FROM INDUSTRIAL VOID TO URBAN CONTINUITY: REGENERATING THE BRAGADIRU INDUSTRIAL ENSEMBLE /

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Abstract. The Bragadiru Brewery ensemble represents one of the most significant historical industrial sites of Bucharest, located at a sensitive point in the relationship between memory, urban transformation and regeneration potential. This article examines the site not only as an architectural object, but as an urban territory marked by historical accumulations and discontinuities generated by political transformations and large-scale interventions during the late socialist period.

The theoretical framework integrates Hannah Arendt's conception of public space as the place of appearance, the ideas of Jane Jacobs and Jan Gehl regarding the human scale, social dynamics and urban vitality, as well as Charles Montgomery's reflections on the relationship between the built environment and wellbeing. The Heideggerian perspective on dwelling allows the industrial heritage to be interpreted as an existential support for collective memory. The analysis traces the historical evolution of the Bragadiru Brewery ensemble, emphasising how the demolitions of the 1980s, which eliminated approximately 5.9–7 square kilometres of urban fabric and resulted in the displacement of around 40,000 inhabitants (Tănase, 2019), profoundly reconfigured its territorial context. The site became isolated and detached from the urban network, losing its natural connections with the city centre.

At present, the ensemble is examined as a potential node within a north south green urban direction, capable of connecting the city's major parks into a continuous urban infrastructure that combines vegetation, pedestrian routes and public spaces. Within this framework, the site can become an interface between the centre of the capital and the southern districts, contributing to the rebalancing of the urban structure. The article argues that the regeneration of the ensemble can function both as a local intervention and as a city scale intervention, transforming a fragmented territory into a coherent sequence of the city.

Introduction and theoretical framework. The industrial heritage of Bucharest constitutes a complex assemblage of elements in which collective memory, political transformations and the absences produced by demolitions overlap in ways that are, at first glance, difficult to decode or disentangle. The Bragadiru Brewery ensemble, located in an area between the historic centre and the Rahova district, reflects this stratification. Its present condition is marked by fragments, inaccessible areas and ruptures of continuity, and these characteristics are not due solely to the decline of industry, but also to broader urban transformations that have altered the relationships among space, community and identity.

To construct an appropriate interpretative framework, the article brings into dialogue conceptual positions originating from different fields. Hannah Arendt understands public space as the place where individuals become visible to one another and articulate their shared existence (Arendt, 1958). Jacobs and Gehl emphasise the importance of everyday interaction and the human scale, both essential for a lively and inclusive city (Jacobs, 1961) (Gehl, 2010). Montgomery highlights the relationship between the urban environment and psychological well being, underlining the role of socio ecological infrastructures in the proper functioning of communities (Montgomery, 2013). Heidegger reinterprets dwelling as a form of existential anchoring and as a fundamental structure of being in the world (Heidegger, 1971/2001).

Seen through this perspective, the Bragadiru Brewery ensemble becomes more than a degraded industrial site. It transforms into a space where the city can reconstruct its broken continuity, a place where memory can be reactivated and where urban reconstruction extends beyond physical restoration to include the reestablishment of a coherent urban trajectory. Its location in a strategic area of Bucharest gives it the potential to act as a transitional element between the centre and the southern districts, offering the possibility of urban reconnection.

Historical evolution, fragmentation and the current context. The evolution of the Bragadiru Brewery ensemble is closely connected to the transformations of the Rahova area from the late nineteenth century to the mid twentieth century. Between 1894 and 1899, the initial nucleus of the brewery took shape in parallel with the street reorganisation of the neighbourhoods located on the right bank of the Dâmboviţa River. The first industrial buildings, erected by architect Anton Schickerle, together with the Bragadiru Palace and the auxiliary constructions, defined the embryonic structure of the ensemble. During the period 1899–1911, economic growth led to substantial expansions, including new production buildings, facilities for workers and logistical infrastructures, all integrated into the functional logic of the complex. Between 1911 and 1948, the ensemble underwent its most extensive phase of modernisation through the introduction of the industrial railway, the reorganisation of production spaces under the coordination of architect F. Waffler and the addition of technical facilities such as the power plant or the rice cleaning station. These transformations converged towards the formation of a modern industrial complex, adapted to the technological demands of the time and integrated into Bucharest's urban dynamics.

The major changes of the 1980s profoundly affected the relationship between the ensemble and the city. The demolitions associated with the Civic Centre project erased between 5.9 and 7 square kilometres of urban fabric and led to the displacement of approximately 40,000 inhabitants, eliminating the historical continuity between Rahova and the city centre. The Bragadiru ensemble thus remained isolated, fragmented and detached from the natural urban circulation. After 1990, the absence of a coherent reconversion strategy, incomplete privatisations and punctual interventions kept the site in an intermediate state, without active functions and without urban integration. Although its location is central, the lack of a unified project has perpetuated the difficulty of reconnecting the ensemble

to the contemporary city and to the needs of the community (Dinescu, 2013).

