



The diploma project in architecture is a special, long-awaited moment – the culmination of six years of studies, but it is also charged with a large spectrum of emotions due to its complexity. The process of developing the diploma project is quite demanding since it assumes working with much more independence and, in most cases for the first time, the responsibility of choosing one's own site, programme and theme. The depth expected, from decoding the context to the narrative, is also much greater. A diploma project must convincingly demonstrate the overlap of various substrata in a coherent discourse.

All the projects presented in the following subchapters proved their consistent qualities by being substantiated through research and responding to the fundamental objectives outlined in the five volumes of this series. Thus, they remain good examples even for the themes of the forthcoming volumes. Yet given the focus of this volume, the authors were asked to frame their projects by emphasizing the role played by context and its deciphering in the course of their research process. These projects, quite different in nature, showcase how decoding a context translated into the design in different manners, shaping distinctive approaches and grounding well-formed arguments.

[7] DIPLOMA RESEARCH



[7.3] FROM UNCOMFORTABLE PAST TO CULTURAL FUTURE

Alexandra MÜLLER

The conversion of industrial heritage sites has played a vital role in urban regeneration in the last decade, albeit faced with challenges like balancing historical preservation and contemporary functions. Such a challenge was also the theme of my diploma project and this paper investigates the relationship between theoretical research and architectural design by exploring how the theoretical framework of the dissertation influenced the development of the project. Using qualitative research methodology and case studies, the study sought to identify different strategies of intervention in the conversion of industrial sites with uncomfortable historical narratives, which preserve their cultural and architectural significance. The research emphasizes the importance of contextual analysis in developing sensitive and sustainable design solutions by illustrating how adaptive reuse can transform industrial sites into vibrant, inclusive and dynamic urban landscapes.

<https://doi.org/10.54508/978-606-638-401-8.10>

INTRODUCTION

The adaptive reuse of industrial heritage sites is essential for balancing preservation initiatives, sustainability and large-scale urban development. This text explores the connection between theoretical research and architectural practice by analysing how the theoretical framework of the graduation dissertation *Uncomfortable Heritage: Adaptive Reuse Strategies for Industrial Building Reconversions* (defended in April 2024 at The Faculty of Architecture of the “Ion Mincu” University of Architecture and Urban Planning, Bucharest, Romania) influenced the development of the diploma project titled *Arts and Science Park* (presented in July 2024). Both projects were developed under the guidance of Justin Baroncea. The diploma project envisioned the conversion of the former Municipal Slaughterhouse of Bucharest, located at Splaiul Unirii 162, into a lively cultural centre, thus addressing the lack of cultural institutions in the south of the city. The dissertation focused on what is defined as uncomfortable heritage, such as sites that have challenging historical narratives, and explored their unique dilemmas and opportunities. The employed methodology comprised a combination of qualitative research methods and case studies in order to help identify different strategies of intervention in the conversion of industrial sites with uncomfortable histories. The analysis focused primarily on the case of *Matadero Madrid* in Spain, a former 19th century slaughterhouse site that was converted in the late 1990s and early 2000s into a contemporary arts centre. This case study was chosen after a thorough examination of the themes it has in common with the Municipal Slaughterhouse in Bucharest.

In this text, the term *uncomfortable heritage* refers to industrial sites associated with industries that evoke discomfort due to their original or historical activities and societal implications. The unease associated with the old slaughterhouses and meat markets obviously comes from their connection to animal cruelty, to meat production and related practices that now raise ethical concerns, particularly in the context of contemporary debates on animal welfare and alternative dietary choices (Wang & Pendlebury, 2024). The conversion of such sites often involves selective remembrance, where difficult aspects of a site’s past are omitted in favour of its architectural and cultural potential. Many abattoirs are nowadays transformed into cultural hubs without acknowledging their original purpose, thus missing opportunities to engage in a discussion about their historical and ethical dimensions (Wang & Pendlebury, 2024).

Uncomfortable heritage in this context should therefore extend beyond architectural and economic value to include the ethical aspects and cultural narratives embodied by these types of buildings. Their conversion should address both the historical realities and contemporary needs, favouring a more nuanced understanding of such an intervention. The dissertation therefore aimed to critically evaluate existing adaptive reuse strategies and subsequently to propose or integrate similar architectural interventions into the diploma project.

FROM RESEARCH TO DESIGN: THE ARTS AND SCIENCE PARK

The dissertation explored the history of adaptive reuse and conversion, tracing its evolution as a practice and its implications for contemporary architectural interventions, with a primary focus on the regeneration of former abattoir sites. Another key aspect was the historical study of the Municipal Slaughterhouse in Bucharest, uncovering its origins, transformations and its current status within the current urban context. The selected in-depth case study focused on Matadero Madrid in Spain, a renowned example of industrial heritage conversion, and included a detailed examination of three different projects within this site in order to identify the specific strategies and attitudes regarding uncomfortable heritage employed by different architects within the same urban regeneration project (Arquitectura Viva, n.d.). The dissertation provided valuable data regarding the dual challenge of maintaining the historical integrity of this type of industrial structures and adapting them to contemporary needs, yet without resorting to selective remembrance or erasing the site's history. Another important aspect, besides understanding the actual architectural interventions, was understanding the way in which this type of urban regeneration can function by also analysing the history of Matadero Madrid, the cultural context, the motivation behind the project, the stakeholders involved and the economic factors. These points informed a better understanding of the complexity of cultural parks on all levels, outlining a plausible scenario for the diploma project programme.

