Children's Spaces

The child-centered design

Extended Abstract

Integrated Master Degree in Architecture

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Abstract

This thesis posits a link between designing children's spaces and child-centered pedagogies by establishing a common ethos and placing the built environment as the "third teacher"[1].

Realizing that both *children's spaces* and *childhood* are social constructions and that the official discourse does not address early childhood education and care as a tool for children's development, nor the benefits from architecture; this thesis discloses an understanding of *childhood* which substantiates the role of *children's spaces.* Only then, the pedagogical potential of the physical setting can be explored by addressing children's needs, priorities and as citizens.

Review of child perspectives regarding children's relation to the built environment points out spatial and functional features that support their development and psychological and social integration in the world. Additionally participatory method to gather children's perspectives about the spaces they inhibit is featured in the analysis of a case study. These approaches stress the importance of an interdisciplinary, contextual and even intergenerational inquiry to inform the design process.

The case study develops crossing perspectives: a formal and a participatory approach come together to acknowledge the quality of the spatial setting. This study proves how realizing children's perceptions and narratives about the *lived space* can add information about the quality of such, which would not be attainable from a solely rational examination.

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1 Designation by Loris Malaguzzi, founder of Reggio Emilia pedagogical approach.

Introduction

Recognizing that the production of space is actually productive, as it informs power relations and renders a certain vision of the child and purpose of children's spaces, this thesis addresses *space* as a tool for children's development in their social and psychological integration in the world. The productive nature of architecture in the definition of the physical, social and imaginary spaces must then stand for an ethical and informed approach to designing children's spaces.

The built environment is the experimental basis of the child. Eager to learn the world, children actively adapt to the *affordances*[1] of space, objects, surfaces and materials (Rubinstein, 1973). Such activity takes place through perception, exploration and manipulation, meeting child's creative and expressive needs (id.). The physical setting not only affects children's motor, cognitive, aesthetic and creative development, but also informs their sense of autonomy and belonging to place (Montessori, 1969)

The original kindergarten ideal sought out to protect children from society's harm, connecting them with nature and encouraging their development through *play*. Early childhood education and care (ECEC) is nowadays a patchwork of diverse educational curricula and social movements (Dudek, 2000).

Attempting to regulate ECEC's provision (quantity) and *quality*, the official discourse[2] sets out global, predetermined outcomes to be measured and assessed through one-dimensional tools claiming to ensure the quality of children's spaces (Dahlberg et al., 2013). This current trend of focusing the product rather than the process bypasses the debate regarding children's lives. Uncontextualized and mostly instrumental, these policies address childhood as a marginal state (Rinaldi, 2006).

Therefore, realizing that both *children's spaces* and *childhood* are social constructions and that the official discourse does not address the pedagogic and democratic potential of ECEC (Dahlberg et al., 2005, 2013), nor the benefits from architecture (Dudek, 2000); this thesis posits a grounded definition of *childhood*, which substantiates the role of *children's spaces*. Further analysis explores de potential of the physical setting.

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1   "The *affordances* of the environment are what the environment offers or affords the person, what it provides or furnishes" (Read, 1997: 10), original designation by James and Eleanor Gibson.

2   For instance that conveyed by organizations such as the EU and OECD.

Methodology

This study draws upon four distinct approaches: (1) literature review of child perspectives regarding children's relation to space, and historical review of the kindergarten, accounting for the social movements and historical moments that most influenced the contemporary architecture of these buildings; (2) critical review of the social and instrumental meaning of *childhood* and *children's spaces*, towards a definition; (3) settle a child-centered approach to the *design process* and *product*, disclosing tools to gather children's perspectives about the spaces they inhabit and establishing spatial and functional features accordingly; (4) and finally, crossing perspectives in a case study, confronting the formal analysis of space and functions with children's accounts about the lived space adopting a participatory approach.

In order to assert spatial and functional features that support and encourage child's development, this study embraces both *child perspectives* and *children's perspectives*. The first one accounts for different literatures regarding, for instance, *child development* towards an understanding of children's perceptions, experiences and behavior in relation to the built environment. The second seeks for the child's own phenomenology; the way children experience spaces or how they see themselves in a particular place or situation, in order to know, for instance, their knowledge of place or bonds (Sommer et al., 2010).

Gathering and understanding children's perspectives is possible through participatory methods. The methodological tools employed in such analysis are based in the ethnographic method and, in particular, on the *mosaic approach* and work of Alison Clark regarding the lived space (Clark, 2010). Through direct contact with children, a specific set of tools suits both the purposes of this study and children's age; standing out the tools *walkthroughs* and photography. The first one meaning child-lead tours through the spaces they inhabit, asking questions to understand 'how they see themselves in that place' (id.). And the second tool allows children to take photographs of that environment with disposable cameras.

Discussion

Understanding the child as a *meaning maker*, a citizen and a *co-constructor of knowledge, identity and culture* (Dahlberg et al., 2013; Rinaldi, 2006); this study points out spatial and functional features, as well as methodological approaches, which afford children's development

and autonomy, and clarify their *place* in the school's milieu, recognizing the child as a citizen.

