concern about controlling their sons. It is interesting that this parental concern seems to be of little importance with regard to the ideas of dwelling place that emerge from the drawings and commentaries of children in their early teens. At these ages children form distinct groups, whose members are more likely to be those who study in the same school and live close by. It is also from this age onwards that adolescent children begin to look for extra-educational activities, with their parents' support, such as the environmental program, handcraft courses, and the church school. The spectrum of social relationships becomes more extended then by the fact of participating in activities beyond the house.

These findings show that, for girls and boys, notions of place and space appear to be predicated on gender differences, which in turn suggests that certain places mediate the process by which children come to an understanding of gender differences. For boys, mastering outdoor-centred activities involves aspects of what it is to be male, while for girls more indoor-identified activities come to stand for aspects of female identity. Making sense of gender differences seems to be closely

connected with one's ability to find one's proper place. So, ideas of place are not divorced from ideas of gender.

### **Conclusion**

The regularities that emerge in the children's data show a developmental sequence of ideas in which the child integrates a certain set of subject/object relations. When referring to the dwelling place, children bring into being not only the objective spatial attributes of places, but they describe it as a dynamic life arena, as a space where they engage in relations of various kinds with other people. Each of these spatial realms becomes an objectification of particular social relationships that children experience in daily life and that are meaningful to them at that time. At first, the child gives special emphasis to kinship relations objectified in the house, and then gradually moves on to include a wider web of relations which are manifested through other immediate places. It is an inextricably intertwined process of engaging at once in a larger net of relationships and broadening spatial reaches. Put simply, the process of broadening social relationships occurs like waves that radiate outwards from the house, whose space is redefined to accommodate such relations. What follows then is that it is difficult to see how far the dwelling place is related to the child's relationships with others and how much it is about the place *per se*.

The data provided point that the range of social relations is mutually implicated with dwelling places in the sense that social relations of wider scale appear to be connected with a larger spatial reach. In this process of making sense of dwelling place the child brings events, people and other non-human beings, into a comprehensible relational socio-spatial system. The relational status and a full range of distinctions between habitats and inhabitants are established in part through significant experiences the child has with other people.

Ideas of dwelling place also provide grounds for the child's understanding of self, in the sense that by knowing more about the place they can know more about themselves. The differences between the sexes suggest that the process of constituting gender is implicated in the constitutive process of understanding dwelling places.

Although the place realms are singled out here for analytical purposes with respect to the process of making meaning, they are not to be

regarded as separated entities. Rather they are juxtaposed to one another in a dynamic and fluid fashion; i.e., these places are not absolute in any sense. Children are making sense that social life occurs in a diversity of places, but accommodate the specific forms of interaction in a gradual fashion, by linking them to those places. The distinctive characteristics attributed to each setting hinge on the various social activities people perform in these places. It is in this way that places can hold particular significance as a function of the ongoing relations.

## References

- Aragonés, J.I. (2000). *Cognición Ambiental*. Em Aragonés, J.I., Amérigo, M. (Coords) *Psicología Ambiental*. Madrid: Ediciones Pirámide.
- Bachelard, G. (1964). *The Poetics of Place*. Boston: Beacon Press.
- Blier, S.P. (1987). *The Anatomy of Architecture*. Cambridge: Cambridge University Press.
- Bloch, M. (1995). People into Places: Zafimaniry Concepts of Clarity. In E. Hirsh and M. O'Hanlon (eds.) *The Anthropology of Landscape*. Oxford: Clarendon Press.
- Boff, L. (1996). *Ecologia, grito da Terra, grito dos pobres*. São Paulo: Ática.
- Boff, L. (1999). *Saber Cuidar: ética humana - compaixão pela terra*. Petrópolis: Vozes.
- Bourdieu, P. (1990 [1970]). The Kabyle House or the World Reversed. In *The Logic of Practice*. Cambridge: Polity Press.
- Buttimer, A (1980). Home, Reach, and the Sense of Place. In A Buttimer and D. Seamon (eds.) *The Human Experience of Space and Place*. London: Croom.
- Carsten, J. (1991). Children in Between: Aspects of Sharing and Mediation Between Houses in Pulau Langkawi Malaysia. *Man* (26), 425-443.
- Carsten, J. (1997). *The Heat of the Hearth: the Process of Kinship in a Malay Fishing Community*. Oxford: Clarendon Press.
- Carsten, J. and Hugh-Jones. (1995). *About the House: Lévi-Strauss and Beyond*. Cambridge: Cambridge University Press.
- Castro, L. R. (2001). *Subjetividade e Cidadania: um estudo com crianças e jovens em três cidades brasileiras*. Rio de Janeiro: 7Letras.
- Castro, R. (2002). 'Voluntariado, altruísmo y participación activa en la conservación del medio ambiente'. *Intervención Psicosocial*, Vol. 11. No. 3. Págs. 317-331
- Cave, S. (1998). *Applying Psychology to the environment*. London: Hodder & Stoughton.
- Corraliza, J., Martín, R., Berenger, J. y Moreno, M. (2002). Los espacios naturales protegidos, escenarios de intervención psicosocial. *Intervencion Psicosocial*, 11(3), 303-316.
- Ching, B. and Creed, G. W. (1997). *Knowing your Place: Rural Identity and Cultural Hierarchy*. London: Routledge.
- DaMatta, R. (1985). *Casa e Rua. Espaço, Cidadania, Mulher e Morte no Brasil*. São Paulo: Brasiliense.
- Delval, J. (1989). La Representacion Infantil del Mundo Social. En E. Turiel, I. Enesco y J. Linaza (Comps.) *El Mundo Social en la Mente Del Niño*. Madrid:Alianza.
- Delval, (2002). *Introdução ao método clínico: descobrindo o pensamento das crianças*. Trad. Fátima Murad. Porto Alegre: Artmed, 2002.

