

RECONVERTING RESIDUAL SPACES INTO RELAXATION HUBS FOR THE ACADEMIC COMMUNITY

Darius-Stefan Nestoriuc, Ana-Irina Lequeux-Dinca, Camelia Teodorescu, Carmen Ileana Dobrescu, Florian Alin Butoi

Faculty of Geography, University of Bucharest, Romania

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Abstract

This article explores the paradigm of an "open campus," supporting the idea that the academic environment transcends through architectural boundaries of the faculty, thus making the public space an organic extension of the classroom. The study focuses on the urban regeneration potential of a degraded site located at the intersection of Academia Militară, near the Rectorate of the University of Bucharest, proposing its transformation from an urban barrier into a multifunctional relaxation park open for everyone. By giving the city back to the people, the project aims to eliminate the functional barriers imposed by heavy traffic, transforming a residual space into a hub of social cohesion and ecological balance. Using visual analysis and public opinion research among students and passers-by, the article highlights the need for green intervention in an area dominated by heavy traffic and concrete surroundings. The results demonstrate that the conversion of this residual space would stimulate social cohesion, providing a vital refuge for both residents and people passing through the area or waiting for public transport. In conclusion, the project transforms an urban barrier into a hub of relaxation, essential for the well-being of the academic community and citizens.

Key words: Urban regeneration, open campus, social cohesion, functional conversion, green infrastructure.

Introduction

In the contemporary urban landscape, defined by rapid densification and a predominance of gray infrastructure, the concept of "residual space" is no longer viewed merely as a planning error, but has become a strategic opportunity for urban regeneration. These "urban voids" or terrains vagues, though often degraded and lacking a clear function, possess a latent potential to repair the social and ecological fabric of the metropolis. In this context, the modern university is reevaluating its role, moving beyond the physical confines of lecture halls to embrace the "open campus" paradigm.

The concept of an open campus supports the idea that the learning process and academic interaction do not stop at the university gates. On the contrary, the adjacent public space becomes an organic extension of the classroom—a social laboratory where ideas are freely debated. However, in Bucharest, many of these spaces adjacent to prestigious institutions remain trapped in a state of functional abandonment, acting more as barriers than as points of convergence.

This article examines the derelict lot located at the Military Academy intersection, in the immediate vicinity of the University of Bucharest's Rectorate. Currently, this site represents an urban paradox: although it is situated at a strategic hub, dominated by imposing institutional architecture and traversed daily by thousands of students and citizens, the space functions as a visual and functional barrier. Noise pollution, heavy traffic, and the lack of green spaces transform this area into a place of hurried transit, depriving the community of a vital space for psychosomatic recovery.

Material and methods

The research began with a literature review focused on the concepts of urban regeneration, vacant lots and green infrastructure. Academic databases (Web of Science, Scopus, Google Scholar) were consulted to identify international best practices regarding the transformation of urban barriers into spaces that foster social cohesion. Particular emphasis was placed on "Open Campus" theories, which analyze how higher education institutions can positively influence the quality of adjacent public space. To understand the dynamics of the site's evolution and the causes of its current degradation, a cartographic and satellite analysis was conducted. Using platforms such as Google Earth Pro (Historical Imagery feature) and data provided by the Copernicus program, the study tracked the history of land use changes at the Military Academy intersection over the past few decades. The proposal phase for the redevelopment solution was carried out using ArchiCAD design software, employing modules and libraries specific to landscape architecture.

Results

A comparative analysis of the site over the course of 15 years reveals a transition from an area used for technical and storage purposes to a green open space which, although undeveloped, has begun to be visually absorbed into the urban fabric.

The 2010 image shows the site in (*fig. 1*) in a highly fragmented state. The land was partially used as a logistics base and materials storage area (likely in connection with adjacent infrastructure work or construction in the area). The ground cover was dominated by impervious surfaces, temporary barracks, and compacted soil, with vegetation being nearly nonexistent or spontaneous and degraded.



