

Re-linked factories. Connecting industrial heritage with public awareness

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Abstract

This project presents the situation and potential of industrial heritage sites in Iași. As the city grows, parts which defined its previous peripheries become encapsulated within the urban fabric, sometimes neighbouring the city center in an even more evident manner, as the scale of the urban environment alters distances. As the plot grows valuable and enticing for urban developers, industrial heritage becomes a subject of endangered architecture, especially if the plot finds itself in an advanced state of decay. Case studies are comprised of examples dating from both pre-communist and communist times: The Cigarette factory, the “Frumoasa” Workshops, the power plant of the Public bath, the Tram Depot, the “Moldomobila” Furniture Factory, the District Heating Plant, INCERC – the National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial Development and the Heavy Equipment + Industrial Machinery Manufacturing (the “FORTUS” Factory). The aim of this research is to establish a digital platform which inventories and raises awareness on the subject of industrial heritage, with the purpose of nurturing collaboration between stakeholders, community and professionals.

Keywords: industrial, heritage, potential, awareness.

Introduction

The Industrial Revolution precipitated a profound shift in the urban fabric, with industrial edifices undergoing rapid scale and architectural style evolution. Paradoxically, the same technological advancements that propelled industrialization also caused the obsolescence of old factories, as realities change and technology evolves to new mechanisms and principles. These imposing edifices, distinguished by their grandeur, form, and spatial qualities, often languish in dereliction. In Romania, urban development pressure imperils the preservation of valuable industrial heritage, belonging either to the pre-communist era (an architecture of masonry), or the communist era, (mainly large scale concrete and steel architecture). If examples in the first category are to be found on a heritage list, the latter is yet of recent descent. After having built at a very rapid pace a consistent industrial skyline during the communist regime, today, the few impressive concrete and metal structures which survived the surging demolition wave in the wake of capitalist years might face a new phase of destruction. The explanation for their overwhelming presence in Romania was due to a process of industrialization of industry (Vais, 2014, *Modernization and Architecture in Romania 1914-2014*) - the accelerated pace of building an industry and its means was a manifestation of the new political restructuring of the country. Industrial sites occupy large areas of land, now neighboring parts of the city center, have now caught the eye of real-estate developers. Without coherent conservation and adaptive reuse strategies, irretrievable loss of these significant vestiges of our industrial past are imminent. Industrial ensembles constitute a landmark with regards to industrial culture, construction techniques and even the history of Iași. Belonging to the pre-communist are the (1) The Cigarette factory (1864/1894), (2) The "Frumoasa" Workshops (1894), (03) The power plant of the Public bath (1889) and (04) The Tram Depot (1900). From the latter industrialization period, (5) The "Moldomobila" Furniture Factory (1960), (06) The District Heating Plant (1962), (07) INCERC – the National Institute for Research and Development in Construction, Urban Planning and Sustainable Spatial

Development (1956/1966) and (08) The Heavy Equipment + Industrial Machinery Manufacturing (1976) provide a meaningful landscape.

Literature Review

The volume coordinated by N. Barbu and Al. Ungureanu, *Geografia Municipiului Iași. Evoluția teritorială* [The Geography of the Municipality of Iași. Territorial Evolution] (1987), represents a fundamental contribution to understanding the spatial development of the city. N.A. Bogdan's monograph, *Orașul Iași. Monografie istorică și socială* [The City of Iași. A Historical and Social Monograph] (1913), offers a detailed account of the city's evolution over the centuries. Going further back into understanding the urban fabric, a significant contribution to the reconstruction of the historical urban landscape is provided by D.D. Iacob through the study *The Map of the City of Iași and its Surrounding Area from 1855*, published in *Historia Urbana* (2020). E. Zaharia, in *The Economic History of Iași County during the Interwar Period* (1970), examines the economic and social mechanisms of the city during a time of profound transformation. The study highlights how commerce, small-scale industry and craftsmanship contributed to the modernization of Iași and the diversification of the urban social class. Irina Tulbure's *Arhitectură și urbanism în România anilor 1944-1960: constrângere și experiment* [Architecture and Urbanism in Romania during the years 1944 - 1960: constraint and experiment] (2016) explains the acute and invasive intervention into the urban layout in communist times as a general agenda of the political regime. But perhaps the work of Cezar Lăzărescu, *Urbanismul în România* [Urbanism in Romania] (1977) puts into perspective the scale of the vision and the endeavour of the alteration of built environment which took place in the Romanian communist urban setting.