Regeneration vision: urban integration, green direction and educational role. The regeneration of the Bragadiru Brewery ensemble follows an urban logic that exceeds the limits of the site and repositions it as a connective element within a broader territorial structure. In recent literature, the concept of urban continuity has become important in the conversion of former industrial areas, being understood as a means of restoring connections between urban fragments, reactivating latent spaces and producing new social and cultural meanings (Morel & Dorpalen, 2023). In this sense, the ensemble is not an isolated object, but a potential urban node capable of reestablishing relationships between neighbourhoods, functions, communities and slow mobility routes.

An essential component of this vision is the inclusion of the site within what could become a coherent green structure at the scale of the city. European research on green infrastructure shows that such ecological continuities can improve environmental quality, support better microclimatic conditions, encourage active mobility, and strengthen social cohesion. At the same time, recent regeneration projects developed within European programmes such as proGIreg demonstrate how former industrial areas can be transformed into green corridors that generate both ecological and social benefits, particularly in vulnerable urban contexts. In this framework, the Bragadiru ensemble can act as an intermediate node within a sequence of existing green spaces, contributing to a north–south connection linking Bucharest's major parks and supporting urban repair in the Rahova area.

The third dimension of the proposed vision concerns the educational role of the site. International literature on post-industrial regeneration shows that cultural and educational functions can serve as catalysts for urban reactivation, especially in post-socialist contexts where urban identity has been affected by dramatic transformations. Examples such as Eastern Suburb Memory in Chengdu or the Sümerbank conversions in Turkey demonstrate that educational programmes, art centres and interdisciplinary cultural spaces can generate new modes of use and perception of place, strengthening the relationship between community, memory and contemporary production (Xia et al., 2025). Thus, the Bragadiru Brewery ensemble can become an urban laboratory for education, research and creation, located in an area that needs accessible public spaces and institutions capable of generating social value.

Through the combination of these three directions, the regeneration vision brings urban continuity, green infrastructure and educational functions into dialogue within an articulated strategy aimed at repairing historical discontinuities, providing ecological benefits and supporting forms of cultural dwelling relevant to the community. This approach supports a phenomenological interpretation of the city, in which regeneration is not only a physical operation but a process through which a place once again becomes a bearer of meaning in collective life.

University study as a critical instrument. Part of the diploma projects developed within the Faculty of Interior Architecture in 2023, coordinated by Associate Professor Dr. Architect Cristina Pană, were dedicated to the Bragadiru Brewery ensemble as a critical framework in which industrial heritage is reexamined through diverse contemporary programmes. Each project proposes a specific function, justifying its placement on the site through an analysis of spatial potential, urban role and community needs. This collective approach shows that the academic environment can become a generator of alternative regeneration scenarios, capable of producing a nuanced reading of the relationship between the industrial past and the city's future.

Although the students' projects propose ambitious directions, they do not belong to the sphere of utopia, but to that of the ideal, understood as an intellectual construction that explores the maximum potential of a site without the immediate constraints of economy, bureaucracy or the compromises inherent to professional practice. Utopia presumes perfection and a world without friction, disconnected from the real possibility of implementation, whereas the ideal represents a possible direction, even if not yet fully achievable, a framework in which architecture can be conceived in terms of the best possible solutions. In this sense, the students' work functions as a conceptual experiment in which the projects are shaped to their optimal form, revealing the potential of the ensemble without the limitations that, in reality, can distort or diminish the initial intentions of an architectural project. It is precisely this controlled freedom that allows the identification of relevant scenarios for the regeneration of the Bragadiru ensemble which, although idealised in an academic setting, remain anchored in the possible and can serve as useful references for future real interventions.

Within the projects, each student selected a distinct building from the ensemble, developing an individual intervention adapted to the architectural characteristics of the chosen structure. In parallel, the team developed a series of collective interventions at masterplan level, conceived to rearticulate the site at the scale of the neighbourhood and transform it into a coherent urban infrastructure. The first of these is the proposal of a public circulation that traverses the ensemble from north to south, restoring a historical axis present in the early phases of the brewery's development and later obstructed. This intervention resolves the height difference of approximately eight metres between the edges of the site and creates a pedestrian connection between The Ark, the Flower Market and George Coşbuc Boulevard, increasing urban permeability and making the site accessible at a human scale. The second collective intervention consists of placing a museum dedicated to the Uranus neighbourhood beneath the central courtyard, a gesture that transforms the nucleus of the ensemble into a space of memory and offers access to all buildings. Each building also receives a visible contemporary extension, a unifying element intended to mark the conversion and distinguish the new interventions from the historic layer. Against this common background, the individual projects develop diverse functions, each grounded in the relationship between the chosen building, the specificity of the ensemble and the needs of the Rahova area.