The Arts and Science Park diploma project aimed to build on the research perspective developed in the dissertation and to integrate key concepts of the last few years including conversion, public space design, integration of green-blue infrastructure, slow mobility, inclusivity and human-centred design. It emphasized the importance of nature within the urban environment, reimagining public space as a place for recreation, play and learning while also promoting permeability and connectivity within the city. The project proposed the transformation of the former Municipal Slaughterhouse of Bucharest, alongside a section of the right bank of the river Dâmbovița, into a vibrant arts and science park by maintaining the existing spatial composition of the site and adding two main buildings that would become the Museum of Industry and Space and the Museum of Natural Sciences respectively. At the urban level, the project reimagined the river as a cultural path that links the southern part of Bucharest with the city centre and the majority of cultural institutions while also establishing itself as a major cultural hub. The concept, at its core, is fundamentally guided by the idea of designing in harmony with nature while also prioritising the user experience, advocating for a harmonious integration of industrial heritage, art, nature and contemporary urban life.

PHASE 1 – COLLECTING DATA

In the first phase of the project, a digital garden approach was used to collect and organise data relevant to the research theme. The process involved compiling information, identifying common themes and creating links or relationships

among concepts that would eventually guide the selection of the architectural programme and of the project site. The collected data were visually structured using a platform called Miro.com to facilitate a simple and easy workflow (Fig. 1).

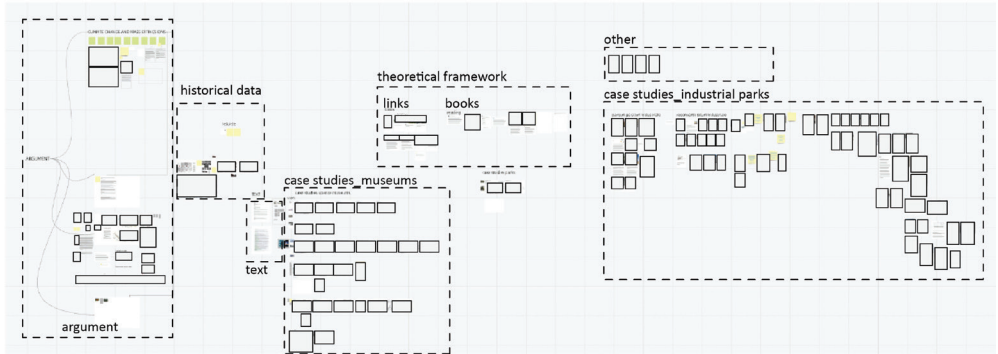


Figure 1. Schematic representation of the workflow on the Miro.com platform.
Source: the author.

PHASE 2 – CRITERIA SELECTION

After this stage, another matrix was created to filter and rank information, ensuring that the most important aspects would later be developed and incorporated into the analysis phase of the project. The selection criteria addressed aspects such as: urban scale interventions, the focus on public space, similar spatial typologies to the selected site, project impact, community involvement and economic factors.

It was important for the project to address the issue of uneven distribution of cultural facilities in Bucharest, particularly the scarcity of these types of institutions in the south of the city (Fig. 2). Thus, it was critical that the initially collected data in regard to contemporary references were closely related to the chosen site and addressed similar issues in order to assess whether what was to be proposed in the foundational study would have been a plausible scenario. In other words, it was important that the studied references shared a similar history to the Bucharest abattoir, had a similar positioning within the city, a similar programme to the envisioned concept of the diploma project, and that they demonstrated successful reintegration within the urban fabric, therefore functioning both at the zonal level and at the level of the urban system. This approach guided how the diploma project would address its relationship with the city, not only in terms of physical urban connectivity but also in relation to functional links of the selected programme. This process ensured that the proposed concept would operate effectively within the urban ecosystem, serving both as a connection and as a point of interest in its own right.

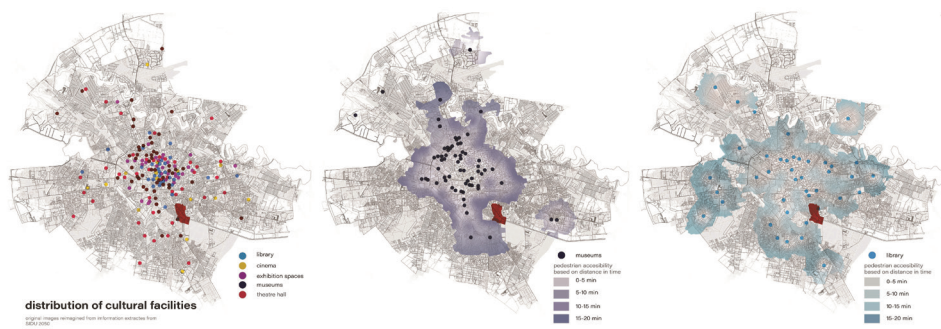


Figure 2. Diagrams representing the distribution of cultural facilities in Bucharest and the accessibility assessment of the selected site.

Source: excerpt from the diploma project, based on data extracted from Strategia Integrată de Dezvoltare Urbană (SIDU) 2021–2030 (Primăria Municipiului București, n.d.).

Public space was another criterion both in selecting references and in what was to become a crucial research point in the multi-criteria analysis of the pre-diploma project. The intended programme, namely the cultural park, usually has an inherent, close relationship with the surrounding public space, which most often acts as an extension of the built environment, sometimes even more inviting and actively used than the architectural objects. An in-depth study of public space was conducted, with a particular focus on uncomfortable heritage, in order to explore how the site's history could be preserved and integrated while transforming the exterior space into an environment that would foster cultural activities and informational exchange in a friendly and inclusive way. Understanding the historical narrative and decoding the context and logic of the site were crucial in shaping a sensitive and contextually responsive system that would subsequently inform and generate the solution at all scales of the project, from the urban scale to the details.

Similar spatial typologies were naturally studied in close connection with their hosted functions within these cultural parks in order to better understand the spatial requirements of the functions proposed in the diploma project. Additionally, the study of projects with similar spatial typologies played a key role in the analysis of the contemporary references, offering valuable insights into how these industrial halls relate to each other but also how they relate to public space. Furthermore, this approach also helped identify various interior intervention strategies, which contributed to the refinement of the conceptual system established in the multi-criteria analysis.

