



PEDAGOGY

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The built environment and public spaces informing teaching and learning

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The built environment and public spaces informing teaching and learning

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Abstract:

Schools now encompass a variety of learning environments, including digital networks, social media, and urban landscapes. Not all these contexts serve as educational spaces. According to Biesta, educational places have a clear purpose and intentionality. Education can extend beyond traditional settings, leading to situated learning through real–world experiences. Interaction with public spaces and the built environment offers students opportunities for spatial engagement. This text explores what constitutes education in various contexts, aligning with critical pedagogy's aim to highlight everyday experiences and unveil institutional power. The term "built environment" encompasses cities, parks, houses, streets, buildings, and public/private spaces, emphasizing education's occurrence beyond traditional classrooms. In education research, urban public spaces and the built environment often provide valuable learning contexts, fostering experiential learning and research. These spaces enable students to develop research competencies, including sharpening observation skills to analyze and unravel familiar experiences.

Case studies examine cultures formed by students reshaping school spaces, urban populations and small communities where interaction shapes unique educational experiences, and cultures produced by urban artists. These studies center on the educational significance arising from the relationships between spatial configurations and the individuals or communities inhabiting these spaces.

Keywords: built environment, public spaces, informing teaching and learning, pedagogies, non-traditional contexts

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Schools are increasingly becoming part of a broader spectrum of learning environments, alongside learning networks, social media, communities, urban landscapes, among others. However, it is important to note that not all these environments serve as educational places. According to Biesta, the distinguishing factors of an educational place include having a clear purpose, an intentionality. In this sense, we are aware that education can take place in non-traditional contexts and can be specifically promoted, for example through real educational experiences that lead to situated learning. Direct interaction with public space and the built environment can provide students with various forms of spatial appropriation and participation.

The question of what is educational in a building, a city, a street or a wall is posed within the framework of a critical pedagogy that aims to pay attention to everyday experiences and to uncover institutional power and dominant ideologies. In this orientation, when we use the term built environment to discuss it as an educational "tool", we mean "cities, parks, houses, streets, buildings, public and private spaces". This positioning assumes that education takes place beyond classrooms, traditional or otherwise, and suggests paying attention to the affordances of the built environment in an urban context.

In the realm of a course on research methods in education for graduate students and the supervision of master's and PhD thesis in education, urban public spaces and the built environment have frequently served as a pivotal context capable of offering valuable educational experiences. Notably, undergraduate and postgraduate students can engage in experiential learning and research, delving into the interplay between political and pedagogical rationalities that define approaches to cities, spaces and buildings. Moreover, the exploration extends beyond physical structures to encompass the space between buildings and practices that shape these contexts.

Urban spaces and built environments are not only suitable for integrating different dimensions of education across different scales, but also serve as instrumental places for learning. In this scenario, students engage with authentic contexts, fostering the development of competences in research practices. This includes sharpening observation skills that enable students to "overcome the veil of familiarity and self-evidence that surrounds the experience of seeing, and to turn it into a problem for analysis, a mystery to be unravelled."⁵

^{1.} Gert Biesta, "Philosophy of Education for the Public Good: Five Challenges and an Agenda," *Educational Philosophy and Theory* 44, no. 6 (August 2012): 581–593.

^{2.} Henry Giroux, Theory and Resistance in Education: A Pedagogy for the Opposition (South Hadley, MA: Bergin & Garvey, 1983).

^{3.} Aase Eriksen, and Katharine Kriebel, "Learning through the Built Environment," Art Education 33, no. 6 (October 1980): 20.

^{4.} Anna Kristin Sigurðardóttir, Torfi Hjartarson, and Aðalsteinn Snorrason, "Pedagogical Walks through Open and Sheltered Spaces: A Post-Occupancy Evaluation of an Innovative Learning Environment," *Buildings* 11, no. 11 (2021): 503.

^{5.} William Mitchell, "Showing Seeing: A Critique of Visual Culture," Journal of Visual Culture 1, no. 2 (2002): 166.

The three selected case studies are concerned with the study of cultures either created by young people in school spaces where they actively reshape and appropriate the built environment or produced by urban populations and small communities where interaction shapes unique educational experiences, or cultures produced by urban artists who contribute to the multifaceted cultural landscape. At the centre of these studies is the question of the educational significance that lies in the relationships between spatial configurations and the individuals or communities that inhabit these spaces.⁶

Educational experiences in urban spaces: three examples

By encouraging students to explore the urban environment as a learning space, they can become aware of different levels of observation to be part of a shared learning environment and discuss how we can all be less spectators and more participants. In this sense, experiential learning sounds like a basis for understanding education as a process that involves "transactions between the person and the environment".