In the project of Alina Alexandra Bucătariu, the sports function is placed in one of the large halls of the ensemble, where the generous volumes can accommodate collective physical activities that are currently inaccessible

to the local community. The choice is justified by the lack of sports infrastructure in the district, and the intervention demonstrates the ensemble's potential to generate social inclusion and become a real community resource.

Anda Konnerth transforms the chosen building into a cultural centre for fashion and visual industries, capitalising on the ensemble's position on Calea Rahovei and its ability to attract diverse urban publics. The industrial building becomes a space for artistic display and production, and the structure of the selected building allows for workshops, runways and exhibition areas that reintegrate the site into the cultural circuit of the city.

In the project of Antonia-Ioana Condrache, another building is transformed into an interdisciplinary laboratory inspired by Bauhaus pedagogy, exploiting the flexibility of industrial space for material research and collaboration between designers, architects and artists. The intervention connects heritage with contemporary creative production dynamics and turns the site into an educational centre for the Rahova area.

For Florentina-Adriana Ioniță, the building becomes an exhibition space dedicated to the memory of the city and the representations of Bucharest. The raw texture of the hall and its generous spaces enable large-scale exhibitions, transforming the ensemble into a place of dialogue between past and present and offering a platform for reflection on urban identity.

Andreea Mihaela Marin identifies in the selected building the possibility of creating a centre for animal-assisted therapy. The protected courtyards and the relative isolation of the ensemble can generate calm environments, and the intervention demonstrates how industrial heritage can support socio-medical programmes needed in the community.

Bianca-Oana Burlacu transforms another building into a centre dedicated to sustainability and circular design, using the industrial materiality as a support for demonstrating contemporary ecological principles. In this way, the ensemble becomes a living pedagogical instrument for crucial themes in contemporary European cities, such as reuse and responsible design.

In the project of Elena-Adriana Dumitru, the chosen building hosts a multisensory and surreal spatial installation, built on the expressive potential of industrial ruins. The proposed installations transform visitors' perception and stimulate an emotional closeness to heritage, demonstrating that the ensemble can host experimental forms of artistic representation.

Viewed together, these individual interventions, articulated through the collective masterplan elements, reveal an industrial ensemble with urban development potential and with the capacity to support diverse programs, from culture and education to health, sustainability and artistic experimentation. The university study thus becomes a critical instrument that investigates the meanings of regeneration at social, cultural and urban levels, demonstrating that the Bragadiru Brewery ensemble is not only a landmark of industrial memory, but also a latent infrastructure for the future of the city.

Regeneration as a process of urban reconciliation. In their cumulative form, the diploma projects dedicated to the Bragadiru Brewery ensemble can be understood as a scenario of complex intervention, in which the site is reimagined as a constellation of cultural, educational, therapeutic and creative functions. This intervention has not only an internal value related to the reactivation of the industrial buildings, but also opens the possibility for urban reconciliation at the scale of the Rahova district and its relationship with the city centre. The proposed functions together configure a network of public and semi public spaces capable of restoring broken links between dwelling, work, culture and memory.

In the immediate vicinity of the Bragadiru Brewery stands the building known today as The Ark, a former customs warehouse and goods exchange from the late nineteenth century, later converted into a centre for creative industries. As presented in the project's own documentation, the building was reintegrated into contemporary urban life through restoration and adaptive reuse and is often perceived as part of the same historical ensemble due to its direct relationship across Calea Rahovei. Today, it functions as a hub for communication, design, cultural production and events, illustrating how industrial heritage can support new forms of activity and public engagement. Its presence already indicates the potential of the Rahova–Uranus area to support a creative urban pole and offers a relevant precedent for the transformation of the Bragadiru site.

Across the street lies George Coșbuc Market, built in the late 1950s and inaugurated in 1959, which functioned for decades as a key centre of everyday commercial life in this part of the city. According to recent municipal planning documents, there is ongoing interest in its rehabilitation and expansion, highlighting its potential to become an intensively used pedestrian public space adapted to contemporary urban needs.The market, The Ark and the Bragadiru Brewery ensemble therefore form an urban triad in Bucharest: a historic industrial site with regeneration potential, an already functional creative hub and a daily commercial space capable of attracting a constant flow of residents.

If this triad is interpreted through the theoretical framework previously discussed, the idea of a multi level urban reconciliation emerges. In Arendtian terms, the relationship between the Bragadiru Brewery ensemble, The Ark and George Coșbuc Market can create a new space of appearance in which residents, workers, visitors and cultural agents become visible to one another. The student proposed spaces in the ensemble, oriented toward education, culture, therapy and experiment, can absorb and redistribute the human flows generated by the market and the creative centre, transforming a fragmented territory into a field of interaction and mutual recognition.