The assessment of the project's regeneration impact on both the immediate community and the city as a whole, accompanied by the analysis of stakeholder involvement, regulatory frameworks as well as economic factors, was essential in order to evaluate the feasibility of such a project within the local context. This also allowed sketching potential economic models and partnerships that could support the implementation of the envisioned scenario, especially in light of the local stakeholders' scepticism towards industrial heritage and heritage as a whole. This approach helped anchor the project in reality.

PHASE 3 – BUILDING THE ARGUMENT

Once these criteria were established, a mind-mapping process was used to structure and justify decision-making in the next phase of the project, the foundational study. This approach helped develop a thorough analysis of the selected site. By visually organising interconnected ideas (Fig. 3), this method helped provide a deeper understanding of the site's historical, urban and socio-cultural potential, ensuring that the proposed scenario of intervention would align with the previously identified criteria and research objectives.

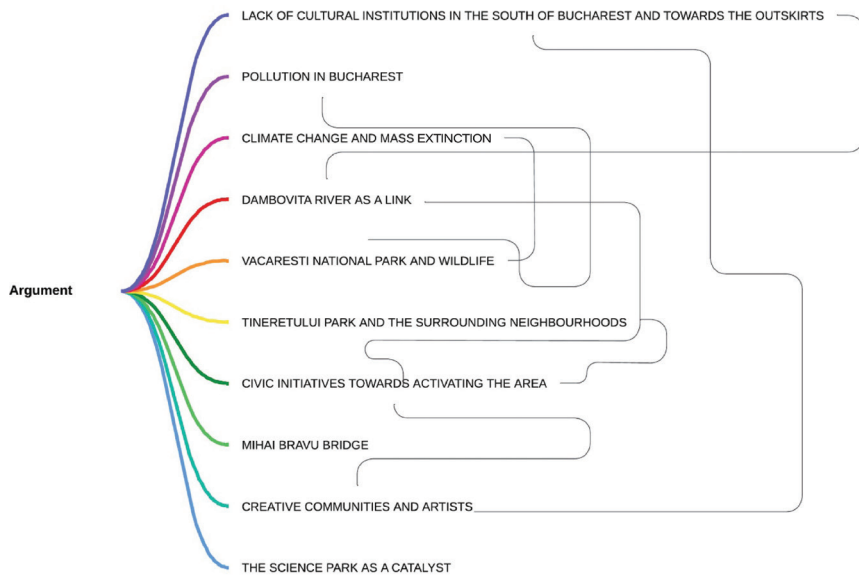


Figure 3. Mind map depicting the decision-making process in building the argument.
Source: the author.

PHASE 4 – SITE ANALYSIS

The multi-criteria analysis of the former Municipal Slaughterhouse elaborated in the pre-diploma phase followed the same principles so as to ensure a coherent project narrative. For this project, it was important to develop a unique analytical framework that took into consideration the juxtaposition of three key urban layers. These included:

_the natural layer, represented by the river Dâmbovița and the parks (Fig. 4);

_the mineral layer, meaning the industrial heritage of the former slaughterhouse and the streets, envisioned as infrastructure for cultural and social activities;

_the human layer, consisting of the residents of Bucharest, the neighbours and the creatives' communities that have already started adaptive reuse projects in this former industrial area (Fig. 5). Actors within this social layer include various local initiatives and several grassroots movements advocating for environmental protection in districts 3 and 4.

