

**SPACE AND EDUCATION: THE MANIPULATION OF THE SCHOLAR ENVIRONMENT IN PESTALOZZI, MONTESSORI AND FREINET**

**ESPAÇO E EDUCAÇÃO: A MANIPULAÇÃO DO AMBIENTE ESCOLAR EM PESTALOZZI, MONTESSORI E FREINET**

**ESPACIO Y EDUCACIÓN: LA MANIPULACIÓN DEL ENTORNO ESCOLAR EN PESTALOZZI, MONTESSORI Y FREINET**



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**ABSTRACT:** The present article examines conceptions of the educational space as articulated in the propositions of three significant authors: Johann Pestalozzi, Maria Montessori, and Célestin Freinet. Given that all of them, to varying extents, questioned the modes of organization of the educational space, this text seeks to comprehend and compare their educational objectives and how they conceived the manipulation of school space to achieve these objectives. Building upon the contributions of Pierre Bourdieu (2010), who posits that space functions as one of the devices for the promotion of symbolic violence, the intention is to shed light on the discussion surrounding this variable that is crucial for the development of educational work but does not always receive the attention it deserves in discussions about education.

**KEYWORDS:** Space. Education. Johann Pestalozzi. Maria Montessori. Célestin Freinet.

**RESUMO:** O presente artigo analisa as concepções sobre o espaço educativo presentes nas proposições de três importantes autores: Johann Pestalozzi, Maria Montessori e Célestin Freinet. Uma vez que todos eles questionaram, em diferentes medidas, os modos de organização do espaço educativo, busca-se, com este texto, compreender e comparar seus objetivos educacionais e os modos como pensaram a manipulação do espaço escolar para alcançá-los. Partindo-se das contribuições de Pierre Bourdieu (2010), para quem o espaço funciona como um dos dispositivos de promoção da violência simbólica, pretende-se lançar luz à discussão sobre esta variável que é tão importante para o desenvolvimento do trabalho educativo, mas que nem sempre ocupa a devida atenção nas discussões acerca da educação.

**PALAVRAS-CHAVE:** Espaço. Educação. Johann Pestalozzi. Maria Montessori. Célestin Freinet.

**RESUMEN:** Este artículo analiza las concepciones sobre el espacio educativo presentes en las proposiciones de tres importantes autores: Johann Pestalozzi, Maria Montessori y Célestin Freinet. Puesto que todos cuestionaron, en distintas medidas, los modos de organización del espacio educativo, buscarse, con este texto, comprender y contrastar sus objetivos y las maneras que pensaron la manipulación del espacio escolar para alcanzarlos. Partiendo de las contribuciones de Pierre Bourdieu (2010), que veía el espacio como un dispositivo de promoción de la violencia simbólica, se pretende arrojar luz sobre la discusión acerca de esta variable que es tan importante para el desarrollo del trabajo educativo, pero que no siempre detém importancia en las discusiones educativas.

**PALABRAS CLAVE:** Espacio. Educación. Johann Pestalozzi. Maria Montessori. Célestin Freinet.

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## Introduction

Education is fundamentally tied to certain elements and logic, and this series of characteristics varies from physical to immaterial. It is not uncommon for physical elements to include an imposing building, a series of classrooms and corridors, books, chalkboards, desks, chairs, and even more playful items such as games and toys. To delve into the metaphysical imagination of education, one can mention learning, the pedagogical relationship, and its participants (the educator and the learners), dissect the components of the school curriculum, and dare to understand the purpose of the entire educational process, which may vary depending on the thinker: Should children be encouraged to learn solely for knowledge? Should their learning serve a profession or occupation? Should the school be the starting point for industrial production? Reflections like these can lead us to encounter entire philosophies aimed at shaping education in the dual sense of creating and giving form. However, the school is a common component in these questions, instruments, and concepts.

In various forms, the school is a permanent member of educational elements. It reflects all the other elements mentioned, but primarily the objective imposed by the one who dominates the educational relationship. This is usually the teacher, although alternative dynamics can be obtained by flexing these educational concepts. Since the school reflects this grouping and is also composed in the material world, it is logical to think that the school can materially change depending on the functionality and needs that the educator believes exist in the pedagogical relationship.

The teacher finds in the particularities of the space granted by the traditional institution (the podium, the chair, and their position at the convergence point of gazes) the material and symbolic conditions that allow them to keep students at a distance with respect, even coercing them if they were to refuse to accept them (Bourdieu, 2010, p. 138, our translation).