We were interested in developing a critical mind in relation to everyday events and recognising public spaces as producers of knowledge. Furthermore, these educational experiences are premised on the understanding that knowledge exists in real contexts.

Study 1 — Young people as everyday producers of the school's built environment⁸

The first case study is an ethnographic and participatory investigation focusing on the active appropriation of school spaces by young people. This engagement involves the reimagining of traditional learning spaces, transforming them into spaces where new educational opportunities are fostered, and cultures of resistance take root. The overarching aim of this study was to explore the complex interplay between spatial dynamics and the formation of subjectivities. It aimed to shed light on how the constant interaction between space and individuals contributes to the cultivation of subjectivities. Ultimately, the study aimed to empower young people to develop an awareness of their agency as active contributors in a built environment whose impact spans social, cultural, and educational domains. 9:10

- Edward Soja, Postmodern Geographies: The Reassertion of Space in Critical Social Theory (London and New York: Verso, 1989).
 David A. Kolb, Experiential Learning: Experience as the Source of Learning and Development (New Jersey: Prentice-Hall,
- 8. Ana Rute Costa developed this study for her PhD in Sciences of Education at the Faculty of Psychology and Education Sciences of the University of Porto. I was the supervisor with Professor Barata Fernandes.
- 9. Ana Rute Costa, Sofia Marques da Silva and Francisco Barata, "Education and architecture. Young people's perspectives and dialogues for a better understanding of built environment," ARCC Conference Repository (August 2011).
- 10. Ana Rute Costa, Sofia Marques da Silva, and Francisco Barata, "O Envolvimento de Jovens no Ambiente Construído da Escola: Do Espaço Físico ao Espaço Educativo". *Educação, Sociedade & Culturas*, no. 44 (February 2015): 67–85.

1984).

Using the built environment as an analytical framework, this study illuminates the intricate process by which young people construct meaningful environments, often within limited or constrained spaces where opportunities are inherently limited due to prior allocation for other purposes. Central to this research is the conceptualisation of appropriation as an interactive and purposeful endeavour. Despite the spatial constraints and the limited power and resources that individuals possess, they consciously transform the physical environment into spaces that give them personal meaning. Through this act of appropriation, individuals engage in a process of resistance, not only reshaping physical space, but also undergoing a personal transformation in the pursuit of meaning–making within a constrained environment.¹¹

School buildings are a reservoir of public places in the urban or rural environment. Moreover, the school is also an architecture of experience that influences the rhythms of the surrounding spaces and the society that still shares these rhythms. As Ciaffi, Saporito and Vassallo¹² mention:

The school itself has changed its local role, becoming a territorial actor for urban regeneration: very often, educational institutions step outside their boundaries in order to take over public space - i.e., gardens, parks, libraries, museums, cycle workshops - pursuing different kinds of educational projects at different levels, and building alliances with other local community actors.

The centrality of school buildings as an object of analysis serves as a critical lens for understanding educational goals. School infrastructures, including their physical structures and locations, serve as a portrait of social disparities, interconnected networks and patterns of movement. They embody an educational legacy and represent priorities and societal efforts to address systemic problems and societal needs. Furthermore, the architectural embodiment of school buildings goes beyond the purely physical and becomes a subject of educational research.

Study 2. The city as a place of education¹³

The study of educational sites in an urban setting requires a comprehensive investigation of spatial practices, community dynamics and individual interactions in the built environment, focusing on the spaces in between —the public space. This project—based learning experience was included within the course research methodologies in education: qualitative methods

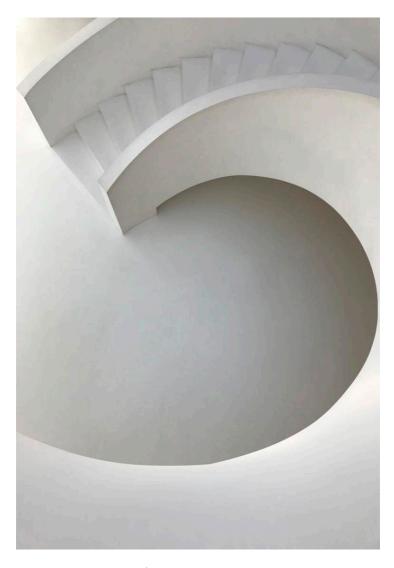
^{11.} Roberta M. Feldman, and Susan Stall, "The Politics of Space Appropriation," in Women and the Environment: Human Behavior and Environment, ed. Arza Churchman and Irwin Altman (Boston, MA: Springer, 1994), vol 13.