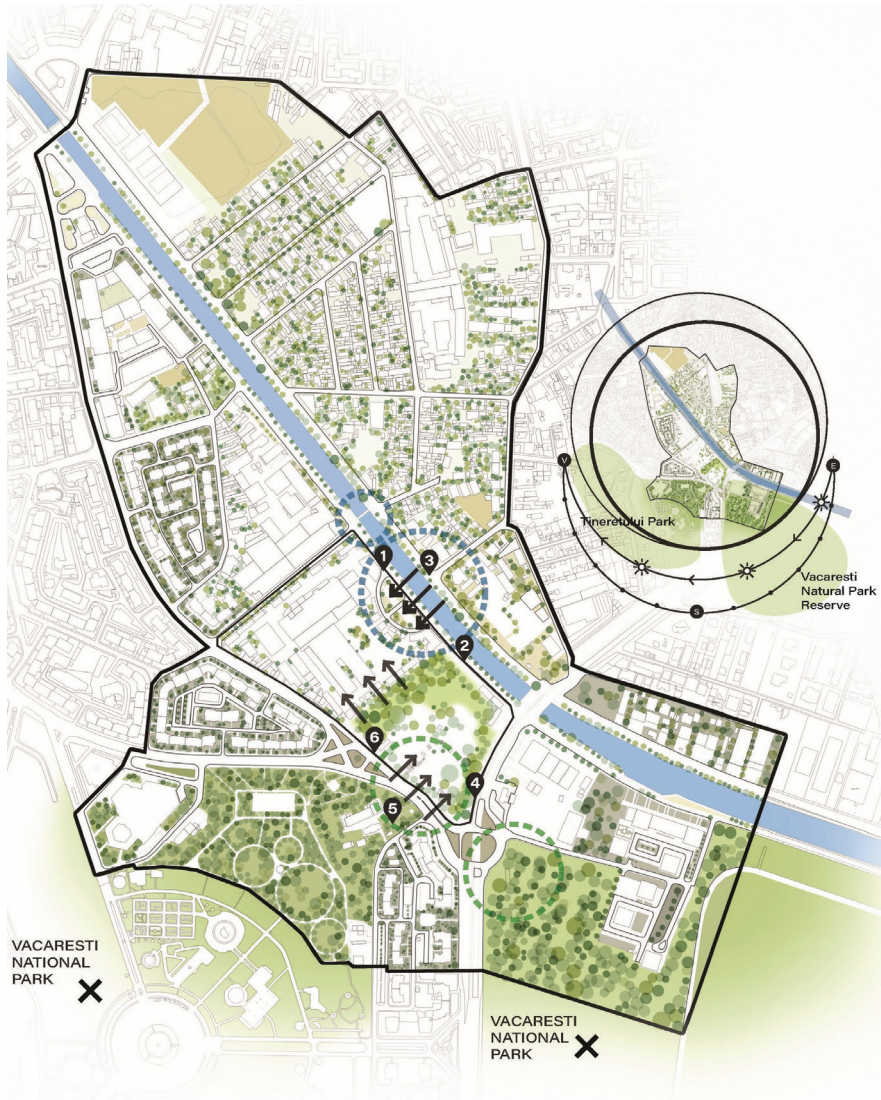


Figure 4. Diagram presenting the natural layer.
Source: the author; excerpt from the diploma project.

Successful examples of adaptive reuse within the area are demonstrated by the case of the conversion of the Industria Bumbacului [Cotton Industry] building in Nod Makerspace and the conversion of some parts of the FLAROS factory building into WASP: Working Art Space and Production, highlighting the potential of reactivating industrial sites by using cultural or creative functions.

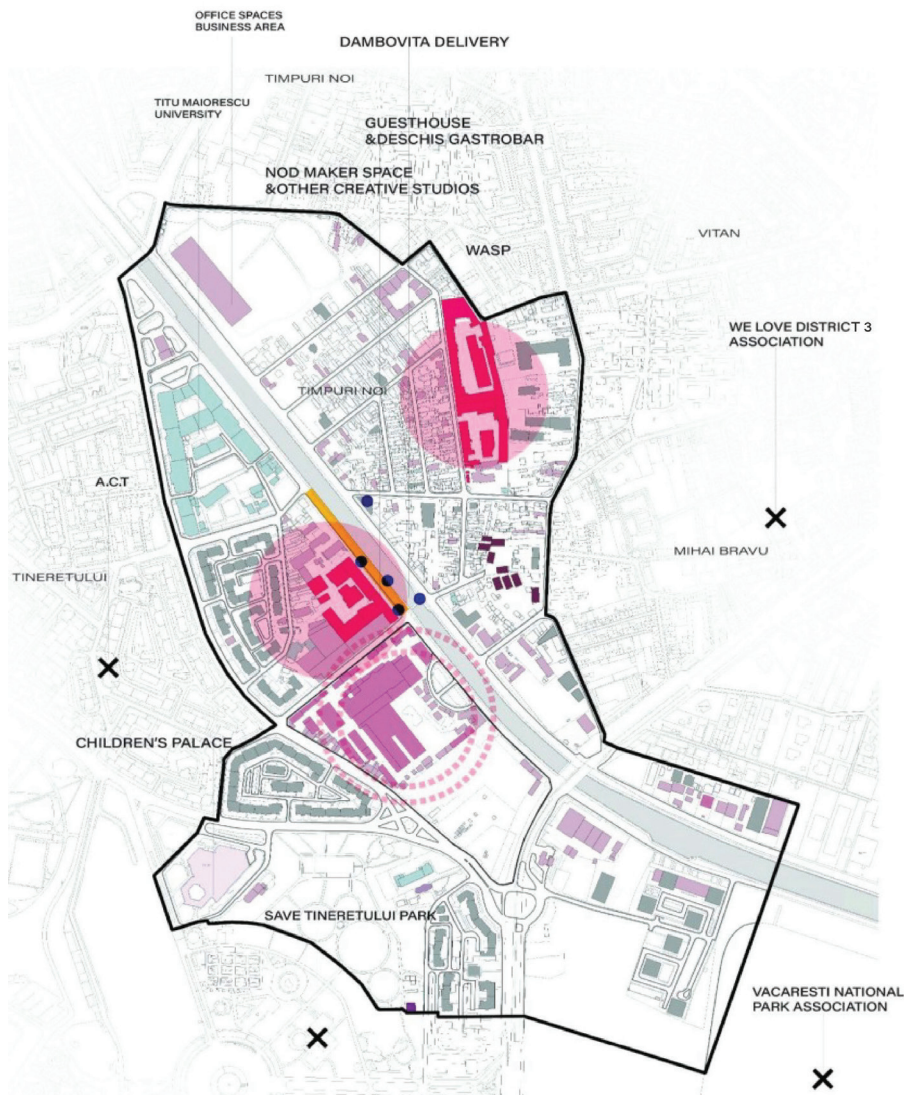


Figure 5. Diagram presenting the human layer.
Source: the author; excerpt from the diploma project.

Furthermore, initiatives such as the Dâmbovița Delivery Festival and other examples of tactical urbanism interventions underline the existing need and public desire to reclaim the promenade along the river, further reinforcing the concept's relevance within the broader urban context.

PHASE 5 – THE DISSERTATION

Once the focus points of the project were established, the methodology of the criteria matrix was further used to structure the dissertation. Its format followed the usual Master's thesis guidelines while focusing on qualitative methods and case studies analysis.

The research concentrated on several key questions. It aimed to explore factors connected to the effectiveness of different strategies, the dilemmas regarding cultural sensitivity, sustainability and economic viability while also exploring matters influencing stakeholder decision-making and public engagement. Additionally, it aimed to explore how different adaptive reuse projects vary in their approaches regarding architecture but also regarding their impacts on the surrounding communities and larger urban context. The dissertation hypothesized that these types of urban regeneration projects pose intricate challenges due to the competing interests of different stakeholders regarding preservation, urbanisation and community needs. It was expected that a combination of regulatory policies, financial aspects and public expectations would play a significant role in shaping these kinds of projects.