Methodology

This research employs a multidisciplinary qualitative methodology to explore the relationship between industrial heritage and public awareness in the city of Iași. Using case study analysis of key former industrial sites, the study investigates how these spaces shaped the city's historical, architectural, and social evolution. The methodology unfolds in three main stages. First, historical and archival research reconstructs the territorial and economic development of Iași's industrial areas through maps, documents, and urban plans. This step provides essential context on the transformation of the city over time. Second, fieldwork and visual documentation involve on-site observations, photographic surveys and mapping, 3D scanning, focusing on the current state of these industrial structures and their role in the urban landscape. Local narratives highlight the human connection to these places. Third, participatory engagement activities, such as public workshops and exhibitions, aim to involve the community in reimagining and valuing this heritage. The methodology is anchored in principles of sustainability, social inclusion, aesthetic and spatial experience speculation and cultural valorization, seeking to reconnect industrial spaces with contemporary urban life. The research outcomes aim to both enhance public awareness and inform urban planning and heritage preservation strategies, while contributing to academic discourse on industrial legacy and urban regeneration. In terms of archive input, information about the first group of industrial subjects which can be regarded as the pre-communist stage of industrialisation, information is available as most of them host or used to host historical monuments. As for the second group, information is available in architecture and engineering magazines which promoted the great achievements in technology, luckily aligned with the political propaganda.



Fig. 1 The Tram Depot

The Tram Depot (Fig. 1) dates back to both communist periods. Machinery and technical equipment belonging to the pre-communist era are of substantial value, yet kept in improper conditions. The state of the sites is conditioned by their continuous usage or total abandonment, a key aspect in the preservation of such places. From this observation stems the advocacy for their continuous usage in order to maintain their viability. Temporary forms of tenancy can both give spaces for communities, while ensuring minimal care and conservation, as was the case for the Moldomobila Factory before it was sold and demolished. Sustained activities in the case of the Tram Depot, the District Heating plant, the public Bath and INCERC ensured a much better state, but implied repairs and interventions in order to maintain their usability. In the case of The Cigarette factory, the



Fig. 2 The "FORTUS" Factory

Fig. 3 The "Frumoasa" Workshops

Frumoasa Workshops and the Fortus factory (Fig. 2) their total abandonment meant that they were scavenged for parts and left in an intentional state of neglect. The legal ownership of these buildings has also impacted the degree of maintenance that they received, notably the Frumoasa factory (Fig. 3) has had the most damage as a result of private interests. Physically exploring these spaces poses risks and in some cases difficulty obtaining access permission. Photography is used both as an analytical tool and as a way of communicating to the general public the beauty and potential that lies hidden in decay. All

the gathered data will be made available on a digital platform meant to be periodically updated. The digital platform is an instrument of both raising awareness about industrial heritage to the general public and also a research instrument, meant to bring researchers, enthusiasts and community alike together into further exploring the significance of the industrial inheritance of the city of Iași.

Results

If the pre-communist group of industrial heritage subjects no longer relies on a community, the second group is still vivid in the collective memory of the people who have experienced an interesting plethora of attitudes and feelings. The communist period was an era of massive intellectual and societal regression, which nourished negative discrimination toward its buildings, despite numerous examples of high quality architecture. Initiatives of reclaiming industrial spaces are countless, mostly referring to festival and gathering places for the youth, as, even in a state of ruin and decay, industrial buildings possess the instagrammable qualities of a postapocalyptic setting. As part of the study process, 4th Year students of the Faculty of Iași were invited to envision possible conversions of the former industrial space, an exercise which led to an interesting result and understanding of how the future generations might approach the repurposing and reconceptualisation of space. Most of the students' proposal revolved around the idea of claiming spaces for their needs and juxtaposing intersectionality between different faculties. The "Frumoasa"

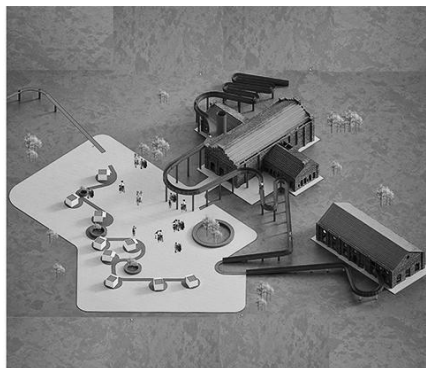
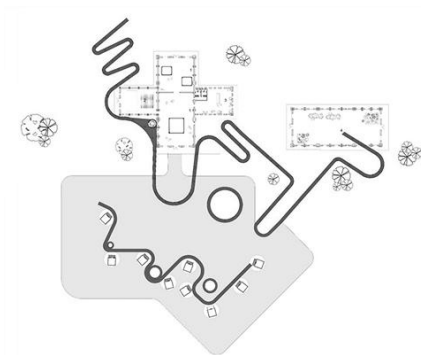


Fig. 4 The "Frumoasa" Workshops converted to a community hub in the students' vision



Fig. 5 The "FORTUS" Factory envisioned as an Arts and Architecture Center, as seen by students

Workshops could function as a much needed community hub in an ever-growing and ever-condensing neighborhood, as shown in Fig. 4. The large scale of the "FORTUS" is ideal for hosting a wide range of art, encompassing both traditional and experimental forms of manifestation, both performative and classical forms of art, as well as architecture (Fig. 5). Some proposals debated on the possibility of a music festival which could provide all the necessary amenities, otherwise usable outside the festival timeline, as is the case of the Cigarette Factory, shown in Fig. 6.