The importance of space in the pedagogical relationship, according to the French philosopher and sociologist Pierre Bourdieu (2010), is to symbolically maintain the teacher's authority and the distance between them and their students (the use of language reinforces this). However, it will be verified that space serves other functions. After all, as explained in the paragraph above and especially observed in embryonic schools, the school's physical space can be manipulated to assist the educator.

These mutations do not, however, alter the symbolic force that these elements attribute to the one who remains under the professorial status (Bourdieu, 2010), as logic is established,

especially for children, through the position of the teacher as the manipulator, mover, and imposer of the culture that is established in this environment.

Under the light of Pierre Bourdieu's work "*A Reprodução*"<sup>3</sup> (2010) and the texts "Célestin Freinet" (Legrand, 2010), "Maria Montessori" (Röhrs, 2010) and "Johann Pestalozzi" (Soëtard, 2010) from the MEC's "*Educadores*"<sup>4</sup> collection – whose aim is to present essential authors in the history of education to educators – this article will analyze how these authors thought about maintaining the symbolic power of teachers in the classroom.

For this purpose, a literary review of the mentioned texts was conducted, highlighting their proposals and searching for central thematic axes that articulate the physical and formal organization of schools and classrooms. A comparative analysis of the proposals of these thinkers followed this. This undertaking is presented in the following text, which is divided into four parts where the philosophy of each of these writers will be scrutinized and investigated.

Thus, this article seeks to answer the following questions: What is the role of space in the pedagogical relationship? How do we use the school environment to teach? It is interesting to reflect on the importance of the environment in pedagogy and its influence on maintaining the relationship between the student, the teacher, and the subject to be transmitted and learned so that it becomes an aesthetic field susceptible to the purposes and ideologies of educators.

### **Johann Pestalozzi and Nature**

The pedagogy of Johann Pestalozzi, a Swiss thinker of the sixteenth century, is permeated by the conflict of spaces. His first pioneering experience as an educator was ironically motivated by acquiring land in Argovia called Neuhof. This property became the stage for Pestalozzi's experimentation, serving his goals as an educator and transforming into an educational-industrial field.

It is important to note that his context was quite peculiar. Switzerland, known for its efficient political and educational plan, reaffirmed the prevailing political interests through education. The rights of city dwellers were widely guaranteed, while necessities were denied to peasants. In this conflict of environments and interests, Pestalozzi directed his efforts toward attempting to establish the alienated rights of the rural population. To achieve this, he welcomed socially vulnerable children from his region, primarily based on their material circumstances.

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<sup>3</sup> Reproduction Theory.

<sup>4</sup> Educators.

At Neuhof, these young individuals worked in cotton production and performed economic and industrial functions. Pestalozzi's objective was to finance the education of several children born outside urban areas and create material and intellectual conditions for the emancipation of the rural sector. Thus, two observations about the school space established in Pestalozzi's embryonic experience are necessary:

1. The conflict of interests between urban areas with well-established economic resources and rural areas dependent solely on agricultural production led Johann Pestalozzi to attempt a *transformation* of the rural space. Furthermore, the author saw the school as a possible catalyst for this change.

2. Despite a clear goal – the emancipation of the rural sector – the school space in Pestalozzi is also affected by the complications of this goal. For instance, working with a poor population that needs to finance their studies and requires an economic reconfiguration (already occurred in urban centers and attempted to be mimicked in Neuhof), he decided to manipulate the space he had to serve both educational and industrial purposes.

It is equally necessary to understand that Pestalozzi has, at its core, a conception of human nature that includes labor. Therefore, his school encourages, almost in an Aristotelian movement, the realization of human nature. However, this conception is what ultimately led Neuhof to its end.

Pestalozzi and, previously, Rousseau learned that attempts to reconcile nature and the interests of a free individual are paradoxically contrary to the functions of a citizen. After all, a person must exercise various economic and social competencies within society. Therefore, the education of Neuhof's children is almost always captive to their funding or the financial duties of the school business to Swiss society. Its dissolution occurred in 1780.

Based on the results obtained at Neuhof and two other institutes he implemented, Pestalozzi developed his pedagogical theory based on a tripartite human nature that must be balanced and respected within the student-teacher relationship. These three formative elements are:

1. The Head: This is the faculty in which humans possess the power of separation and interpretation of facts acquired in the world. Through the head, one distinguishes the truth from the false to generate new ideas.