The case studies aimed to explore pioneering transformations of uncomfortable heritage throughout Europe, with a special focus on projects converted into

PHASE 6 – CASE STUDIES

public parks and/or cultural hubs. The assessment of contemporary references considered several aspects, including architecture and historical value, the project's impact on the surrounding urban fabric and the city as a whole, its role in enhancing public accessibility and community engagement and the spatial organisation and functionality of both the new and the old spaces. Furthermore, each project's historical and cultural significance was analysed, with a focus on the balance achieved between design strategies, such as intervention, insertion and installation (Brooker & Stone, 2019, Chapter 2). The focus on the use of circular city principles, such as the use of old industrial materials in maintaining aesthetic and formal coherence in the adaptive reuse projects, was also a selection criterion.

Based on these aspects, three main case studies were chosen for the pre-diploma analysis. Parc de la Villette (1982-83, Paris, France) by Bernard Tschumi was first selected for its revolutionary approach to the master plan and for its past as a slaughterhouse and a cattle market. Tschumi redefined park design by rejecting traditional landscapes in favour of a more dynamic habitat where nature and artificial/architectural elements can coexist. Under deconstructivist principles, the project is structured around three key elements that create a non-hierarchical system:

- _points (the follies);
- _lines (the axes and circulations);
- _surfaces (the open public spaces and green spaces).

This type of approach was reflected in the research through the drawings made in the pre-diploma analysis, which investigated the intervention logic of the diploma project.

The winning proposal of The Center for Art, Technology and Experiment – MultipleXity Competition in Timișoara, organised by the Ordinul Arhitecților din

România (Romanian Order of Architects, OAR) in 2020, was selected for its local relevance and innovative solution, providing insights into the requirements of these types of projects in Romania's post-industrial context.

The main focus of the dissertation shifted to Matadero Madrid, which closely aligned with the themes and challenges of the diploma project. Matadero Madrid and the former Municipal Slaughterhouse of Bucharest have a similar historical background, and both are strategically placed towards the historical city outskirts near major urban rivers. Both sites were developed in response to urban expansion and industrialisation that brought with it new regulatory policies regarding sanitation and they served as major centres for meat processing and distribution in their respective cities. Their strategic positioning was crucial for sanitation and waste management, adhering to a practice in planning slaughterhouses that was common in 19th century Europe (Servicio Histórico COAM, 2005).

Matadero Madrid, completed in 1923 under architect Luis Bellido González, was designed in conformity with the German abattoir model (Servicio Histórico COAM, 2005). The Municipal Slaughterhouse in Bucharest was initially designed in 1865 by engineer Alexis Godillot (Slăniceanu, 1914), after the Paris model and later modernised in the early 20th century, incorporating German industrial trends and advancements observed and brought back by a team of experts from cities like Zürich, Frankfurt and Breslau (Fig. 6).

Matadero Madrid was strategically placed near railway lines, guaranteeing efficient livestock transport – similar to the planned railway extension connecting Bucharest's slaughterhouse to major transport hubs like Obor-Filaret Stations (Slăniceanu, 1914).

Both sites evolved over time due to increasing demands and regulations, incorporating new facilities such as cattle stalls, cattle markets, storage halls and other functions. By the late 20th century, both sites ceased operations, becoming obsolete due to advances in food processing, changing regulatory guidelines and urban expansion. Matadero Madrid officially closed in the 1980s, while the Bucharest abattoir stopped operations in the 1990s following the collapse of state-controlled industries after the Romanian Revolution (Chelcea, 2008).

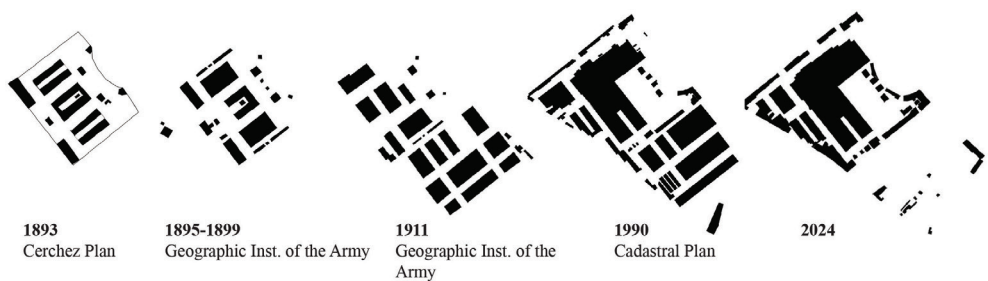


Figure 6. Evolution of the Municipal Slaughterhouse in Bucharest.
Source: the author; excerpt from the diploma project.

However, Matadero Madrid's fate changed when the site was included in Madrid's urban protection plan in 1997, which ensured its preservation, while the Bucharest abattoir remains mired in legal disputes that affect its ability to undergo large-scale redevelopment. In Bucharest, the old buildings were repurposed and leased to private companies and they underwent significant modifications including demolitions, interior partitioning, changes at the level of the facade and adaptations for diverse commercial uses such as auto repair shops, workshops, storage facilities, restaurants and other businesses (Chelcea, 2008).

The conversion of Matadero Madrid site into an extraordinary cultural institution provided a strong example for the diploma concept proposal. The integration of Matadero Madrid into the Madrid Río urban renewal master plan project, extending the city's cultural axis and green corridors to the Manzanares River, parallels the vision for the Bucharest site, which seeks to reimagine the river Dâmbovița as the main cultural and ecological corridor of the city.

What is interesting about the site of Matadero Madrid is that the project for its regeneration did not follow an integral master plan. Despite maintaining a consistent vision for the project, the site evolved in multiple stages, with each former hall being treated as an individual effort through public competitions organised by the municipality. This fragmented approach has led to diverse architectural interpretations of the site's uncomfortable legacy, providing an interesting perspective on how these independently developed projects ultimately form a cohesive whole, despite being developed by different teams. Within the Matadero Madrid site, three projects were chosen for further analysis: *Intermediae* by Arturo Franco, *Nave 16* by Vila and Virseda Architects, and *Casa del Lector* by Ensemble Studio.