From the perspective of Jacobs and Gehl, the configuration of a continuous human scale route that links George Coșbuc Market, The Ark and the courtyards of the Bragadiru Brewery ensemble can produce an urban environment in which walking, pausing, socialising and observing become natural experiences. Calea Rahovei, currently dominated by traffic and disparate parcels, could be reimagined as a sequence of active frontages in which the market ensures the constant presence of residents, the creative centre brings cultural and professional publics and the regenerated industrial ensemble offers spaces for workshops, exhibitions, social activities and public events. This spatial and functional continuity creates the premises for a specific form of everyday urbanity in which daily life, culture and production overlap.

In Montgomery's logic, such an extended ensemble has the potential to improve urban well being at the level of the Rahova district by increasing access to quality public spaces, to cultural activities and to relevant services. The market brings food infrastructure and everyday encounters, The Ark provides a framework for creative networks and events, and the interventions proposed in the Bragadiru Brewery ensemble introduce programmes dedicated to health, education and artistic expression. Together, these can rebalance a post socialist context marked by eviction, deprivation and spatial fragmentation, as documented in recent studies on Rahova–Uranus (McElroy & Popovici, 2019).

From a Heideggerian perspective, the industrial and commercial heritage of the area can be understood as a support for dwelling, not merely an inert background. The Bragadiru Brewery ensemble, the former Goods Exchange at The Ark and the market together construct a recognisable "world" in which residents can anchor their experiences. Their conversion does not refer simply to material restoration, but to the reconfiguration of the way in which the community positions itself in relation to the history of the district and to the violent transformations of the 1980s. Studies on the impact of centralised industrialisation and deindustrialisation on spatial identity show that the rebalancing of territorial systems often occurs through tertiarisation and through the reintroduction of cultural and service functions in former productive spaces (Săgeată et al., 2021). In this sense, the students' proposals can be seen as a step toward such rebalancing.

Viewed from the perspective of the literature on post industrial regeneration and green infrastructure, the urban reconciliation that takes shape here is not only morphological, but also ecological and cultural. A possible green route linking George Coşbuc Market and the Bragadiru Brewery ensemble to Carol Park and Tineretului Park could support ecological continuity and improve slow mobility, while the cultural and educational programmes in The Ark and in the ensemble would work upon the memory and identity of the place, in line with experiences documented in programmes such as proGIreg or in the conversion of similar sites in other European cities (Cristea, 2023).

Thus, the regeneration of the Bragadiru Brewery ensemble, viewed together with The Ark and George Coşbuc Market, can be understood as a process of urban reconciliation in which industrial and commercial heritage becomes infrastructure for the emergence of a new form of urban life. The interventions proposed by the students are not merely theoretical exercises, but articulations of a real possibility: that a fragment of the city marked by losses and discontinuities may be reintegrated into the metropolitan landscape of Bucharest through a careful combination of cultural, social, educational programmes and public spaces activated at the human scale.

Acknowledgments. The author wishes to express sincere gratitude to the students of the Interior Architecture Faculty who dedicated their diploma projects to the study of the Bragadiru Brewery ensemble. Their commitment, creativity and sustained effort have been essential in shaping the critical perspectives and design scenarios presented in this research. Special thanks are extended to Mr. Erich Bartha, the owner of the ensemble, for generously providing access to historical documentation, archival materials and technical information that made this study possible.

The author also gratefully acknowledges architect Adina Dinescu, whose doctoral research on the Bragadiru Brewery ensemble offered a rigorous and invaluable foundation for the historical and architectural analyses developed in this work..