Fig. 6 The Cigarette Factory as a festival venue envisioned by students

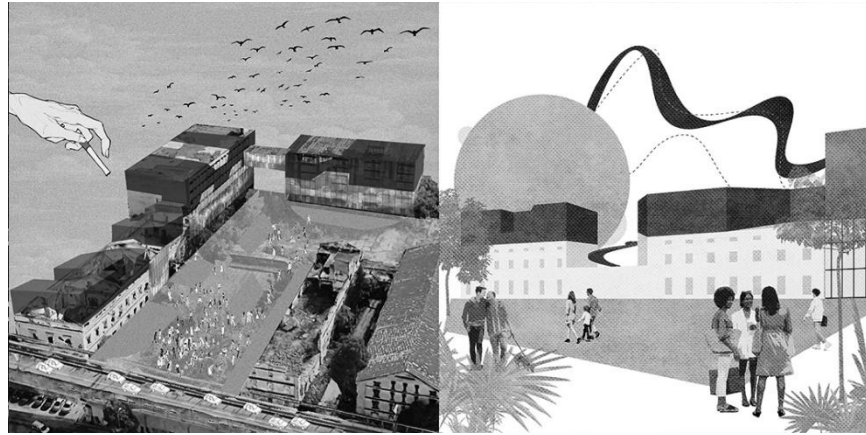
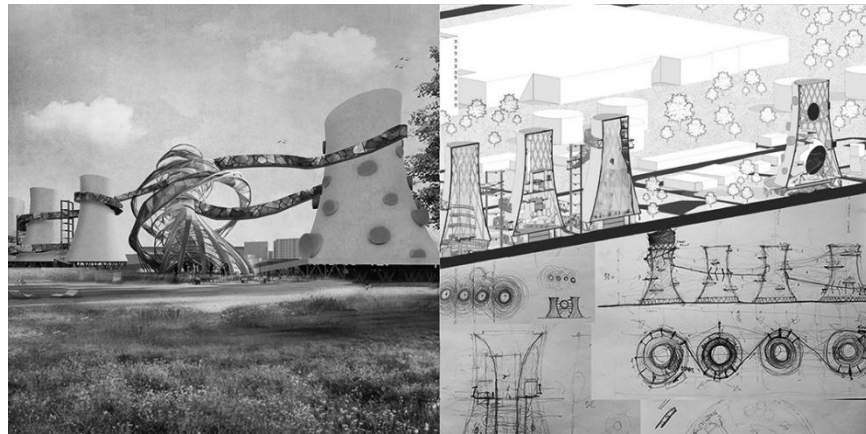
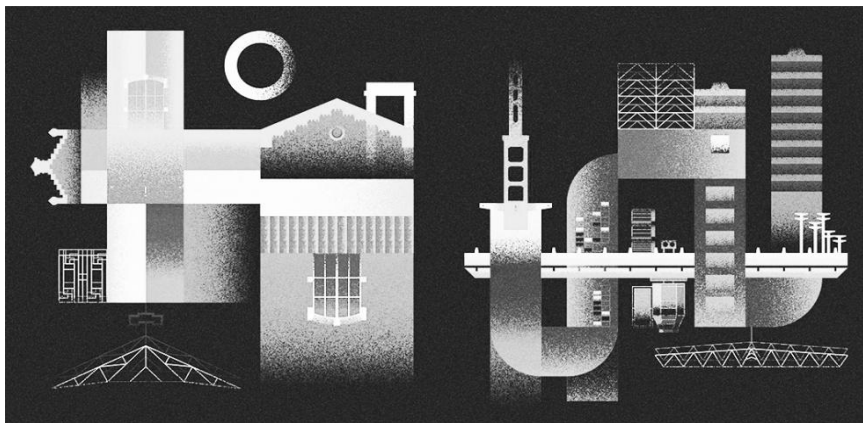


Fig. 7 The Cooling Towers of the District Heating Plant as a playground, envisioned by students



The example bearing spectacular geometry remains, perhaps, the District Heating Plant with its cooling towers which possess the spatial quality compatible with hosting experiences such as sky-diving and wall-climbing (Fig. 7). The scale, the grit, and the utilitarian aesthetic make the industrial heritage an improbable candidate for defining the image of the city, when recounting its history, while iconic plazas, palaces, cathedrals, and houses dominate the collective memory.