PHASE 7 – MATADERO MADRID: IN-DEPTH ANALYSIS

The next phase of the research used Matadero Madrid as an in-depth case study; the three interventions mentioned before were considered instrumental and were individually evaluated on the basis of predetermined criteria. Subsequently, a comparative analysis was conducted to identify common themes and differences, assessing their sensitivity, effectiveness, sustainability and long-term success.

In this phase, the analysis was guided by the principles identified by Brooker & Stone (2019) in their work *Re-readings 2: Interior Architecture and the Design Principles of Remodelling Existing Buildings*. The authors categorise adaptive reuse interventions into three main types:

- _intervention – major modifications that significantly alter the existing spatial structure;
- _insertion – the introduction of new architectural elements into the existing structure;
- _installation – reversible or temporary modifications, ensuring adaptability and flexibility.

It was important to understand the different types of interventions on this kind of architectural heritage because the diploma project aimed to approach the site as sensitively as possible without erasing its history and sanitising the narrative. This categorisation helped in identifying best practice projects and understanding the context in which these specific approaches are appropriate as well as the advantages and disadvantages of choosing one of them. Thus, the differentiation of the types of relationships with the existing built fabric generated the solution not only for the interior of existing architectural objects but also for the way in which the proposed new objects related to the site, to public space and to the existing buildings in the established working system.

A new set of criteria was developed to ensure a thorough and structured evaluation of the selected projects would be possible at the level of intervention on the existing architectural objects. These criteria would be: type of strategy, types of movement in space, type of structure, materiality, the treatment of the openings and lighting. This criteria matrix was developed first to allow for a detailed individual analysis of the case study and ultimately to serve as a common framework for discussions that would constitute the basis of the comparative analysis.

Intermediae, designed by Arturo Franco in 2007, emphasizes non-intervention and reversibility, facilitating an ongoing dialogue between the old and the contemporary layers. This attitude was influenced also by budgetary constraints and the project's expected temporary nature, with dismantling planned within two years. Warehouse 17 was the first transformed space within the complex and served as a pilot project. The linear typology of the hall dictated the type of intervention; using a hybrid approach of insertion and installation, the project seamlessly integrated with the existing structure while ensuring reversibility for the majority of the new elements. Arturo Franco (n.d.) stated about the project: "The point was to contribute with a new attitude in face of the public realm of historical patrimony, a radical posture, an experience about limits, the limits of non-intervention, reducing such intervention to a bare minimum". The project proved to be a success and became a permanent part of Matadero, emerging as a major cultural venue that offers programmes focused on ecology, children and civic participation through local community projects and international collaborations. *Intermediae* was one of the projects that most influenced the diploma project's attitude towards existing buildings. This attention to the relationship between the old and the new so that they mutually enhance each other became a main principle of my project. It reinforced the decision of incorporating new industrial elements into the site, contrasting the existing structures while simultaneously preserving the memory and character of the place. Furthermore, the idea of non-intervention and no limits was implemented in some of the park areas to encourage community participation. The idea of no limits was also reflected in the character of the park, as proposed in the diploma, by removing its physical boundaries and ensuring permeability and connectivity both between the buildings on the site and with neighbouring points of interest.

The next project selected was *Nave 16* designed by Vila and Virseda Architects (ArchDaily 2011; COAM, 2017). The winning project of the 2007 open call initiated by the Madrid City Council aimed to transform the hall into a flexible multifunctional space for a multitude of cultural activities like exhibitions, events

and performances. To enable adaptability, a mobile system allows the hall to function either as a single closed space, an open space or as multiple smaller units. The design strategy clearly focused on insertion, integrating two flexible volumes within the central space of the existing halls. The dimensions of the revolving panels were carefully designed to respect the proportions of the opening of the existing masonry structure. The roof trusses rest on the original masonry walls, ensuring reversibility through its structural logic. Additionally, the idea of reusing former structural elements to shape up new spaces was integrated, highlighting the sustainable approach of the project. *Nave 16* also served as inspiration for the diploma project through its design approach that relates to the dimensions and composition logic of the existing buildings on the site.

The last case study was *Casa del Lector* by Ensamble Studio (2015). Ensamble Studio won the 2006 competition to restore four of the former slaughterhouse pavilions and transform them into an educational programme. The project used a major alteration strategy, introducing two interconnected levels. The upper level, formed by 40-tonne precast beams inserted through the existing openings, bridges previously separated warehouses. The lower level follows this new, imposed structural rhythm, basically inverting the existing logic of the space. Unlike the previously discussed reversible concepts, this intervention is permanent, altering the spatial and functional dynamics of the halls. It is also potentially contentious as a contemporary approach to uncomfortable heritage since it sanitises the space by erasing its history, distancing itself from the former identity of the site as a slaughterhouse, presumably under the influence of its child- and youth-friendly programme but also of a more complex architectural programme, with additional requirements in terms of thermal control. *Casa del Lector* has served more as a negative example despite its successful functional approach and its architectural quality because it neglected the aspects enhanced by the other two projects, such as reversibility, adaptability and non-intervention. Instead, it proposed a permanent architectural intervention that significantly altered and contradicted the functional logic and spatial typology of the old slaughterhouse.

Despite their differences, the three projects share common themes including a commitment to industrial aesthetics, reflected in the use of materials like steel, glass and concrete, and an emphasis on flexibility. Their long-term success is clear from ongoing community engagement, the financial viability achieved through public-private partnerships and their permanent role within Matadero Madrid. The forward-thinking approach and design sensitivity displayed will ensure that they continue to serve as remarkable examples of adaptive reuse.

