



Where Do The Japanese Kids Want to Live? Theoretical and Empirical Approach to Define Children's Favorite Built Environment

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Abstract

Children see the architectural and urban environments in which they live from their own unique perspective. It is interesting and important to know their point of view, concerning how it differs from the perspective of the adults. The purpose of this research was to study the perception of daily-life environments by Japanese children and to analyze how these results can be applied to the concept of environmental “child-friendliness.” A child and its environment are rarely focused upon within the theories influencing the concept of the environmental “child-friendliness,” which was developed by M. Kytta (Kytta, 2003), and in line with the theory of affordances (Gibson, 1966, 1979/1986). On account of this research framework, this paper aims to discuss rural and urban environments. According to the studies of M. Kytta (Kytta, 2003), a rural area is representing a “child-friendly” environment, an ideal environment. Results of this research, based on children’s preferences, have shown that children living in such countryside area are representing an urban area as their place of living. Finally, which one is more “child-friendly”? Is it the built one that represents an attractive and attracting place, full of life and possibilities? Or is it the rural one, with nature, calmness, tranquility, and familiar atmosphere? In fact, is there the only one right answer?

Keywords: *Environmental “child-friendliness”, perception, representation, appropriation, everyday life environments, children, Japan*

1. Introduction

The theoretical part of this research is situated in the field of environmental psychology. The developmental psychology of Piaget (Piaget, 1981) considered a child as an active participant of the environment (which had a passive role of a framework in his studies). Kaplan (Kaplan, 1987; Kaplan, 1988) thought that bases of the environmental preferences are situated in the perceptual information collected in the environment controlling activities and mobility of a person. Ulrich (Ulrich, 1983; Ulrich, 1991) also worked on environmental preferences. Gibson (Gibson, 1966; Gibson, 1979/1986) developed a theory of ecological perceptual psychology in the center of which is situated the concept of affordances. He thought that perception and mobility are connected together. He considered perception as an active process in time, in which action and mobility play an important role. In his opinion, the objective of perception is to perceive affordances. M. Kytta (Kytta, 2003) based her research on the theory of Gibson. She created a model of child-friendly environment’s evaluation, which is based on two criteria: the possibility of independent mobility and the ability for the actualization of affordances. On these bases, she defined an important concept of the classification of environments and specified its 4 types: Bullerby (an ideal environment – situated in a rural area), Wasteland (a boring environment), Cell (the mobility is restricted what impede children to find affordances, so their motivation to move around is reduced) and Glasshouse (even with the limited mobility, the environment seems to be a rich source of affordances). The Bullerby type corresponds to one of the objectives of this research – the definition of the “child – friendly” environment. According to her research, the village where the author made these experimentations (Ishigure, Mie Prefecture, Japan), is supposed to be a typical child-friendly environment because it is situated in the rural area. According to transactional studies of environmental preferences by Bronfenbrenner (Bronfenbrenner, 1989, 1993), the characteristics of an environment should be studied at various levels as home, school, and other living places and with the importance given also to social and symbolic aspects. In his opinion, the characteristics of an environment (for example instability, impermissibility, lack of clearly defined systems, lack of place, conflicts, and so on) impede the development. Chawla (Chawla, 2002) also defined the opportunity of free moving and the variety of



activities as the main factors of a child-friendly environment. Lynch (Lynch and Banerjee, 1977) did famous research about the perception of the environment and utilization of mental maps. Teramoto (Teramoto, 1988) described his study about how do Japanese children perceive their environment. According to Bronfenbrenner, the author made these studies on various environmental and architectural levels.



Figure 1 Ishigure, a Japanese rural area corresponding to the Bullerby type – an environment child-friendly by excellence



2. Studying children's preferences – method of the research

In this study, the author focused on the lives and lifestyles found within agricultural, Japanese areas called Ishigure (Figure 1). Basing upon existing theories¹, the author predefined it as a “child-friendly” environment and analyzed the lives of the young inhabitants and how it was reflected in their environmental experiences. To this end, the author investigated 130 children in the age between 7 and 12 years in the Ishigure elementary school. The author was interested in the everyday environments of these 130 pupils. The author retained 4 environments that the author defined as daily ones for the majority of children, using a form of drawing, followed by a detailed questionnaire.

