

## The architecture of inclusion: addressing segregation in Romania's education system

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### Abstract

Romania's education system struggles with high levels of inequalities and segregation. These are also reflected in architecture, with poorer communities being more likely to access bad education facilities. Despite this, approaching education challenges from a spatial point of view remains rather marginal, both in research and policymaking. This paper looks at school buildings not merely as facilities, but as a result of social constructions and power relations. As such, they can be re-imagined to serve marginalised communities in building equity and inclusion. Indeed, previous research shows that high-quality architecture has a positive impact on attendance, student performance, teacher retention, creating a general climate of wellbeing. Based on several international case studies, our contribution opens the debate around what could be implemented in the Romanian context.

**Keywords:** school architecture, inequalities, community, participatory design

## Introduction

Romania's education system struggles with high levels of inequalities and segregation. These are also reflected in architecture, with poorer communities being more likely to access bad education facilities. Despite this, approaching education challenges from a spatial point of view remains rather marginal, both in academic research and in policymaking. Indeed, learning spaces have seen a very slow evolution in past decades, especially when it comes to their interior design (Hertzberger, 2008, p. 11). Perceived as "immediate and mundane", the importance of school buildings is often overlooked by the larger public as well as by policymakers (Ogden, Upitis, Brook, Peterson, Davis, Troop, 2010, p. 150).

This paper looks at school buildings not merely as facilities, but as spaces, interrogating both their materiality and the perceptions surrounding them. From this perspective, schools are a result of social constructions and power relations. These buildings contribute to defining individual and collective behaviours, attitudes and representations, even more so as their physical presence is long-term. As such, they can be re-imagined to serve marginalised communities in building equity and inclusion. Indeed, previous research shows that high-quality architecture has a positive impact on attendance, student performance, teacher retention, creating a general climate of wellbeing.

So how can schools be (re)designed to foster inclusion, community growth and reduce inequalities? Based on several case studies from Europe and beyond, our contribution opens the debate around what could be implemented in the Romanian context.

## **Literature review**

Research on school architecture is by default a multidisciplinary field, combining pedagogical studies, sociology, history, political science with architecture, design, engineering and urban planning. As such, this body of literature remains complex, often difficult to identify and delimitate (Lafitte, 2020, p. 99).

Some of these approaches are also more hegemonic than others. Studying school architecture first developed through a historical perspective. Indeed, many authors focus on the evolution of school buildings, especially since the expansion of education in the 19<sup>th</sup> century. Architecture is analysed as part of larger political and societal transformations (Weisser, 2006), with schools playing a central role in the construction of democracy and the nation (Caramelea, 2014; Grigore, 2023).

But since Bourdieu, education's ability to ensure equal chances to all citizens has been critiqued. From a spatial point of view, the reproduction of inequalities translates in a rich body of research on school segregation. Architecture itself is more rarely studied from this perspective, although a growing number of papers interrogate its impact on student wellbeing, behaviour (Fisher, 2001), outcomes (Tanner, 2000) and equity. Indeed, recent evidence highlights that the quality and the design of school facilities impacts students' self-worth (Syed, 2022) and identity (Dizerbo, 2017), perpetuating or, on the contrary, disrupting patterns of poverty and marginality.

## **Defining inequalities in education**

According to PISA results, Romania's education system is both low performing and highly unequal. Moreover, in past years, the gap between privileged and unprivileged students' performance grew

bigger, contrary to OECD tendencies that remained stable (PISA, 2022). Factors such as social status, disability or race thus have an important impact on students' school life in Romania, determining their academic paths as well as the level of educational attainment.

From a spatial and architectural point of view, inequalities are translated into school segregation and poor infrastructure. While prestigious schools are well-situated and usually enjoy high-quality spaces, marginal communities are often left with obsolete buildings, sometimes on the brink of collapse. If this is more visible in the urban-rural gap, high inequalities also persist within cities: reputed high-schools are centrally located, often in pre-communist imposing buildings, while less performant institutions are found at the periphery, hosted in concrete, prison-like socialist-era blocks. Moreover, although new campuses are being built according to high quality architectural standards, this is most often the case for private schools.

These early-life inequalities, that the education system conserves and even exacerbates (Zamfir, Aldea, Molea, 2024), unveil larger levels of disparities at societal level. Where school infrastructure is fragile or lacking, other basic needs are more likely to be missing as well: health services, transportation, access to nature etc. School buildings thus become a reflection of wider power relations in society (Syed, p. 773). Far from neutral, they contribute to perpetuating a cycle of intergenerational struggles, blocking people in poverty traps (Banerjee, Duflo, 2012). Part of the problem, schools can however aim to become essential actors of the solution.

In what follows, our article will discuss several case studies from across the world that showcase possible ways in which school architecture can be thought to serve alternative positive ends. Although set in different cultural and political contexts, these case studies were chosen based on a common essential trait: they represent public or

civil society initiatives, as opposed to private. Therefore, they directly address unprivileged layers of society, making good architecture accessible to all.

## Learning hubs

For the past few decades, it has become increasingly evident that planning schools with the whole community in mind is utterly beneficial. Opening school facilities to a larger public can increase the health and general wellbeing of communities, while also making them more sustainable (Filardo, Vincent, 2014, p. 6). Outside of school hours, these spaces can be used to provide sport facilities, parks, as well as other public and social services, becoming real “hubs” of development. This joint use can be particularly attractive for disadvantaged areas, as it allows for a more efficient management of public money and land (Ibid., p. 7), while also involving other actors, private or non-governmental (Syed, p. 781).