The analysis confirmed what had been hypothesised in the project's initial phase. However, the investigation was limited to a single case study with three interventions, which points to the need for further research into diverse contexts with different regulatory frameworks. Expanding the study would provide a broader perspective on best practices and strategies for preserving uncomfortable heritage.

OVERVIEW OF THE DIPLOMA PROJECT

The structured research approach, which included comparative case studies, multi-criteria analysis as well as the recurring themes identified in the dissertation, directly informed the diploma project.

One major theme was the emphasis on contextual sensitivity. The study highlighted the significance of thorough contextual analysis in developing the design strategy (Fig. 7). Matadero Madrid served as a key reference, demonstrating that industrial sites can be converted into vibrant cultural hubs while preserving their historical essence. This directly influenced the decision to retain the Municipal Slaughterhouse's spatial and logistical composition and industrial aesthetics while incorporating new cultural, educational and public functions. The studied design typologies – installation, insertion, intervention – provided a structured framework for integrating new elements into the site without compromising its industrial character, with the majority of the interventions being installations and insertions.

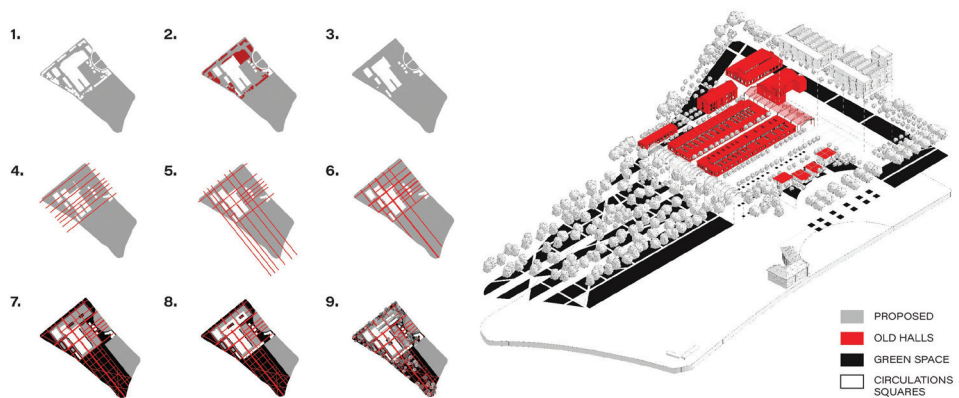


Figure 7. Conceptual diagram depicting each step taken in developing the solution. Steps: 1. Removal of the wall 2. Identification of parasitic structures and 3. Their removal 4. Connections to main arteries 5. Perpendicular connections 6. Building connections hierarchy 7. Introduction of the green layer 8. Introduction of the new proposed buildings 9. Introduction of the tall vegetation buffers.

Source: the author; excerpt from the diploma project.

The proposed new buildings, the Museum of Industry and Space and the Museum of Natural Sciences, can be considered interventions, but at the level of the master plan they can be considered insertions since they respect the composition rules of the existing plan. The facades of these buildings are clad in frameless laminated glass to minimise the appearance of the buildings on the site and to give them a spectral aspect.

Another main goal of the research was to explore the reintegration of industrial heritage into the urban landscape. The proposal positions itself as part of a larger

green-blue corridor and cultural pathway along the river Dâmbovița, connecting the city centre with significant green urban nodes such as Tineretului Park and Văcărești Park. This idea builds on the findings of the case study that underline cultural enrichment, ecological connectivity and slow mobility strategies in urban regeneration interventions.

The findings also highlight the importance of landscape integration into everyday life. The proposal aims to maximise the potential of the site's spontaneous vegetation, harnessing its ecological value while transforming the site into an accessible urban environment (Fig. 8). Inspired by the best practices observed in the analysis, the concept integrates into public space features such as community greenhouses, permeable pathways, shaded pergolas with vine-type vegetation and thematic gardens and squares in order to create a sustainable microclimate that supports both biodiversity and human comfort.



Figure 8. Site plan that underlines the idea of landscape integration.

Source: the author; excerpt from the diploma project.

The proposal addresses the challenges of preserving uncomfortable heritage by maintaining the slaughterhouse's spatial memory through carefully designed circulation routes, structural rhythms and the mindful repurposing of the existing halls (Fig. 9). The former industrial halls are reimagined through new cultural and educational lenses, ensuring that the site's complex history remains visible and accessible to the public.