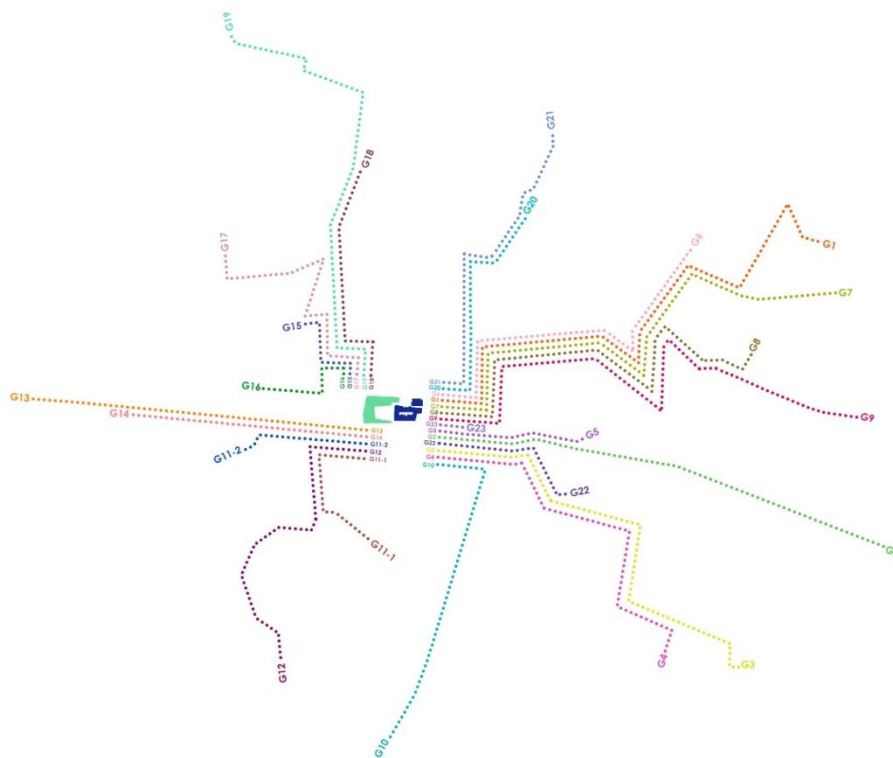


Figure 2 The outline of daily journeys from home to school of 24 groups

The author described their journey from home to school, their way of living, and their experiences with extracurricular activities, as well as home and school buildings. For each of 4 environments, the author defined three levels of perception and also the levels of appropriation: the children's favorite places, the common places (for everyone) and the places reserved to others (therefore prohibited to a child). The surveys were conducted on a period of one month, in winter. During one hour, students drew the mental maps representing the 4 environments, supplemented of 3 levels of perception.

Using perception (the mine one, in the phase of studying existing areas, as well as the one of children) and representation, through the interpretation and analyses of drawings (approximately 700 drawings collected), the author defined the relation of pupils to the areas studied and redefined the concept of the environmental “child-friendliness”. In terms of their living place pupils were grouped into 24

¹ Bullerby type defined by M. Kytä (Kytä, 2003) – see introduction



collective journeys (that the author defined as falling of semi-independent mobility) covering all Ishigure (Figure 2). These groups of journey constitute the mode of travel to school of all Japanese children who meet every morning at the meeting points situated in their neighborhood and go all together to the school.

3. A rural area, is it a most “child-friendly” place?

a. Importance given to buildings



Ishigure, Mie Prefecture



Ishigure, Mie Prefecture



Nagoya, Aichi Prefecture



Nagoya, Aichi Prefecture



Tokyo, Ginza



Tokyo, Shibuya

Figure 3 The degree of urbanisation and the attractiveness level changing between Ishigure, Nagoya and Tokyo



This study, based on a different of M. Kyttä's methodological approach, raises an important point. Although the research area, Ishigure, is situated in a countryside area and compound especially agricultural elements, children mainly represented buildings on their drawings, so architectural elements which, in reality, usually were not situated there. According to this result, the question is, do the children consider an agricultural area as a "child-friendly" place? In the case when children are not representing an environmental reality (because they are drawing the non-existing buildings), we can suppose that they are drawing what they like, what is attractive for them, what they would like to see or to have in their living place, so what is in their opinion "child-friendly." After that, it does not seem to be appropriated to consider an agriculture area as a best-suited place for a happy childhood.

b. Attractive aspects of urban environment

However, the author did not ask the children about what it means for them a "child-friendly" environment. Nevertheless, M. Kyttä did not do it either. In her research about the actualization of affordances, she found that a rural area where the independent mobility of children is not limited represent a Bullerby type, so a geographical location "child-friendly" by excellence. According to the results of the studies, the author thinks that a geographical location may play an important role in attempts to define a "child-friendly" environment, especially from the point of view of urban conditions or the degree of urbanity. Thus, it seems important to rise that M. Kyttä mainly carried out her studies in Finland. Moreover, even if she completed her research in Belarus, it remains possible that the results of her investigations are influenced by the particular situation in Finland, one of the least urbanized countries in the developed world. Japan, where the author made the studies, in contrast to Finland, is one of the most urbanized countries in the world. Japanese children, accustomed to such a situation and influenced by television, manga, travel, and so on seem to would like to have their living space corresponding more to a "Japanese normality," so representing a place which is dense, bright, attractive, dynamic, moving, and so on (**Figure**). The answers of the interviewed children confirmed this.