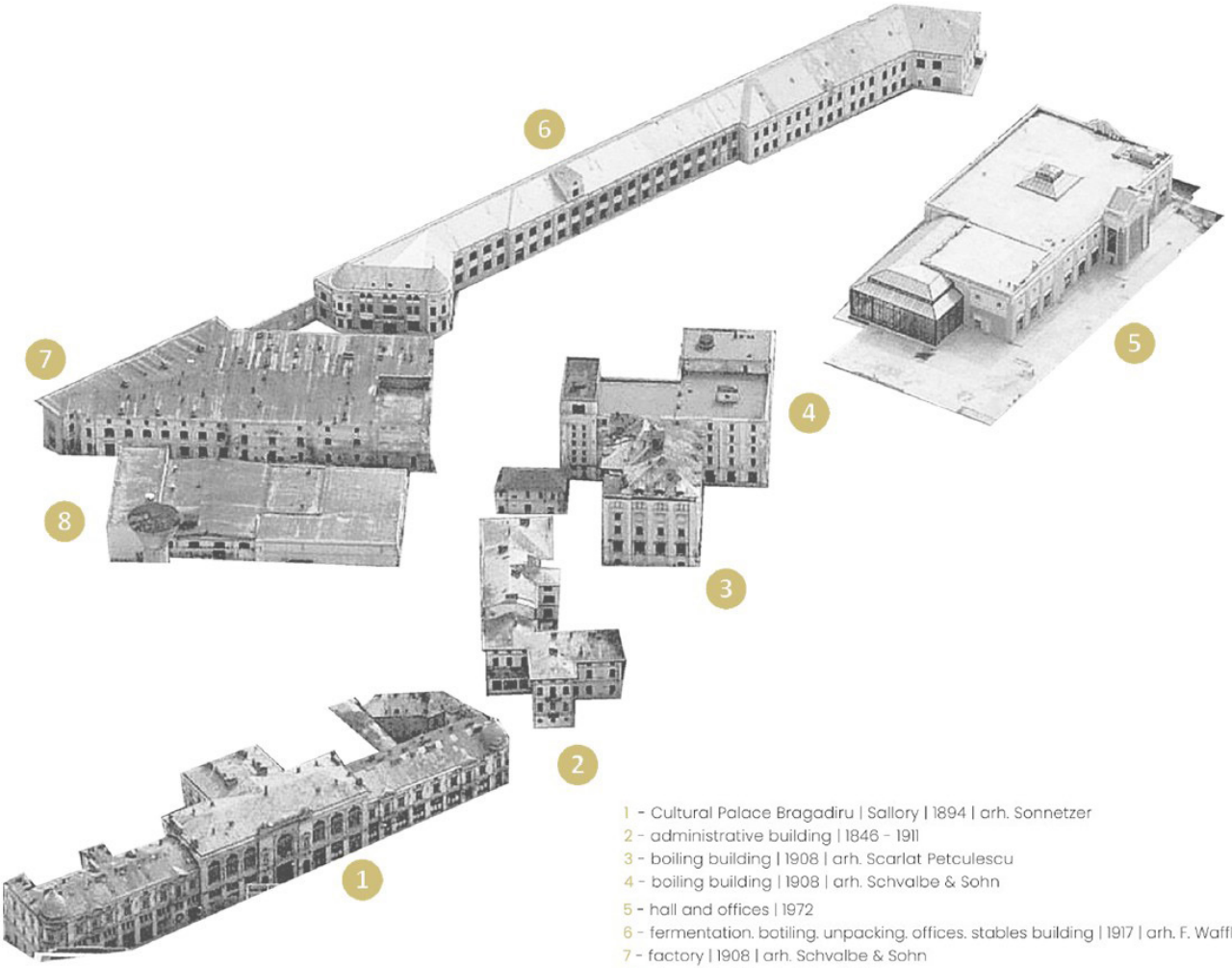
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Figures.

FIGURE 1 - Aerial view of the existing condition of the Bragadiru Brewery ensemble, produced by the student team as part of the site analysis.
FIGURE 2 - Photographs documenting the current condition of the Bragadiru Brewery ensemble, illustrating the existing architectural fabric and spatial characteristics of the site.
FIGURE 3 - Physical model of the Bragadiru Brewery ensemble, illustrating the collective proposals developed by the student team within the regeneration masterplan.
FIGURE 4 - Design board by Antonia-Ioana Condrache, presenting the contemporary intervention proposed within the selected industrial building of the Bragadiru Brewery ensemble.

1.



1 - Cultural Palace Bragadiru | Sallory | 1894 | arh. Sonnetzer
2 - administrative building | 1846 - 1911
3 - boiling building | 1908 | arh. Scarlat Petculescu
4 - boiling building | 1908 | arh. Schvalbe & Sohn
5 - hall and offices | 1972
6 - fermentation. botiling. unpacking. offices. stables building | 1917 | arh. F. Waffler
7 - factory | 1908 | arh. Schvalbe & Sohn
8 - deposit. botiling building | 1972

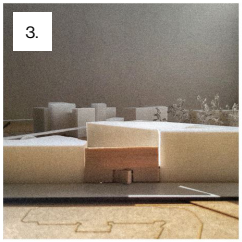
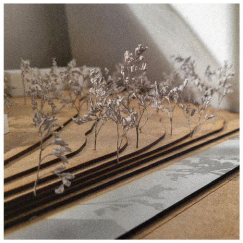
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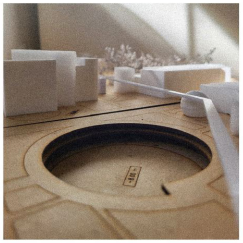