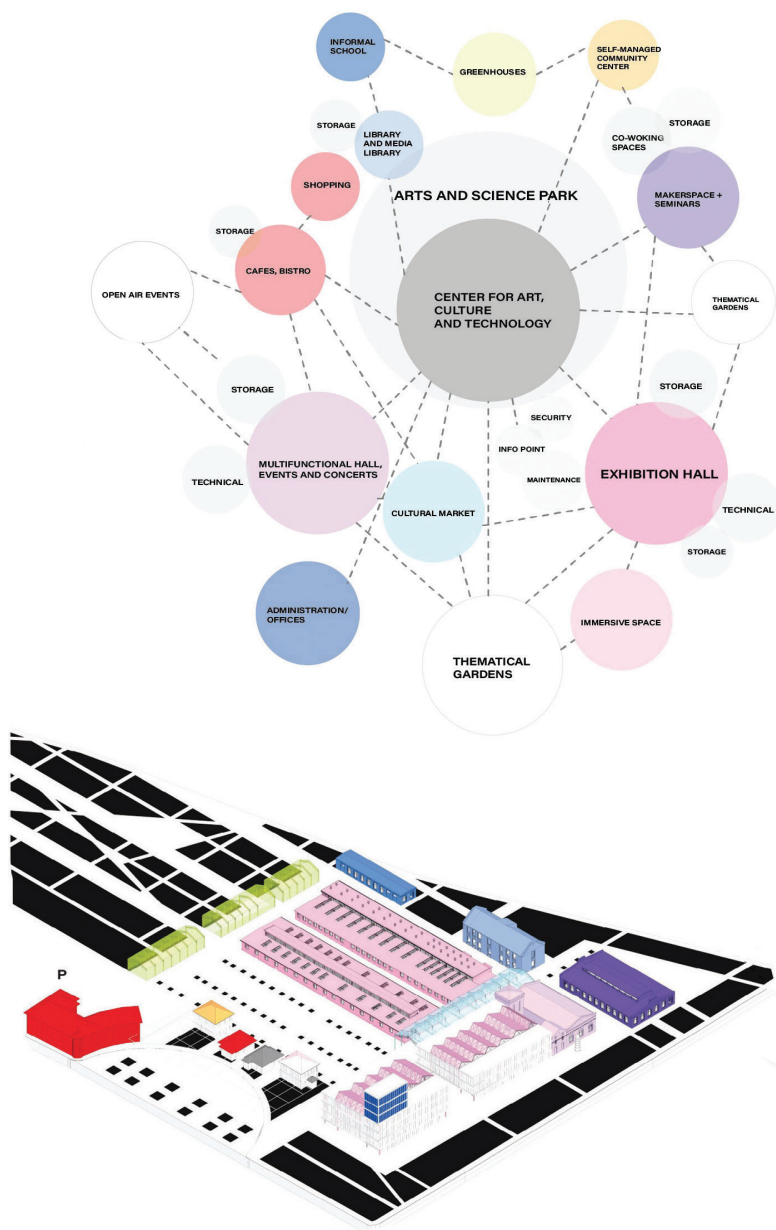


Figure 9. Functional diagram.

Source: the author; excerpt from the diploma project.

Finally, the research underlines that community involvement is needed for the success of such initiatives. This principle has been integrated into the proposal through carefully selected programmatic changes, including the establishment of an informal learning centre, co-working spaces, a mediatheque, a makerspace, a community centre and community greenhouses towards the park. Events like Dâmbovița Delivery Festival and existing civic initiatives from the area provided precedents for shaping the site's programme, ensuring it could evolve into a participatory space rather than a static architectural one.

CONCLUSION

Ultimately, the Arts and Science Park project reimagines a space where the natural environment, industrial heritage, art, science and community intersect, creating a dynamic and inclusive urban landscape for both human and non-human actors (Fig. 10). The project emerges at the crossroads of: the natural layer – the parks and the river; the mineral layer – the industrial heritage and the streets; the social layer – the residents and creative communities. By focusing on nature, permeability, connectivity and social inclusion, the project aimed to strengthen the area's identity while providing public space for learning, recreation and cultural and informational exchange.

The diploma project represents a continuation of the theoretical research, illustrating how a conceptual framework can inform site-specific solutions. It ultimately argues that industrial heritage should not be treated as a static monument but as a dynamic entity with an evolving cultural and historical background.

The study encourages a reflective and forward-thinking approach to urban regeneration. The project's core principle – with nature, for nature and for the user (Batlleiroig, 2023) – encapsulates this attitude, therefore underlining the need for sustainable and inclusive design strategies. The journey from research to concept proposal sought to demonstrate that industrial conversions, when approached with sensitivity and vision, have the potential to become powerful catalysts for urban regeneration, fostering a more connected, resilient and culturally enriched inclusive city.



Figure 10. Main longitudinal section and a rendering depicting the new main axis of composition with the Cultural Market as the end point.

Source: the author; excerpt from the diploma project.

REFERENCES

- ArchDaily. (2011, August 31). *Nave 16 Matadero Madrid / ICA Arquitectura*. <https://www.archdaily.cl/cl/02-105564/nave-16-matadero-madrid-ica-arquitectura>
- Franco, A. (n.d.). *Intermediae Matadero Madrid*. Archello. Retrieved February 16, 2025, from <https://archello.com/project/intermediae-matadero-madrid>
- Arquitectura Viva. (n.d.). *Centro de Creación Matadero*. Retrieved February 26, 2025, from <https://arquitecturaviva.com/obras/centro-de-creacion-matadero>
- Batlleiroig. (2023). *Merging City & Nature: 10 commitments to combat climate change*. Actar.
- Brooker, G., & Stone, S. (2019). *Re-readings 2: Interior architecture and the design principles of remodelling existing buildings*. Routledge.
- Chelcea, L. (2008). *Bucureștiul post-industrial: Memorie, deindustrializare, și regenerare urbană*. Polirom.
- COAM. (2017). *Nave 16 Matadero. Premio COAM 2012* [PDF]. Retrieved February 15, 2025, from <https://www.coam.org/media/Default%20Files/actualidad/agenda/docs/2017/170609-Nave16-desplegable.pdf>
- Ensamble Studio. (2015, March 20). *Ensamble Studio Casa del Lector*. Divisare. <https://divisare.com/projects/284866-ensamble-studio-roland-halbe-casa-del-lector>
- Primăria Municipiului București. (n.d.). *Strategia Integrată de Dezvoltare Urbană (SIDU) 2021–2030*. Ești București. <https://estibucuresti.pmb.ro/sidu>
- Servicio Histórico COAM. (2005). *Memoria Histórica para el Proyecto de Rehabilitación del antiguo Matadero Municipal de Madrid, el sector meridional* [PDF]. <https://patrimonioypaisaje.madrid.es/FWPProjects/monumenta/contenidos/Monografias/ficheros/Matadero.%20Memoria%20Hist%C3%B3rica.pdf>
- Slăniceanu, N. (1914). *Description du nouvel abattoir de Bucarest: Construction, agencement et exploitation*. Imprimerie de la Cour Royale, F. Göbl Fils.
- Wang, Y., & Pendlebury, J. (2024, July 26). 'Uncomfortable heritage': How cities are repurposing former slaughterhouses. The Conversation. <https://theconversation.com/uncomfortable-heritage-how-cities-are-repurposing-former-slaughterhouses-195688>