*Fig. 8 Author's
Illustrations of the
studied industrial sites*

The illustrations fill the gap that remains between surveys, maps, films, photographs and texts about the industrial heritage of Iași. In order to “mind the gap”, the industrial processes that once turned the raw into finished goods are reversed—the factory becomes the finished good that is being deconstructed into its primary ingredients, only to be reassembled into abstract illustrations. The sequences of architecture details, industrial machinery, structural elements and the general layout come together like parts on a conveyor belt to depict the industrial colossus. This colossi, gritty and uncelebrated, faceless, strictly functional and austere, is given a face, a kind of a presence, a gaze, a breath, making it relatable – vital character telling the story of labor, innovation, and transformation specific to industrial sites, often gritty and uncelebrated. Rendered in grainy textures and faded colors, the series of illustrations reimagines the decommissioned industrial sites (Fig. 8). By anthropomorphizing the industrial heritage of Iași, the illustrations and the study as a whole are a means of reclaiming the overlooked spaces that once shaped everyday life, by asking the viewer to meditate on the echo of labor, the rhythm of the machines now still, and the stories etched in rust and soot.

Discussion

This research intends to discover and calibrate the specific criteria for inventorying, documenting, and promoting exemplary and diverse industrial buildings in Iași. We aim to establish the formwork of a platform that can be scalable to a wider geographical level. We search for potential patterns to connect these forgotten sites to meaningful urban spaces and, most importantly, to public awareness. Existent derelict spaces are carefully linked to successful stories of reuse which demonstrate that the adaptive reuse of industrial spaces can yield numerous benefits for its community by creating much-needed spaces like cultural centers, co-working spaces, and residential units without a high energy consumption attributed to demolition.

Conclusion

The endeavor of this project, is, all in all, a study on the perception and memory of the community and how built fragments of the past might nourish contemporary significance and heal the inevitable syncopes in the urban narrative. The western world offers a wide variety of examples with regards to how recovery of industrial spaces can translate into an immersing spatial experience which can enhance modern day activities. More than that, community engagement is paramount in this endeavor to reach these unique spaces' full potential and build a sustainable manner of collaboration between all the interested parts in growing a city, with its history and visions.

References

- Barbu, N., Ungureanu, Al. (1987). *Geografia Municipiului Iași, evoluția teritorială*, Editura Universității „Alexandru Ioan Cuza”.
- Bogdan, N.A. (1913). *Orașul Iași. Monografie istorică și socială, ilustrată*, Ediția a II-a. Tehnopress.

Iacob D.D., (2020). Harta Orașului Iași și a zonei înconjurătoare din 1855, *Cartografie și Topografie Urbană*, Historia Urbana, ed. Academiei Române, XXVIII, 267–316

Lăzărescu, C. (1977). *Urbanismul în România [Urbanism in Romania]*, Editura Tehnică.

Tulbure, I., (2016). *Arhitectură și urbanism în România anilor 1944-1960: constrângere și experiment [Architecture and Urbanism in Romania during the years 1944 - 1960: constraint and experiment]*, Simetria.

Vais, D., (2014). Modernization and Architecture in Romania 1914-2014, in: Sima, M. et al. (eds.), *Site Under Construction, Catalogue of the Romanian Pavilion at the 14th International Exhibition, La Biennale di Venezia*, pp.81-84

Zaharia E., (1970) *Istoria economică a județului Iași în perioada interbelică, Cercetări istorice Muzeul de Istorie al Moldovei*, www.cimec.ro / www.palatulculturii.ro

Fabrici reconectate. Conectarea patrimoniului industrial cu conștientizarea publică

(rezumat)

Acest proiect prezintă situația și potențialul siturilor de patrimoniu industrial din Iași. Pe măsură ce orașul se extinde, zonele care defineau fostele sale periferii devin încapsulate în țesutul urban, uneori vecine cu centrul orașului într-un mod și mai evident, pe măsură ce scara mediului urban modifică percepția distanțelor. Pe măsură ce terenurile devin valoroase și atractive pentru dezvoltatorii urbani, patrimoniul industrial devine un subiect al arhitecturii amenințate, mai ales dacă situl se află într-o stare avansată de degradare. Studiile de caz includ exemple din perioadele pre-comunistă și comunistă: Fabrica de Țigarete, Atelierele „Frumoasa”, Uzina electrică a Băii Publice, Depoul de Tramvaie, Fabrica de Mobilă „Moldomobila”, Uzina de Termoficare, INCERC – Institutul Național de Cercetare-Dezvoltare pentru Construcții, Urbanism și Dezvoltare Spațială Durabilă și Fabrica de Echipamente Grele și Mașini Industriale (Fabrica „FORTUS”). Scopul acestei

Ramona Costea *et al.*

cercetări este de a crea o platformă digitală care să inventarieze și să crească gradul de conștientizare asupra patrimoniului industrial, cu scopul de a încuraja colaborarea între părțile interesate, comunitate și profesioniști.