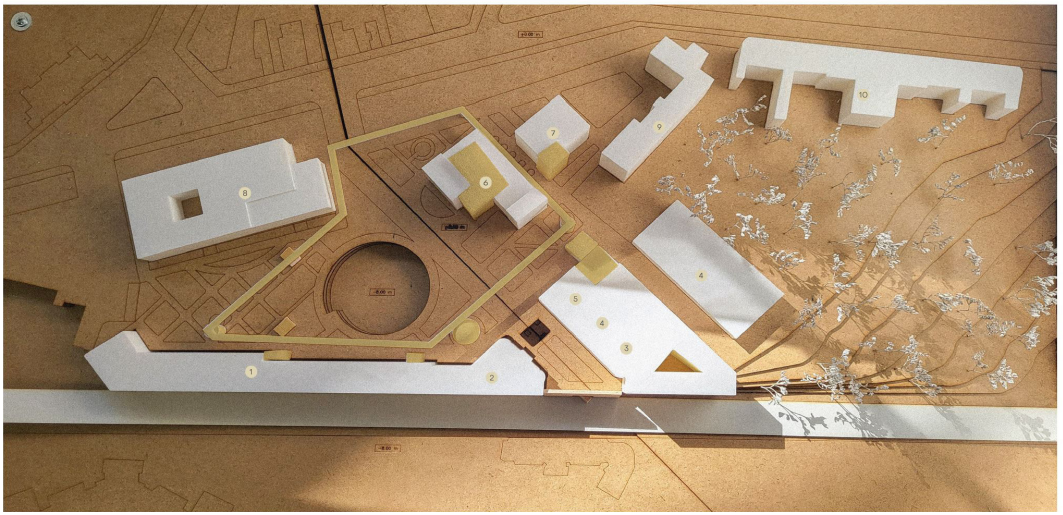





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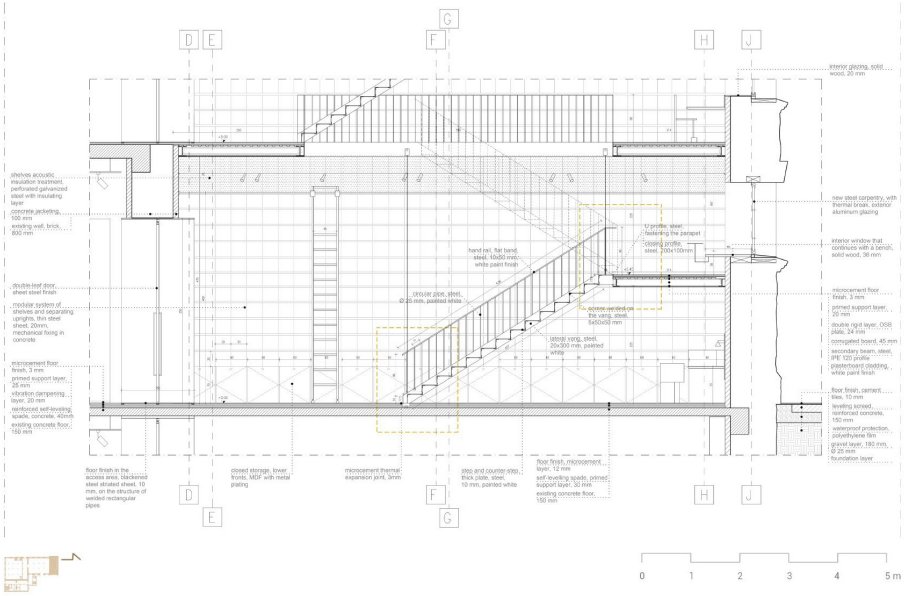





