



**Magdalena Żmudzińska-Nowak\*, Assunta Pelliccio\*\***

## ***Lazio Region Paper Mills vs. Upper Silesia Brownfields: Industrial heritage as a subject of research, projects and international exchange of experience***

### ***Abstract***

The subject of the research is the sites of former paper mills in the Liri river valley in the Lazio region, which represent a valuable cultural heritage in need of preservation and design intervention, as well as activation involving the authorities, institutions and local communities.

The main objective of the inter-university international collaboration, which started back in 2014, is research and didactic design activities based on the exchange of experiences and good practices that we have developed in the Upper Silesia region when revitalising post-industrial sites. The method combines research and design/conceptual work (research by design). The proposed conceptual designs play the role of hypotheses, which are verified at each stage through consultations and discussions with partners, including experts, decision-makers, facility managers and owners and the local resident community.

The results of the project, in the form of more than 300 design concepts produced over 10 years with the participation of students from both universities, formed the basis for a public debate on the industrial heritage of the Lazio region. The projects showed that despite the conditions common to post-industrial sites, specific conditions play a key role in the revitalisation process, constituting the distinctiveness of individual examples and their contexts. It is precisely this specificity that is crucial for the proper guidance of the site adaptation process and the success of these activities.

**Key words:** industrial heritage, revitalisation, Lazio, Upper Silesia

### ***Introduction***

The collaboration between the Department of Architecture of the Silesian University of Technology and the University of Cassino and Southern Lazio dates back to 2014 and encompasses various activities, including research, teaching and popularisation. It is worth noting that this year we are celebrating the tenth anniversary while the collaboration continues to develop.

The genesis was our common fascination with industrial heritage. The projects focus on areas and objects of industrial heritage, which are very numerous in both regions, i.e., Upper Silesia and Lazio. Just as in the case of

Upper Silesia, where the presence of industry has contributed to the visual identity of the region since the 19<sup>th</sup> century, in Lazio the presence of industry is not exposed and the industrial heritage has been forgotten.

The rich experience of Upper Silesia in adapting and revitalising the heritage of post-industrial areas and sites, and iconic examples such as the “Axis of Culture” at the former coal mine in Katowice and the historic silver mine in Tarnowskie Góry – a UNESCO World Heritage Site – proved extremely attractive to the Italian partners. The research and design competence and experience in the revitalisation of post-industrial areas and the sites that the Silesian University of Technology represents, as well as the personal involvement of its employees in numerous industrial heritage activities, meant that initial discussions with representatives of the University of Cassino and Southern Lazio quickly turned into a long-term and fruitful venture.

This article describes the joint activities, focussing on the method that links the various projects carried out over

\* ORCID: 0000-0002-9323-0272. Faculty of Architecture of the Silesian University of Technology, Poland, e-mail: magdalena.zmudzinska-nowak@polsl.pl

\*\* ORCID: 0000-0002-0365-6094. Department of Literature and Philosophy (DLF), University of Cassino and Southern Lazio, Italy.

ten years. At the outset, we provide background on the research area of Southern Lazio and its industrial heritage and, as a point of reference, selected post-industrial sites of Upper Silesia.

The collaborative research process followed the model adopted by the authors, which will be described in detail later in the text. It consisted of several stages: general research, comparative analysis, preliminary recommendations, detailed research and case studies, detailed recommendations and proposals for functional and spatial solutions and the presentation and discussion of the results.

### *Industrial heritage as a subject of research*

Although the subject of industrial heritage research does not have a very long history, the state of research in this area is extremely extensive. It includes surveys, resource inventories, documentation, a review of preservation approaches and references for adaptation and modernisation, as well as assessments of potential opportunities and threats arising from the revitalisation process. The substance of post-industrial sites varies in terms of type of industry, time of construction or state of preservation.

Crucial to the state of knowledge of industrial heritage on a global scale are the research papers and annual National Reports published by the International Committee for the Conservation of Industrial Heritage (TICCIH). They provide data on the state of efforts to protect and promote post-industrial sites in dozens of countries around the world.