Similarity to child-centered pedagogical praxis, this study emphasizes the importance of embracing an ethos of permanent critique in the architectural praxis, supported by an interdisciplinary and contextual inquiry to inform the design process.

Thereby, the built environment can be a pedagogical tool, reflecting educational, therapeutic, aesthetic, ethical and political meanings. Transmitting "what the teacher is not saying" (Oliveira-Formosinho, 2011), the space and functional setting clarifies a certain vision of the child, materializing their status in school; enhancing their autonomy, creativity and contributing to their sense of belonging to place.

In the search for these meanings translated in the architectural form, the following variables are highlighted: *accessibility* and *legibility* which foster children's autonomy and movement; *flexibility*, allowing *loose parts* in the physical setting so that children and teachers may transform spaces within the pedagogical praxis or in day-to-day activities where the child manipulates the setting for play; *private spaces*, where the child engages social activities or chooses to be alone; a spatial frame that underlines community activities linking the whole; equipped curricular spaces like ateliers or a pool; or feature *functional* spaces *as pedagogical* spaces, such as the kitchen accessible to children.

It is believed that the architectural quality of children's spaces abides in such meanings and space of action. Thereby, the influence of the built environment is not only onto user's behavior (e.g. well-being, calm, concentration) or aesthetic experience; but also affords social relations between users and the community. Understanding these relations when designing spaces for children is only possible through direct contact with users or the sociocultural context. In this sense, both the design process and the study of a built object requires a participatory approach to such context.

To understand children's perceptions and experiences of the built environment, this study features a participatory methodology to gather children's perspectives about the spaces they inhabit. This methodology is then adopted in the analysis of a case study.

The case study develops crossing perspectives: those of the child with the formal analysis of space and functions. Getting those perspectives together shows the importance of such

subjectivation when searching for the qualities of children's spaces: understanding the *lived space* makes possible an intrinsic, acknowledged and ethical analysis of the built environment, which would not be attainable from a solely rational examination.

Crossing perspectives set forth that the case study have formally fulfilled every functional prerequisite imposed by the Pedagogical Council during the design process, however, the philosophical grounds of its pedagogical model—a child-centered one— are not embodied. The spatial setting does not unequivocally fulfill a child-centered approach.

The space has no *loose parts* in order to allow users creative control of space, as well as it does not clarify the place of the child in the school's milieu – clearly inconsistent between what the pedagogical model sustains and the constraints children actually feel.

There are certainly unknown variables about how the built environment objectively contributes to the development of the child. On the contrary, there are possible resolutions – with a particular ethos it is believed – that meet the needs and interests of children. It is therefore essential to design such spaces with an awareness of the social implications of the production of space. This approach should be based on an explicit ideological basis. clear and ethical, without avoiding debate.

This study emphasizes the importance of the child-centered design nowadays. Recognizing the fragility of social constructions such as childhood and ECEC, settles in one of the foundations of this child-centered approach – or even of any democratic architectural practice: the debate. Activity that requires questioning and reasoning, and values the co-construction of *choices* in the process. This constant debate or permanent critique does not facilitate the process, but enriches it, increasing the chances of a successful experience of the built environment.

The disciplinary scope of architecture may have important contributions to childhood. Not only the quality of the preschool's landscape, but also in the affirmation of the social status of children in the urban setting. The architectural praxis might actually promote the debate on childhood and contribute to a healthy integration, attentive and democratic, putting forward child-friendly cities.

References

Clark, A., 2010. *Transforming Children's Spaces*. Londres: Taylor & Francis Group.

Dahlberg, G.; Moss, P., 2005. *Ethics and Politics in Early Childhood Education*. Londres: Taylor & Francis Group.

Dahlberg, G.; Moss, P.; Pence, A., 2013, 3rd. *Beyond Quality in Early Childhood Education and Care: Languages of Evaluation*. Londres: Taylor & Francis Group.

Dudek, M., 2000, 2nd. *Kindergarten Architecture: Space for the Imagination*. Londres: Taylor & Francis Group.

Montessori, M., 1969 (1936). *A criança*. Lisboa: Portugália Editora

Oliveira-Formosinho, J., 2011. *O Espaço e o Tempo na Pedagogia-em-Participação*. Porto: Porto Editora.

Read, M., 1997. *The Impact of Space and Color in the Physical Environment on Children's Cooperative Behavior*. Ph. D. Oregon State University. Disponível em: < http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/34337/ReadMarilynA1997.pdf> [15.09.2013].

Rinaldi, C., 2006. *In Dialogue with Reggio Emilia*. Londres: Taylor & Francis Group.

Rubinstein, S. L., 1973. *Princípios de Psicologia Geral. Vol. III-IV,* Lisboa: Editorial Estampa.

Sommer, D.; Samuelsson, I. P.; Hundeide, K., 2010. *Child Perspectives and Children's Perspectives in Theory and Practice*. London: Springer.