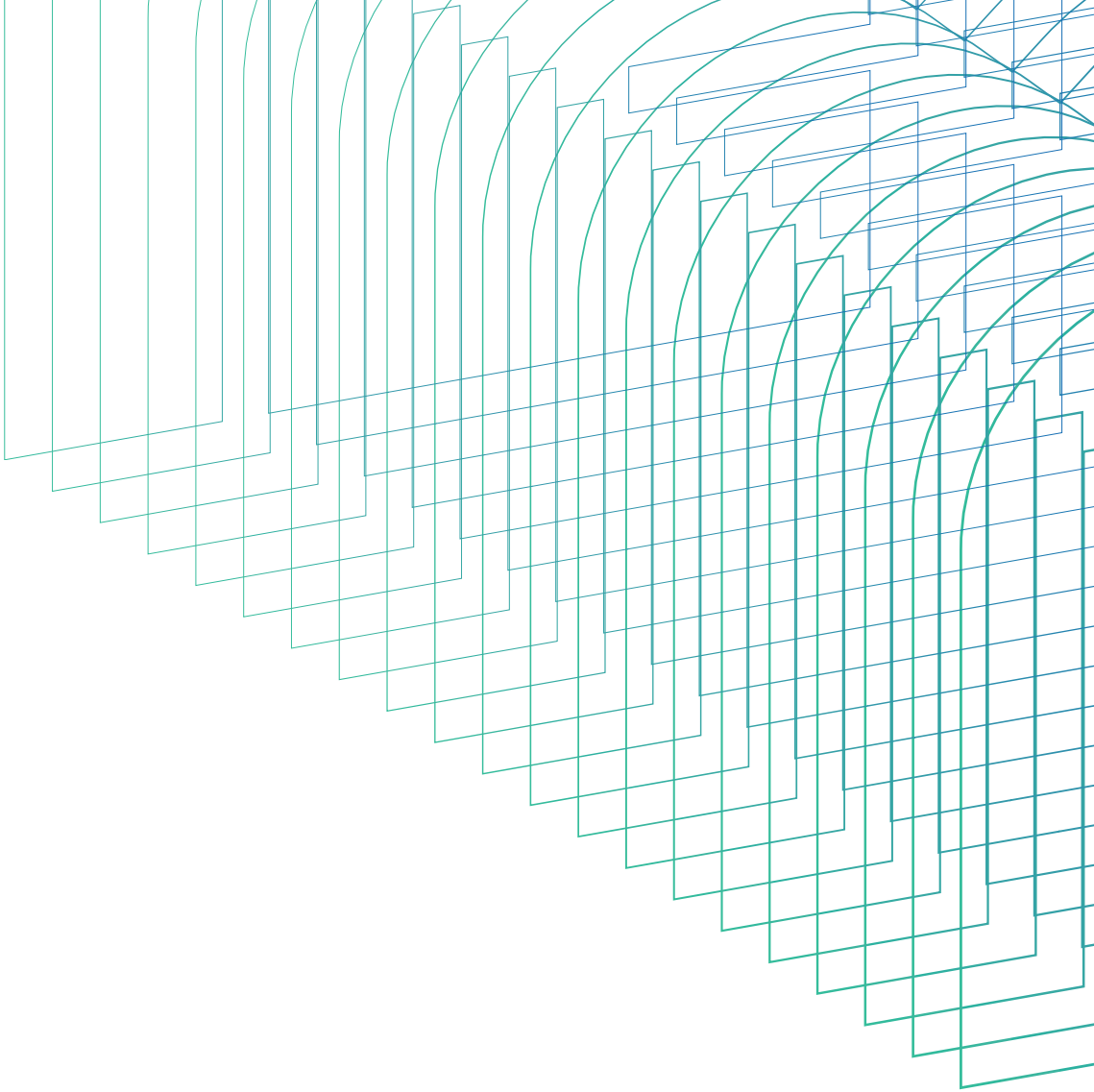


1. apart hotel
2. fashion & design center
3. therapy center
4. sports center
5. entertainment and recreation center
6. arts & crafts school
7. arts center
8. furniture refurbishing center
9. administrative building
10. Bragadiru Palace

4.


D
E
F
G
H
J
interior glazing, solid wood, 20 mm
new steel carpentry, with thermal break, exterior aluminum glazing
interior window that continues with a bench, solid wood, 36 mm
microcement floor finish, 3 mm
primed support layer, 20 mm
double rigid layer, OSB plate, 24 mm
corrugated board, 45 mm
secondary beam, steel, IPE 120 profile
plasterboard cladding, white paint finish
floor finish, cement tiles, 10 mm
leveling screed, reinforced concrete, 150 mm
waterproof protection, polyethylene film
gravel layer, 150 mm, Ø 25 mm
foundation layer
shelves acoustic insulation treatment, perforated galvanized steel with insulating layer
concrete leveling, 100 mm
existing wall, brick, 800 mm
double-leaf door, sheet steel finish
modular system of shelves and separating uprights, thin steel sheet, 20mm, mechanical fixing in concrete
microcement floor finish, 3 mm
primed support layer, 36 mm
vibration dampening layer, 20 mm
reinforced self-leveling spade, concrete, 40cm
existing concrete floor, 150 mm
U profile, steel, fastening the parapet
closing profile, steel, 200x100 mm
hand rail, flat band, steel, 40x50 mm, white paint finish
circular pipe, steel, Ø 25 mm, painted white
screw on end on the vang, steel, 6x50x50 mm
lateral vang, steel, 20x300 mm, painted white
floor finish in the access area, blackened steel striated sheet, 10 mm, on the structure of welded rectangular pipes
closed storage, lower fronts, MDF with metal plating
microcement thermal expansion joint, 3mm
step and counter-step, thick plate, steel, 10 mm, painted white
floor finish, microcement layer, 12 mm
self-levelling spade, primed support layer, 30 mm
existing concrete floor, 150 mm
0
1
2
3
4
5 m





RESIDUAL INFRASTRUCTURES AS REGENERATIVE TERRAINS: CLIMATE-ADAPTIVE AND CULTURALLY SITUATED DESIGN IN POST-COLONIAL TANZANIA

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Abstract. Begin Across sub-Saharan Africa, the transformation of colonial infrastructures presents a distinct set of challenges and opportunities that diverge from Eurocentric narratives of post-industrial redevelopment. Cities such as Iringa are shaped not by decommissioned factories, but by residual socio-productive architectures whose material logics, climatic intelligence, and symbolic weight continue to structure everyday life. These spaces are neither abandoned nor fully assimilated into the contemporary urban metabolism; rather, they occupy an intermediate condition where memory, identity, and environmental adaptation intersect in complex ways.