- Emler, N., Ohana, J., Dickinson, J. (1990). 'Children's representations of social relations'. In G. Duveen and B. Lloyd (eds.). *Social Representations and the Development of Knowledge*. Cambridge: Cambridge University Press.
- Hart, R.A. and Moore, G.T. (1973). The development of spatial cognition: a review. In Downes, R.M. and Stea, D. (eds) *Image, and Environment: Cognitive Mapping and Spatial Behavior*. Chicago: Aldine.
- Heft, H. and Wohlwill, J.F. (1987). Environmental cognition in children. In Stokols, D. and Altman, I. (eds) *Handbook of Environmental Psychology*. New York: Wiley.
- Higuchi, M.I.G. (1999). *House, Street, Bairro and Mata: Ideas of Place and Space in an Urban Location in Brazil*. Ph.D. Thesis. Inglaterra: Brunel University.
- Higuchi, M. I.G. (2003). 'A socialidade da estrutura espacial da casa'. *Revista de Ciências Humanas*. N.33, p.43-70, Florianópolis: UFSC.
- Higuchi, M.I.G. Farias, M.S.M. (2002). *Pequenos Guias do Bosque da Ciência: trajetória de uma experiência de educação ambiental com crianças na Amazônia*. Manaus: INPA.
- Higuchi, M.I.G.; Farias, M.S.M., Azevedo, G.C., Abreu, J.P. (1996). 'Representações infantis de meio ambiente amazônico: implicações no ensino da educação ambiental'. *Interamerican Journal of Psychology*, 30(2), 209-222.
- Hirshfeld, L. (1988). On Acquiring Social Categories; Cognitive Development and Anthropological Wisdom. *Man* (N.S.) 23:611-638.
- Ingold, T. (1992). Culture and the perception of the Environment. In E. Croll and D. Parkin (eds.) *Bush Base: Forest Farm*. London: Routledge.
- Ingold, T. (1995). Building, Dwelling, Living. In M. Strathern (ed.) *Shifting Contexts*. London: Routledge.
- Lima, M.S. (1989). *A cidade e a criança*. São Paulo: Nobel.
- Lima, A. D. M. (1992). The Social Category Caboclo. History, Social Organisation and Outsiders Classification of the Rural Population of an Amazonian Region (The middle Solimões). Ph.D. Thesis. Cambridge University.
- Lynch, K. (1997). *A Imagem da Cidade*. São Paulo: Martins Fontes.
- Oliveira, J.O. (1995). *Cidades na Selva: Urbanização das Amazonas*. Doctoral Thesis. São Paulo: USP.
- Piaget, J. (1954). *The Construction of Reality in the Child*. New York: Basic Books.
- Piaget, J. (1971). *Structuralism*. London: Routledge & Kegan Paul.
- Piaget J. and Inhelder, B. (1967). *The Child's Conception of Space*. London: Routledge & Kegan Paul.
- Pred, A (1984). Place as Historically Contingent Process: Structuration and the Time-geography of Becoming Places. In *Annals of the Association of American Geographers*, 74(2) :279-297.
- Santos, M.(1997). *A Natureza do Espaço*: São Paulo: Editora Hucitec.
- Santos, M. (1998). *O espaço do cidadão*. 4ª. Ed. São Paulo: Nobel.
- Satterthwaite, D. Hart, r., Levy, C. Mitlin, D., Ross, D., Smit, J. and Stephens, C. (1996) *The environment for children*. London:Unicef/Earthscan.
- Siegal, A.W. and White, S. (1975). The development of spatial representations of large-scale environments. In Reese, H.W. (ed) *Advances in Child Development and Behavior*. New York: Academic Press.
- Silva, M.P.S.. (2000). *Aqui é melhor do que lá.: Representação Social da vida urbana das populações migrantes e seus impactos socioambientais em Manaus*. Dissertação de Mestrado Natureza e Cultura na Amazônia. Manaus: Universidade Federal do Amazonas.

- Silveira, I.M. & Lopes, D.F. (1994). O Homem na Amazônia: Aspectos Sócio-político-econômico-culturais. In *Amazônia: Uma Proposta Interdisciplinar de Educação Ambiental: Temas Básicos*. Brasília: IBAMA.
- Storey, C.; Farias, M.S.M.; Higuchi, M.I.G. (1994). Levantamento de Informações da Comunidade Vale do Amanhecer com Vistas a sua Participação no Projeto de Educação Científica e Ambiental do Inpa. *Relatório Técnico*. Manaus: INPA.
- Toledano, L.C. (2005). *Modos de ser, morar e viver*. Monografia de Conclusão de Curso de Psicologia. Manaus:ULBRA.
- Toren, C. (1990). *Making Sense of Hierarchy: Cognition as Social Process in Fiji*. London: Athlone Press.
- Toren, C. (1993). Making History: the Significance of Childhood Cognition for a Comparative Anthropology of Mind, *Man* (NS) 28:461-478.
- Toren, C. (1999). *Mind, Materiality and History*. London: Routledge.
- Wagley, C. (1985). *Uma Comunidade Amazônica*. São Paulo: Editora da USP. 316 pp.