^{12.} Daniela Ciaffi, Emanuela Saporito, and Ianira Vassallo, "From Social Infrastructure to the Civic Center. The School as Laboratory of Collaborative Governance Models," Les Cahiers de la Recherche Architecturale Urbaine et Paysagère, no. 16 (2022): 2.

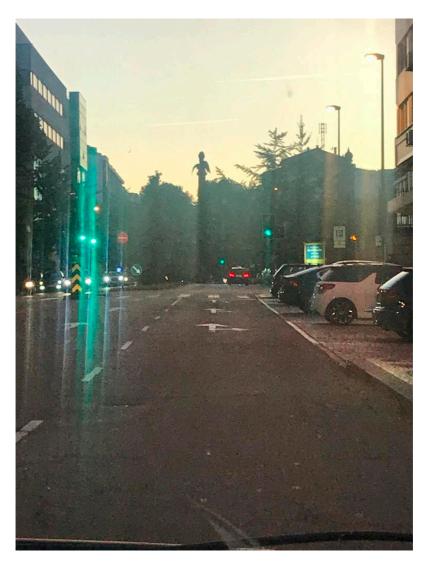
^{13.} This study was developed collaboratively by a class of around 25 undergraduate students in 2017 in the context of a Course I teach on Research Methodologies in Education: Qualitative Methodologies Laboratory. This course is part of the graduation in Educational Sciences at the Faculty of Psychology and Education Sciences of the University of Porto.



Meeting generations, Barcelona, 2014



Meeting cultures, Centro de Artes de Águeda, 2019



Green lights, mouve forward, Porto, 2019



These are not old walls, Berlin, 2018

laboratory, on the topic of Educating Cities. In addition to selecting appropriate research methods and techniques, the purpose of this student project was to cultivate the ability to critically observe familiar localities and routines. The central aim was to recognize and understand the educational processes involved in the use of a space and to interpret the meaning it has for its users, as well as the meanings attributed to it. Students developed participant observation and wrote field notes accounting for groups, communities and individuals using and performing space. Contacting, for example, with processes such as sharing public goods or acknowledge collective meaning—making contributed to understand the social construction of a place and the sense of belonging to it. Ethnographic conversations with seniors playing cards, young people in gardens or tourists in historical sites allowed a deep understanding about different appropriations of public spaces and a discussion about how a city may become and educational context.

Students involved in this project engaged not only with the traditional educational sites typically found in urban environments, particularly historic landmarks such as public libraries, schools, and museums, but also with observing and analysing the use of various outdoor spaces. This careful observation went beyond the expected places of education and focused on how these outdoor spaces are intertwined with both individual and collective identities and ultimately influence the sense of belonging within communities.

This research made it possible to understand the role of shared spaces in creating opportunities for new forms of micro-public encounters in terms of urban citizenship and fairness. ¹⁴ On the other hand, it also enabled the discussion of how urban development can limit the appropriation of shared space or create new opportunities.

Study 3. Learning from walls and urban art15

This research project, based on ethnographic and visual methods ^{16,17}, examines the urban landscape as a civic arena in which socially engaged artists ¹⁸ assert themselves through the articulation of objects of ideological contestation. At the same time, these artists catalyse the occupation of private building walls, effectively expanding public space. Through their work, a dialogue between the artist and the viewer is fostered, extending the boundaries of public discourse beyond conventional spaces and encouraging a critical engagement with the urban environment.

^{14.} Gill Valentine, "Living with Difference: Reflections on Geographies of Encounters," *Progress in Human Geography* 32, no. 3 (2008): 323–337.

^{15.} Sarha Pawlak is developing this study for her Master in Educational Sciences at the Faculty of Psychology and Educational Sciences of the University of Porto. I am the supervisor of this thesis.

^{16.} Sarha Pawlak, and Sofia M. Silva, "Pixo Not Dead! A Arte Subversiva Jovem como Forma de Expressão," at GROW UP, Porto, Portugal, June 8–9, 2022.