This contribution emerges from a fifteen-year trajectory of field-based research conducted between universities, local institutions and rural communities in southern Tanzania, integrating architectural analysis, historical mapping, ethnographic observation, and environmental interpretation. Due to the limited availability of original architectural documentation—often inaccessible or never formally archived in the Tanzanian context—the analysis does not rely on conventional planimetric reconstruction. Instead, it is grounded in long-term fieldwork, direct observation, and the interpretation of material conditions and contemporary patterns of use. Within this framework, the study examines two colonial-era infrastructures—the Iringa Boma and the Iringa Central Market—to explore how regenerative design can operate as a culturally anchored and climate-adaptive methodology in post-colonial urban contexts.

The Iringa Boma, originally conceived as a German administrative complex, has undergone a notable transformation into a museum and cultural centre. Its layered architecture—thick walls, deep verandas, and a courtyard that mediates air and light—illustrates a form of climatic responsiveness that resonates with contemporary ecological concerns. Its current role, shaped through anthropological engagement and community-driven cultural programmes, provides a compelling example of heritage as an active urban catalyst. Conversely, the Iringa Central Market remains a vibrant yet increasingly pressured infrastructural organism: dense, porous, thermally stressed, and central to the city's socio-economic life. Its morphology offers significant potential for regenerative strategies that enhance ventilation, shading, circulation, and resilience for informal economies in a warming climate. Rather than applying external templates, the paper argues for a regenerative approach grounded in ecological intelligence and local agency. The two case studies demonstrate how residual colonial infrastructures—neither obsolete nor fully requalified—can become metabolic catalysts for low-carbon, culturally meaningful urban futures.

Keywords: Iringa Boma; Regenerative Design; Post-Colonial Urbanism; Climate-Adaptive Architecture; Cultural Heritage; Field-based research

Introduction

Urban transformation in sub-Saharan Africa unfolds along trajectories that differ profoundly from the European or North American narratives most commonly associated with the regeneration of industrial ruins. In many African cities, the spaces that shape contemporary debates on reuse are not former factories or post-Fordist warehouses, but colonial infrastructures—architectures conceived for administrative control, military governance, or regulated exchange, whose material logics and spatial configurations continue to influence daily life long after the political systems that generated them have receded. These infrastructures are not neutral residues of history; they are stratified palimpsests where environmental intelligence, extractive ideologies, cultural assimilation, and community practices have interacted for decades.

Iringa, a medium-sized city perched on the edge of the Southern Highlands of Tanzania, offers a fertile terrain in which to investigate the regenerative potential of such colonial spatial devices. Its urban fabric retains the imprint of German and later British occupation: fortified compounds, wide avenues engineered for surveillance and sanitary control, market structures built to regulate flows of goods and labour, and administrative buildings that mediated between colonial power and local society. Yet these same structures—thick-walled, climatically responsive, materially robust—are also the place where contemporary forms of cultural expression, community gathering, and socio-economic life unfold. In this perspective, climate-adaptive design is not interpreted as a new layer imposed onto existing structures, but as the continued and evolving performance of architectures originally conceived with passive environmental strategies. These colonial infrastructures—through elements such as thermal mass, shaded thresholds, and natural ventilation—already embody forms of climatic intelligence that can be reactivated through contemporary uses.

This paper examines two of these infrastructures—the Iringa Boma and the Iringa Central Market—to explore how regenerative design can emerge from a deeper reading of post-colonial spatial conditions. The Boma, originally the German administrative and military headquarters, has been transformed into a cultural and educational centre, becoming a reference point for participatory heritage practices, anthropological research, and climatic reinterpretation. The Central Market, by contrast, remains a pulsating organism of urban life—dense, porous, and dynamic, but increasingly vulnerable to heat, congestion, and unregulated extensions. Its spatial potential is evident, yet its climatic and infrastructural challenges demand new approaches.

The discussion develops within a research trajectory extending over fifteen years of fieldwork, conducted between institutional collaborations, architectural surveys, community-based projects, and long-term engagements with the Catholic University of Ruaha (RUCU) and with