2. The Heart: This is the faculty instigated by experience. The heart can unite individuals and their peers to master their nature through work.

3. The Hand: Finally, considering the process left by the other faculties, the hand is responsible for assisting humans in their work. Its function is to complete the cycle of faculties entirely, moving from the pure metaphysics of the head to the material work of the hand.

Furthermore, teachers must be able to assist students in manifesting these three faculties. The space becomes a field of work for these three dimensions: the analysis of the head, the intuitive process of the heart, and the practical completion of the hand on the environment assist in the learning process and the objective manifestation of what is taught by the teachers. "Examine everything; hold fast what is good. And if something better comes along, let it mature in your minds. Add truth and love to it, just as I try to convey with truth and love what I speak in these pages" (Pestalozzi, 1826, p. 57 apud Soëtard, 2010, p. 24, our translation)<sup>5</sup>.

The need for experimentation is a crucial tool believed to have manifested at different moments in the history of pedagogy. In Herbart, for example, exploring children in space is fundamental to their learning, with the teacher serving as a mediator between the child and the material nature (Hilgenheger, 2010). Pestalozzi advocates, however, a mediation and exploration between the child and human nature, transcending their contact with fauna and flora and culminating in the complete submission of nature (human and material) to work. We will return to the discussion of labor aspects, exploring again Freinet's approach.

In conclusion, it is pertinent to assert that Pestalozzi's educational process becomes a foundation for the lines of thought we will study next. He seeks a balance between the natural aspects of human formation and their social implications, attempting utopically to keep them under an agreement.

### **Maria Montessori and Sensory Perception**

Maria Montessori, born in Chiaravalle, Italy, in 1870, began her career as a physician but eventually shifted towards studying education. Despite challenging various aspects of the society in which she lived, Montessori achieved great success in her dialogue with renowned authors, such as Pestalozzi, and became a celebrity in Italy. This led her to embark on her journey as an educator, working with marginalized children and becoming a teacher for affluent students from prominent families.

Maria Montessori takes the specifics of what is natural to being and breaks away from the popular belief that a child is a miniature adult, possessing all their faculties and differing

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<sup>5</sup> It was referenced on p. 13 of this document as "s.d.," maintaining the formatting of the French publisher.



only in size. This is a noteworthy departure seen in Renaissance artworks and a challenge to prevailing pedagogy (Soëtard, 2010).

However, Maria Montessori goes beyond the specificities of what is natural to be; she establishes a rupture with the popular imagination that sees the child as a miniature adult, possessing all their faculties and differing only in size. This is an intriguing aspect that can be observed in Renaissance artworks. In doing so, she engages in a battle with prevailing pedagogy (Röhrs, 2010).

Montessori's activities and didactic materials recall this discrepancy between adult and child development. There is a constant concern about encouraging the stability of children's senses and their effects, such as balance and harmony of gestures. This is a direct inheritance from her medical career and the scientific pedagogy that follows from applying medical studies to education.

Her didactic materials included paints, toys, carpets, and other instruments that, when used, enhanced the training of students' bodily awareness in conjunction with interaction with peers of the same age group and, thus, at the same level of biological and physiological development. The author emphasizes the need to combine her students' social and practical life through her teaching in the pedagogy she practices (Montessori, 1972 apud Röhrs, 2010, p. 22).

This leads to the pinnacle of Montessori pedagogy: furniture. Alongside the facts – Montessori pays attention to the practical and sensory development of the child, acknowledging that the child has needs divergent from adults – there is also a material resistance imposed by the times. Educational spaces were designed for the teacher's comfortable exercise, neglecting the learner's natural learning. Therefore, Maria Montessori became the first educator to adapt the furniture of these spaces for children, allowing them to reach tables and chairs, sit comfortably, and observe paintings on the walls at their height, among other things.

Maria Montessori intends to assist the natural, so this furniture is entirely free in space and can be manipulated to aid in understanding the dynamics between the student's body and space. By breaking away from immobility, the student can learn from their mistakes. For example, by knocking over a chair, the child understands the effects of their movements in the space they inhabit and will not repeat it.

To conclude the effects of these methods, the teacher in the Montessori school becomes an observer, a mediator between the child and the surrounding environment. They assess the sensory, social, and practical development of the children they assist. These practices and

materials have garnered a series of criticisms for Montessori, and accusations of creating an overly generic method were met with observations of nature:

As a whole, the world repeats more or less the same elements. If we study, for example, the life of plants or insects in nature, we have an approximate idea of the life of plants or insects worldwide. No one knows all the plants. But seeing a pine tree is enough to imagine how all pine trees live (Montessori, 1976, p. 80 apud Röhrs, 2010, p. 26, our translation).