c. The role of characteristic elements

The choice of characteristic elements is, in the author's opinion, another factor influencing the concept of the environmental "child-friendliness." During the fieldwork, the author noted that the elements of the journey which seem to be characteristic are rarely considered as such by children, who generally do not represent them (or do it very rarely). This phenomenon may be related to the attendance at a place and the relationship that children have. Indeed, we can imagine that if the children go to the temple with their parents at least once a year (at the time of Eve), they rarely attend a *koban* (a police box), a funeral hall and the building of Japan Agriculture Cooperative. Temples were the only element which the author considered as characteristic and which were also often drawn by children. Thus, a place seems to be characteristic if it has a particular, easily defined function to identify and locate on site. However, for a child, the same place (or even a building) may just be any place (or any building) because it has no relationship. The author defined characteristic elements as one of the factors influencing the concept of the environmental "child-friendliness" because the author thinks children define differently than adults the characteristic elements of an architectural or urban environment. Also, they need to keep a relationship with a place. Additionally, the characteristic elements defined by a child are important factors of the environmental "child-friendliness" concept because they allow children not only to identify with their environment but also to find benchmarks. Nevertheless, it is referencing to the question concerning the "child-friendly" aspects of a rural environment. In such an environment, the number of features is very limited. There are few services for adults and almost nothing dedicated just for children (which is representing a contrast with an urban area). In Japan, the choice of services, places of entertainment, and so on is extremely rich in cities. Children would surely attend a wider variety of places than that proposed by Ishigure. Therefore, they seem to identify more with an important amount of any buildings or spaces. According to this result, can we say that cities are more "child-friendly" than an urban area?



d. Sentimental relationship with elements of urban environment

Also, another type of relationship with an element of a daily life environment, a more intimate or private one was observed. During a phase of interpretation and analysis of drawings, the author could observe that children, very often, represent elements with which they have a personal or sentimental relationship (like “my home,” “home of a grandmother,” “the friend's house,” and so on). These familiar for children places are important for the definition of the environmental “child-friendliness” concept. However, the author thinks this result is possible to obtain in rural areas, populated mainly by local people or people from the same families. In the case of large cities, because of their size and distances, or following strong economic migration, the ability to have other family members living in the neighborhood decreases. The author can, therefore, say that in this case, rural areas, because of their more human scale, appear to be more “child-friendly” than an urban agglomeration.

e. Favorite and scaring places

Based on a detailed analysis of favorite and scaring places drawn by children, the author noted that the architectural elements are usually defined as the favorite places. The scaring places are mostly related to nature and circulation elements. It should nevertheless be noted that the same components of the environment (including architectural and urban elements) are considered as favorite ones by some children, and as scaring ones by others. To consider a part of an environment as a favorite place or as a scaring place influence in the author’s opinion perception of the environment as a “child-friendly.” A strong presence of scaring places seems to make an environment less suitable for children.

4. Conclusion - Where to live? Is there the only one right answer?

This approach was innovative regarding the majority of the research cited above because the author did not limit the experimentation on exterior environments (as the journey from home to school), but extended the field of interest to places related to various aspects of everyday life environments. From this point of view, the research was complex and allowed to have a large spectrum on the relationship child-environment as well as on the components and definition of a “child-friendly” environment. Nevertheless, some of the factors that the author has just defined are not directly applicable to projects (such as the presence of places where children feel comfortable, where they have the opportunity to take ownership of the space, and so on). Their application requires prior knowledge of the population of children for whom a project is designed. From this point of view, the results of this study show interest in participatory planning with children. Participation allows creating both urban and rural child-friendly (and also human-friendly) environments. The results of this research show that the only answer to the question about where to live does not exist. Also, the definition of one of these environments as the most “child-friendly” does not seem to be right because, after all, the definition of a “child-friendly” environment depends especially on children’s preferences.

M.Kyttä (Kyttä, 2003), concluding her research, proposed an opening by wandering about obligations should complete an environment for became Bullerby and the author thinks that this research offers an environmental response to this question. As said by J. Wernich: « The true purpose of architecture is to help make human existence meaningful: all of the functions such as the satisfaction of mere physical needs can be achieved without architecture. Without architecture, buildings are reduced to a schedule of rooms formatted in size, shape, and distribution in accordance with their primary functional requirements. The purpose for which the room is to be used, the activity, and how many people it needs to accommodate is described without identity and character » (Wernich, 2008).



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