Another group of publications are studies that shaped the approach to industrial heritage in their time and which today constitute the literary canon in this field. These include fundamental writings on the issue – such as Binney (1984) and Eley and Worthington (1984) – guides to the conservation of industrial heritage, reviews of procedures and theoretical assumptions (Douet 2012). In turn, the aspect of identity preservation in the face of transforming post-industrial areas is extensively discussed by Wicke et al. (2018).

Also, publications that provide an overview of the achievements of the industrial heritage approach in individual countries and regions are very relevant to the state of research. A synthetic summary of the achievements of the UK's leading industrial heritage preservation efforts can be found in a study by Keith Falconer (2006). The book by Bart Zwegers (2022) offers a multifaceted synthesis of the transformations of industrial heritage with a focus on Germany and the UK. Likewise, more than 30 years of Italy's experience is described in a publication by Massimo Preite and Gabriella Maciocco (2022), among others. On the other hand, the Polish experience, the state of research and the perspectives and research needs have been extensively analysed by Monika Murzyn-Kupisz, Dominika Hołuj and Jarosław Działek (2022).

### *Characteristics of the study area in terms of industrial heritage: Lazio versus Upper Silesia*

Southern Lazio is a region with a significant hydrographic basin, which – combined with the innovativeness and hard work of the local population – led to the flourishing of

industrial activity between the 19<sup>th</sup> century and the 2<sup>nd</sup> half of the 20<sup>th</sup> century (Arcese et al. 2014). The Liri, Gari, Fibreno and Sacco rivers and their various tributaries played a significant role in the industrialisation of the region, transforming it from a rural area into one of the most industrialised centres in the country. Paper mills, textile factories and various other industrial facilities, powered by hydraulic mills, sprang up mainly along the river routes of the Liri Valley, using water as a source of energy. The water of the Liri Valley rivers is characterised by low temperatures and properties that prevent the growth of microorganisms, thus ensuring very high-quality end products. This important industrial district of the valley transformed rural towns into proto-industrial “factory towns” (Pelliccio 2020).

Traditional rural houses were also used for industrial activities, such as weaving, and even castles or noble palaces were often transformed and expanded to accommodate industrial activities, e.g., the Boncompagni Viscogliosi Castle in Isola del Liri (Jadecola 2019). The cultural landscape changed, with small mediaeval historic villages being transformed into factory towns. Within a few decades, 15 large wool spinning mills were built in the valley, such as in Polsinelli, Zino, Ciccodicola and Manna, as well as many other medium and small ones, more or less mechanised. Numerous paper mills – Bartolomucci in Picinisco, Visocchi brothers in Atina, Lanni brothers in Sant’Elia, Courier, Servillo, and Mazzetti in Isola and Pelagalli paper mills in Arpino and Ceprano (Monti et al. 2020) – employed hundreds of workers, such as Count Lefrèbre’s paper mill in Isola del Liri, which managed to provide employment for more than 500 workers. Emilio Boimond’s paper mill, located on the banks of the Liri River in Valdurso, is one of the few mills that has preserved antique machinery, including the so-called endless machine introduced in the industrial triangle of Arpino, Sora and Isola for the production of large sheets of paper (Dell’Orefice 1984; Mancini 2016).

Most of these factories could not withstand the devastation caused by World War II and the market demand for technological innovation. They gradually ceased operations until eventually closing. Today, most of them, many of which are still privately owned, are completely abandoned. For example, in the small village of Isola del Liri, once highly industrialised, four large paper mills and three felt factories are housed on an area of just 0.06 km<sup>2</sup>, all of which are now abandoned, except for one that has been converted into a multipurpose building (APAT 2006) (Fig. 1).

Thus, the industrial identity of the region has been almost completely obliterated. While the remaining unused facilities still hold significant cultural and architectural value, they have not been the subject of wider interest to date.

