

- **14074 | Sensitive Spaces - From Montessori pedagogy to school design**
Bruni, Elisabetta, Student at Faculty of Architecture, University of Porto, Portugal, Italy
Casal Ribeiro, Helder, Assistant Professor FAUP; Researcher CEAU – FAUP Group Atlas da Casa – Identidade e Transferência, Portugal

Although significant advances have taken place in the pedagogical field in recent decades, and it is understood that education should not be interpreted as an undifferentiated process, it is too often given preference to rigid models of pedagogy and consequently to traditional school buildings.

This research aims to reflect upon educational spaces, in order to underline the benefits that a properly designed environment has on children's learning. In particular, its purpose is to explore the connections between school design and the Montessori pedagogy.

This pedagogy, developed by Maria Montessori a century ago, differs a lot from the traditional methods usually used by public schools. It is built around a new understanding of the children, promotes their natural inclinations and stimulates their independence. The students are invited to explore freely the topics that interest them most and improve their knowledge, both individually and as a group, with the teachers guiding them throughout the process. This freedom also affects architectural design by providing school buildings with greater flexibility and organizational variety. These educational environments should reflect the fluidity of the learning while stimulating creativity and space appropriation in children.

Moreover, Montessori method comprehends the strict relationship existing between sensitive perception and cognitive processes, and emphasizes the interaction between body and space. Indeed, it is demonstrated how much the quality of living spaces has important consequences on our emotional, intellectual and physical development.

We intend to reflect on the child's experience of architectural space and seek a new approach to school design that translates the principles of the Montessori method into innovative educational spaces and structures.

This work is part of an ongoing master thesis on Master's Degree in Architecture, at FAUP, 2017/18, under the supervision of Professor Helder Casal Ribeiro.