In Iran, for example, the Jadgal elementary school serves as a place of gathering for the entire community, while also contributing to enhancing women’s education and social status through workshops and groups organised after school hours. In China’s Fujian Province, a reinterpreted traditional design is symbolically and effectively bringing the entire community together: following the model of an inhabited bridge, Li Xiaodong’s project functions as a school, a passing area and an impromptu theatre.

Many of these school projects also have a strong environmental dimension, thus answering to the growing concern of disparities caused by climate change. In the United States, a study revealed a strong link between schoolyard temperature and students’ social background. In other words, the more disadvantaged the community, the higher the chances their school playground is not adapted to

climate change. In return, this affects students' performance, attendance and wellbeing (TPL, 2021). To answer to these inequalities, an environmental NGO, the Trust for Public Land, has been working to transform concrete heated schoolyards into green parks that are also open to the entire neighbourhood outside of school hours. With hundreds of projects across America, the NGO offers a model that could be reproduced anywhere around the world, contributing not only to students' wellbeing, but also to closing the park equity gap for the entire community surrounding the school.

## **Participatory design**

Designing education spaces with the community in mind also implies involving that same community in the planning and construction process. This is the case in the above-mentioned example from Iran, where villagers contributed to parts of the building. The Trust for Public Land is also applying this strategy, involving students in redesigning their schoolyards. Similar projects are currently emerging in Romania as well. In a village near Iasi, Studio aPunct imagined an inclusive space for the children and adults of a community where such resources are scarce. Borrowing elements from the traditional rural architecture, "the School Beyond the Village" plans on involving local workforce in the construction phase.

Participatory school architecture could thus be perceived as a social transformation tool, even more so in marginalised (rural) communities. The philosophy behind it implies an understanding of space as being the result of constant social interactions, where users are active actors in creating and maintaining the space, however small and diverse their contribution (Lafitte, 2020, p. 16).

Nevertheless, involving the community in the construction or renovation of the local school is hardly imaginable without priorly

building social cohesion. In the small village of Trébédan, in France's Brittany, stigmatisation and lack of perspective used to define the life of the pupils attending the local school. Its old building, lacking basic comfort, was further pushing away both students and new teachers, while parents rarely set foot around the school area. Before envisioning a new building, creating a sense of community and belonging was essential – through open doors, parents' gatherings and common small-scale projects. A few years in the making, this process led to redesigning the existing school building, further opening it to the entire village outside of classroom hours – the cafeteria became a space for local associations and common activities, while the garden is open to all inhabitants. The children were actively involved in the whole process, from building their own architectural models, to visiting the construction site and learning about materials or meeting the different professionals at work. Parents also took part in assembling the furniture or adding the final design touches (*Ibid.*, p. 310).

Involving a variety of local actors in this process not only creates a sense of belonging and togetherness but also puts education at the heart of the community's shared values. In doing so, schools become a long-term resource for children and adults alike.

## **Social enterprises**

Taking this idea to the next level, some projects envision schools as social enterprises. Involving the community in the construction of the building ensures temporary work for the unemployed as well as lifelong skills that might enable them to seek jobs in the future. But this model can be extended beyond the construction phase.

The Makhtar boarding school, in the Tunisian countryside, is one such example. Located in a village deeply touched by poverty, the school

became a transformational actor by using the already existing resources of the community. At the initiative of an NGO – Wallah We Can, money was raised to install solar panels that provide students with energy and water. Surplus production was invested in rehabilitating the building and ensuring better facilities. The surrounding eight-hectare land started being cultivated, thus providing food autonomy to the students. Moreover, unemployed parents were trained and offered a job as farmers on the schools' domain. They also became shareholders in the agriculture business set up by the NGO, selling surplus goods on the local market. In doing so, the Makhtar initiative provides a unique social model for disadvantaged areas, aimed at benefiting the entire family.

## Conclusions

School spaces thus actively contribute to reducing or, on the contrary, exacerbating already existing gaps at society-level. Romania's everlasting debate around education reform has not yet managed to provide sustainable solutions to the system's stringent inequalities. School infrastructure is only a reflection of these discrepancies and should therefore constitute an integral part of the solution. Perhaps Spiru Haret's famous quote can here be interpreted quite literally: "the way the school looks like today, society will look like tomorrow".

Built on several case studies, this paper aimed at providing a starting point for a larger-scale debate on the issue, involving architects, policymakers and activists alike.

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## **Arhitectura incluziunii: abordarea segregării în sistemul educațional din România**

(rezumat)

Sistemul educațional din România se confruntă cu niveluri ridicate de inegalitate și segregare. Acestea se reflectă și în arhitectură, comunitățile mai sărace având o probabilitate mai mare de a accesa facilități educaționale de calitate inferioară. Cu toate acestea, abordarea provocărilor educaționale dintr-o perspectivă spațială rămâne mai degrabă marginală, atât în cercetare, cât și în elaborarea politicilor. Această lucrare analizează clădirile școlare nu doar ca simple facilități, ci ca rezultat al construcțiilor sociale și al relațiilor de putere. Ca atare, ele pot fi reimaginat pentru a servi comunitățile marginalizate în promovarea echității și incluziunii. Cercetările anterioare arată că arhitectura de înaltă calitate are un impact pozitiv asupra frecvenței, performanței elevilor, retenției cadrelor didactice și creării unui climat general de bunăstare. Bazându-ne pe mai multe studii de caz internaționale, contribuția noastră inițiază dezbateră cu privire la ce ar putea fi implementat în contextul românesc.