Upper Silesia is one of Europe’s largest regions of heavy industry; it developed strongly starting in the 19<sup>th</sup> century’s great industrialisation. After World War II, the Upper Silesian Industrial District (GOP) formed the largest mining and metallurgical operations area in Poland and one of the largest in Europe. More than 50 coal mines, 43 of them in urban areas, operated on the basis of complexes of historical facilities that were constantly modernised and

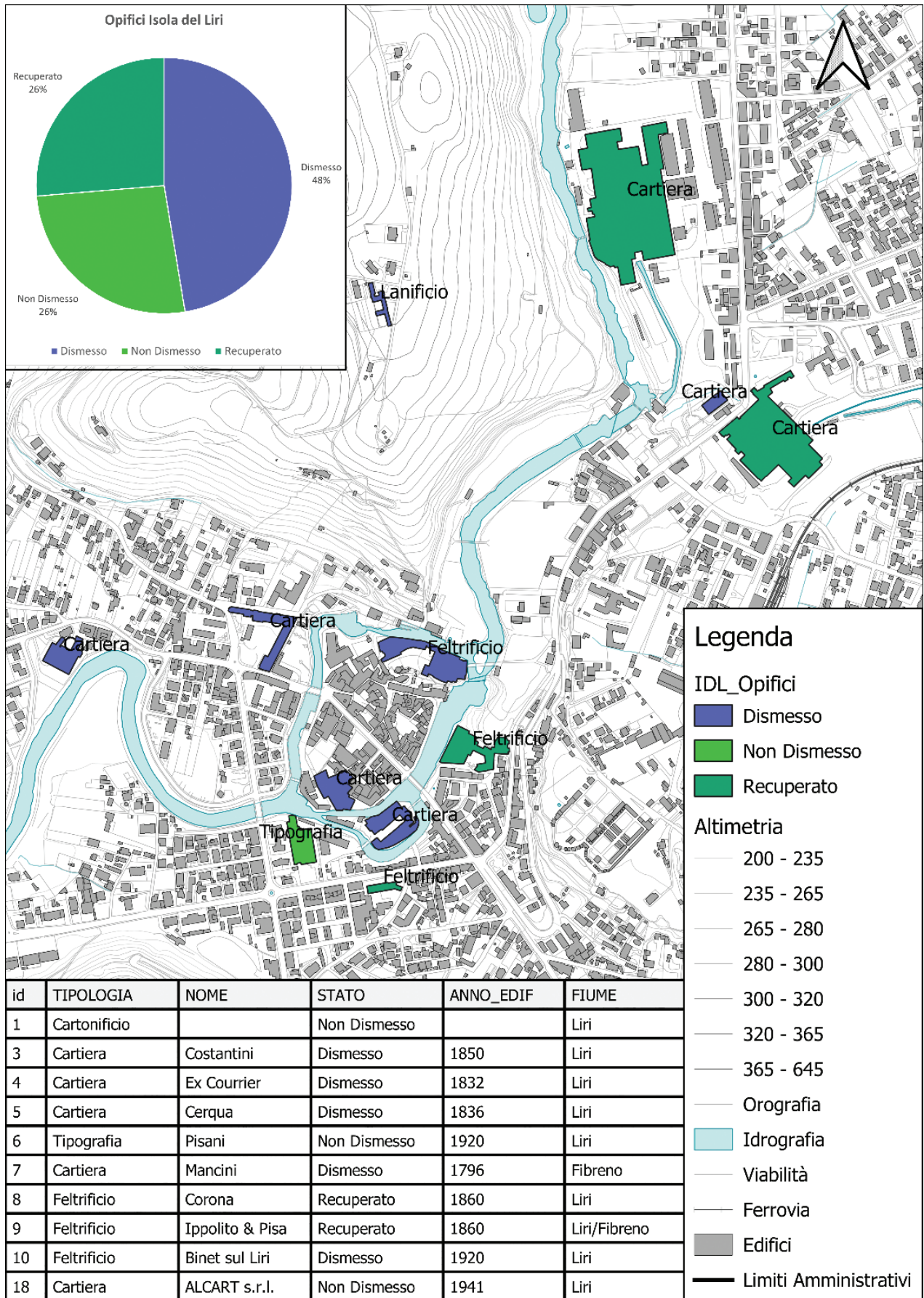


Fig. 1. Isola del Liri paper mills' contemporary condition – GIS (Geographic Information System) representation (Pelliccio 2020, 142)