These accusations against Montessori can be refuted by citing her inclusive work with disabled bodies. Understanding the unique needs of each child, Montessori adhered to a multiplicity of nature. Thus, she adapted her material with equal effectiveness for students who faced physiological challenges in movement and those who did not.

Therefore, it is correct to assert that Maria Montessori's pedagogy renewed the aspects proposed by Pestalozzi and advanced further, particularly in material aspects related to the application of her ideas. The environment in her work solidifies not only as a background but also as a fundamental tool to establish revolutionary and highly humanistic concepts in pedagogy, allowing the education of children with disabilities while respecting the natural development of those being educated.

### **Célestin Freinet's Workshops**

The class interrupts the student's life. From this perspective, the French educator Célestin Freinet, appointed as an assistant teacher in 1920, based his entire educational philosophy. Like the other authors studied, he acknowledged the need to create a teaching method that harmonized with students' lives but went beyond what Montessori and Pestalozzi proposed: the class interrupts the rhythm of life, he concluded. How can the hours spent learning become a continuation of what happens outside the classroom? For Freinet, the only way would be to remove students from this space and redefine it according to its functionality.

Firstly, it is an urgent need, experienced physically and psychologically, to leave the classroom in search of life in the immediate surroundings, the countryside, and in contact with the artisanal practice still found in this environment. The first innovation, therefore, is the field trip class, which aims to observe the natural and human environment (Legrand, 2010, p. 15, our translation).

The field trip class stands as the ascending foundation of education in Freinet's philosophy. The experiences gained from it are converted into internal reflections and oral



discussions and eventually transformed into free texts. Three basic aspects permeate Célestin Freinet's pedagogy: autonomy, communication, and the production of didactic and historical documents. Following the communication line, the free texts written by students develop in the school press and inter-school correspondence. The school newspaper plays a significant role in this educational plan, holding a privileged place within the classroom. Through it, the school establishes connections with the surrounding region and makes meaningful contributions to producing didactic material.

In Freinet's school, the children produce the content used by other students (contemporaries and future ones) to study and deepen their knowledge. These knowledge resources can be shared with students from different regions through inter-school correspondence. Freinet's students engaged in dialogues with students from all over France.

There is a crucial biographical fact about Freinet: during his youth, he worked as a shepherd in the French Alps and had his life interrupted by participation in the war, which cost him part of the integrity of his lungs. Consequently, he could not deliver long lectures (Legrand, 2010). Nevertheless, he knew there was no way to make a sheep drink water if it wasn't thirsty. The pursuit of knowledge for children relates to this reality for Freinet; children must have access to the tools to maintain their knowledge, but they are the motivating agents in the quest for learning.

This fact, combined with the importance of communicative aspects and the production of support materials, led Freinet to manipulate the school space instinctively and circularly. His workshops were divided into areas such as craft workshops, a space dedicated to the rug where the child has the opportunity to communicate with the teacher and peers, the press where school newspaper editions are developed, the dollhouse, costumes, and puppets for rest and play environments, as well as a kitchen, and a library where created didactic materials accumulate, etc.

The arrangement of these areas is instinctive, allowing students to find appropriate places to perform tasks they had chosen in the previous week according to their preferences. These mechanisms assist the students' independence not only in the practical execution of their work but also in how they intellectually develop their tastes and preferences.

According to Legrand (2010), the practical and material focus in Freinet's educational approach becomes evident. This direction emerged from his interactions with the educational system of the Union of Soviet Socialist Republics, established during a visit to the country to explore different approaches to early childhood education. Since then, Freinet actively engaged

in the Communist Party. A closer look at some of Freinet's propositions reveals that he was an intelligent user of the space at his disposal, transforming the school into a rich environment due to its innovative and objective dynamics.

### **Pestalozzi, Montessori, and Freinet: Similarities**

Before delving into the differences between the authors, it is necessary to highlight one point of convergence. It is evident that Pestalozzi, Montessori, and Freinet arrived at considerations about space based on analyses that considered the nature of children. Their keen observation of their students gave them insights to propose modifications to the education methods.