^{17.} Sarha Pawlak, and Sofia M. Silva, "O que as Paredes nos Ensinam? A Arte de Rua e o Desenvolvimento da Educação Política, Crítica e Cívica," III Encontro Internacional Lusófono Todas as Artes | Todos os Nomes, Porto, Portugal, June 21–23, 2023.

 $^{18. \,} David \, Darts, "Visual \, Culture \, Jam: \, Art, \, Pedagogy, \, and \, Creative \, Resistance," \, \textit{Studies in Art Education} \, 45, no. \, 4 \, (2004): \, 313-327.$

In the midst of a pronounced phase of urban gentrification and the gradual erosion of public spaces intended for simple communal use, the architectural landscape takes on the role of a canvas. As part of this transformation, the buildings serve as expressive platforms that express, among other things, the repercussions of urban metamorphosis on daily life in the city. Far beyond their aesthetic appeal, these expressive endeavours, prominently showcased in visible public space, forge alternative narratives. These narratives serve as potential educational conduits that promote social awareness and advocacy for social justice. This process blurs the dichotomy between culture and politics, offering citizen-initiated interventions that transform into "pedagogic practices of resistance." 19

The built environment serves as a canvas for social criticism and active engagement by social actors who articulate direct messages about contemporary living conditions. These expressions often manifest on accessible surfaces such as walls, avoiding conventional urban billboards or other non-sanctioned locations designated for commissioned urban art. The public's engagement with art in public space represents an important 'moments of learning' and provides a unique educational experience.

However, the action embedded in public art installations in urban space aims to cultivate a critical perspective on urban priorities and basic rights. This includes the reclamation of public space, the challenges of housing and a critique of consumer behaviour.

Final considerations

The use of urban space, the built environment and public space as an educational resource creates a rich interdisciplinary opportunity to develop research competences and skills and to reflect on educational practices and places of learning. The immersive experience in urban space equips students with theoretical and methodological tools to approach social life and develop specific modes of engagement and awareness that consolidate their worldview and place as citizens and future professionals in shaping inclusive and equitable societies.

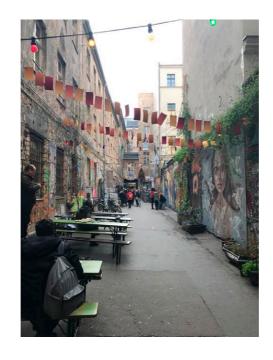
These three project examples, viewed through three different analytical lenses, represent not only the transformation of the built environment and public space in the city of Porto, but also a diversity of actors that not only influence change, but also the role of civil society in this transformation and the search for public solutions.

The use of the city as a learning space is integrated into an educational approach that aims to deconstruct and question.

^{19.} Henry Giroux, "Cultural Studies, Public Pedagogy, and the Responsibility of Intellectuals," *Communication and Critical/Cultural Studies* 1, no. 1 (2004): 65.

^{20.} Nick Schuermans, Maarten P. J. Loopmans, and Joke Vandenabeele, "Public Space, Public Art and Public Pedagogy," Social & Cultural Geography 13, no. 7 (2012): 678.







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Educational experiences are not limited or fixed to university classrooms or direct educational environments. The connection between the university and the city provides an educational ecosystem and the opportunity to develop specific competences:

- Learn how to participate in public discussions about common interests and goods.
- Learn how to navigate and benefit from experiences in less institutionalised learning contexts.
- Learn to recognise how local knowledge circulates.
- Understand how people interact with non-people as you develop spatial practices.
- Learn to document what you observe through field notes, interviews, photography or film.

Through the experience of supervising these projects, which were developed in urban settings, it became apparent that as they developed research competencies, they learned to integrate what they were learning, observing and analysing into a broader interpretive landscape that allowed them to be able to see "things that matter educationally." Education and educational actors are not limited to schools and exposure to the different spaces of the built environment enables experiential learning. ^{22, 23}

Students' interactions with communities of practice serve as important learning opportunities, albeit within what Lave and Wenger²⁴ term 'legitimate peripheral participation'. Although these three cases illustrate peripheral participation, meaning that the students were not full members of these communities, they did engage in a form of participatory learning described by Lave and Wenger. The concept of periphery, as explained by these authors, is not negative per se. Instead, peripherality, when enabled, suggests an openness and a possibility of access to sources of understanding through gradual participation.

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