Fig.1: Military Academy Area in 2010

In contrast, the current situation (2025), represented in (*fig. 2*) points to a passive “re-greening.” With the completion of major infrastructure projects (the M5 subway line), the land has remained free of buildings but has become a captive residual space. Although vegetation has taken over much of the plots, it is uncontrolled, and the lack of pedestrian accessibility turns the area into an inaccessible “green island” surrounded by heavy traffic.



Fig. 2: Military Academy Area in 2025

The strategy for unifying the two lots represented in (*fig. 1 and fig. 2*) under the umbrella of a cohesive urban park is based on a series of technical and landscape interventions designed to mitigate the negative impact of the road infrastructure and return the space to the community. The primary focus is on ensuring pedestrian continuity through the implementation of safe seen in (*Fig. 3*), oversized crossings or a green bridge that organically connects the North Plot to the South Plot, thereby eliminating the current fragmentation caused by traffic.



Fig. 3: Actual situation of the site in 2026

At the same time, the acoustic comfort of the future hub is guaranteed by creating a natural sound barrier, made of layered vegetation screens (trees and shrubs) that acoustically isolate the interior of the park from the intense noise of the intersection. The functionality of the space is enhanced by the integration of smart urban furniture, equipped with solar charging stations and Wi-Fi access, thus directly addressing students' study and connectivity needs.

Discussion

The proposed development plan (*Fig.4*) is not merely a cosmetic change, but a comprehensive strategy to "heal" the urban divide between the University Rectorate and the Military Academy intersection.

The central element of the project is the oval-shaped urban clearing. In the context of the "open campus" concept, this organic form functions as a "green amphitheater." In contrast to the rigidity of the surrounding institutional buildings, the central oval invites free use: from individual study on the grass to spontaneous social interactions or even outdoor classes. This area becomes the nucleus of social cohesion, offering the "psychosomatic restoration" mentioned in the study's objectives.



Fig. 4: Planning Proposal Parck for Military Academy Area

The rectangular areas marked on the plan, adjacent to the main walkways, suggest the placement of functional zones equipped with smart street furniture. The discussion here extends to the concept of a "living lab": spaces where students can access free Wi-Fi, charging stations, and sustainable lighting. This feature transforms the unused space into a productive workspace, extending the library and classroom into the outdoor environment.

Conclusion

This study has demonstrated that the process of urban regeneration of brownfield sites is an imperative necessity for Bucharest's evolution into a sustainable and resident-friendly city. The analysis of the site located at the intersection of Academia Militară, near the Rector's Office of the University of Bucharest, has highlighted several fundamental aspects, such as the following. A diachronic analysis of satellite imagery from 2010 to 2025 revealed the site's transformation from a logistical support area for infrastructure into a "captive" residual space. Although spontaneous renaturalization has occurred, the lack of coherent planning has transformed this potential green lung into a visual and functional barrier. Research confirms that the academic environment extends beyond the physical boundaries of the university buildings. The proposal to transform this space into a relaxation hub directly addresses the need of students and faculty for a safe transit area, as well as a place for outdoor study and social interaction. In conclusion, transforming this underutilized space into an organic extension of the university campus represents a crucial step toward eliminating functional barriers. The project not only provides a vital refuge in an area dominated by concrete, but also reaffirms the university's role as a driving force for regeneration and ecological balance within the landscape of the contemporary metropolis.

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Souhrn

Studie navrhuje přeměnu zchátralých pozemků u Vojenské akademie na rekreační centrum ve stylu „otevřeného kampusu“ pro akademickou obec. Prostřednictvím satelitní analýzy (2010–2025) a modelování v programu ArchiCAD projekt sjednocuje roztržštěné pozemky do jediného parku, chráněného před hustým provozem vegetativními bariérami. Výsledkem je odstranění stávajících městských bariér a vytvoření inteligentního zeleného prostoru, který podporuje sociální soudržnost a pohodu v samém srdci Bukurešti.

Contact:

Darius-Stefan Nestoriuc
E-mail: darius-stefan.nestoriuc@s.unibuc.ro

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