More than Pestalozzi and Freinet, Montessori observed the nature of her students and identified deficiencies in the school environment through her practical experiences. This allowed her to work primarily on new proposals. The relationship Pestalozzi envisioned between the child and their nature is expanded in Montessori by equalizing the space for the audience she aims to serve. This is evident when considering how the authors view teachers and their role, reflecting their underlying conceptions.

In Pestalozzi, the teacher, as the mediator between the student and their nature, can only "hold onto what is good." It's as if the teacher is responsible for guiding a process of self-discovery that respects a natural course, implying an obligation that does not involve combating evil but only preventing it from flourishing (Pestalozzi, s.d.). Montessori's evolutionary change was to create tools so that a teacher, serving as a mediator between the child and the environment rather than their nature, could shape the child's nature, reducing their difficulties and aligning their functions for a balanced, full development. This contrasts with Pestalozzi's compensatory outcomes, meaning that even when engaged in what the author calls the "spirit of the method," they merely free the student from their mediator so that they can relate to their nature themselves but never alter it (Soëtard, 2010).

Pestalozzi aligns with Freinet in considering the teacher as a mediator of the child's intuitive experience with space. However, he diverges by creating conditions for the children themselves to monitor the content aspect (Legrand, 2010). It is evident that Freinet takes into account the child's relationship with nature, relegating this development to social contact, and also considers the child's relationship with space, introducing the teacher as an intervener, as Montessori did (Soëtard, 2010). The significant difference between Freinet and other educators

is the consideration of the child as a social being (Legrand, 2010). For example, field trips were a way to overcome the abrupt interruption of the student's life by the school routine, fostering greater integration between the classroom and the world outside.

What can be concluded about the proposals of the three educators is that the correct utilization of space requires a process of understanding on the part of teachers regarding their students and their goals as educators. Mass, homogeneous teaching has suppressed a craft-based and personalized approach within classrooms, leading to increasingly constrained and immobilized dynamics inside them and, apparently, less effective teaching.

These insights already underpinned the ideas of the authors discussed in this article, who contemplated ways to break away from these practices. Despite criticisms of the three educators, it is crucial to acknowledge that their concerns highlighted the importance of considering students and making adaptations to the classroom space with them in mind. Regardless of the perspective adopted, educators must recognize the classroom space as an environment where *symbolic violence* occurs (Bourdieu, 2010). Thus, choices made regarding it are never neutral; they always have an impact and educate in some way.

### Final considerations

The pedagogical relationship cannot be based solely on the conceptual understanding of what will be taught or even on the innate knowledge of the human being. It is essential to establish deep and functional material connections when deciding to educate, and the first of these connections is formed in the space where the entire teacher-student relationship will unfold. After all, it is impossible to ignore our surroundings, especially during the most crucial phases of motor, moral, and intellectual development: childhood and adolescence.

With this in mind, the teacher, as an authoritative figure in the classroom, must understand and use this space to their advantage; otherwise, communication may become disrupted, and the learning process may be inhibited. Therefore, it is essential to have preconceived objectives before students, materials, etc., inhabit this environment. It is also necessary for teachers to comprehend the educational potential of spaces, allowing them to explore alternatives during the teaching and learning process, thereby multiplying the conditions for their students' success.

The authors examined in this article describe this process so attentively that it moves from the imaginary and hypothetical realm to culminate formally in the physical plane. Despite

following different ideologies and contexts, Johann Pestalozzi, Maria Montessori, and Célestin Freinet agree in considering students' natural and comfortable growth. Space is a fundamental ally in achieving the expected outcomes for all of them.

The success of these thinkers is closely tied to the fact that they developed an understanding of the relationships that would need to be established between their concepts – imbued with a broad notion of who the students they taught were – and the space where these interactions would occur. It is this conceptual-spatial awareness that every educator should seek. The more theoretical knowledge they acquire and the more they recognize the concepts that often move unconsciously, the less they will depend on materials formulated by other professionals. Consequently, they will gain more control over the teaching activity.

Therefore, analyzing these mechanisms is fundamental to understanding the philosophy of education, regardless of its nature, and enriching the repertoire of Brazilian educators so that they can carefully observe the space in which the triadic relationship of student-teacher-content unfolds.

It is concluded that within the pre-class ideal – including the proper training of teachers, interaction with students, the development of a lesson plan, a comprehensive understanding of the concepts to be conveyed, and the space in which they will be conveyed – resides the ability to dictate the entire pedagogical relationship that will follow, whether for its success or the condemnation of the remainder of the academic year.

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