II. 1. Aktualny stan zachowania papierni w Isola del Liri – według danych GIS (Geographic Information System) (Pelliccio 2020, 142)

expanded. Similarly, the metallurgical industry comprised 25 steel mills, dozens of manufacturing plants, power plants and rail transportation centres (Jędrzyśiak 2011).

Poland's period of transition in the 1990s resulted in a significant liquidation of heavy industry, which in Upper Silesia resulted in a huge number of unused plants and post-industrial areas. They posed a significant problem, and those located in urban centres were especially subject to arbitrary demolition. This process was slowed down to some extent when the value of the facilities, their adaptation potential and the fact that they represent the essence of the uniqueness of the region began to be noticed.

Some sites were adapted for new functions, although the choice of functions was not always successful, degrading the modernised structures to varying degrees. Such examples are the "Silesia City Center" in the area of the former Gottwald Mine in Katowice or the Platan shopping centre on the site of the Donnersmarck Steelworks in Zabrze, which cannot be counted as successful in terms of the principles of conservation protection, as most of the historic substance was removed.

Among the good examples of adaptation and use of post-industrial facilities in Silesia, we find the New Silesian Museum on the site of the Katowice coal mine, the Maciej shaft in Zabrze, the facilities of the Wilson coal mine shaft in Katowice-Giszowiec and the highly prestigious complex of 28 post-mining facilities of the historic silver and lead ore mine in Tarnowskie Góry, which in 2017 was inscribed on the UNESCO World Heritage List (Żmudzińska-Nowak, Radziejewicz-Winnicki 2017).

An example of a Silesian city which has been relatively quick to appreciate its potential for post-industrial monuments, above- and below-ground infrastructure and workers' buildings is Zabrze. Several sites, such as the Mining Open-Air Museum and the museum in the buildings of the former Queen Luisa Mine and Guido Mine, the Key Hereditary Adit and the historic Water Tower (Carboneum), have been adapted for touristic and educational purposes.

The city has been included in the European Route of Industrial Heritage (ERIH).

One of the ways to save post-industrial sites has been for the Board of the Silesian Voivodeship to create tourist routes: the Trail of the Beginnings of Metallurgy, the Trail of Mining History, the Trail of Patronage Estates and the Trail of Monuments of Technology are some examples. This form of activity is financially supported by the voivodeship self-government. The Silesian Industrial Monuments Route has also been included in the prestigious European Route of Industrial Heritage (Kaczmarek, Przybyłka 2010).

However, there are also many examples of neglected areas and sites in Upper Silesia where valuable historical substance is deteriorating or being demolished, such as the former Gliwice steelworks, the neglected facilities of the Mikulczyce coal mine in Zabrze and the Szombierki power plant, which was under threat until recently.

### Assumptions and purpose of the study

As the above comparison has shown, both Upper Silesia and Lazio have an industrial past. Although it is difficult to compare the scale and type of the Silesian industry with that found in the Lazio area, both have a significant number of post-industrial facilities. Upper Silesia, unlike the Lazio region, already has extensive experience in the revitalisation of post-industrial sites and areas, so the research premise of this collaboration was to exchange experience in this area.

Therefore, the objective of the project was to develop recommendations for the revitalisation of brownfield sites in Lazio on the basis of analyses of selected post-industrial sites in Silesia. Sample proposals for functional and spatial concepts for sites in the Lazio region were prepared jointly in line with the recommendations (Fig. 2).

There is no doubt that modernising and adapting post-industrial sites to new purposes, in accordance with

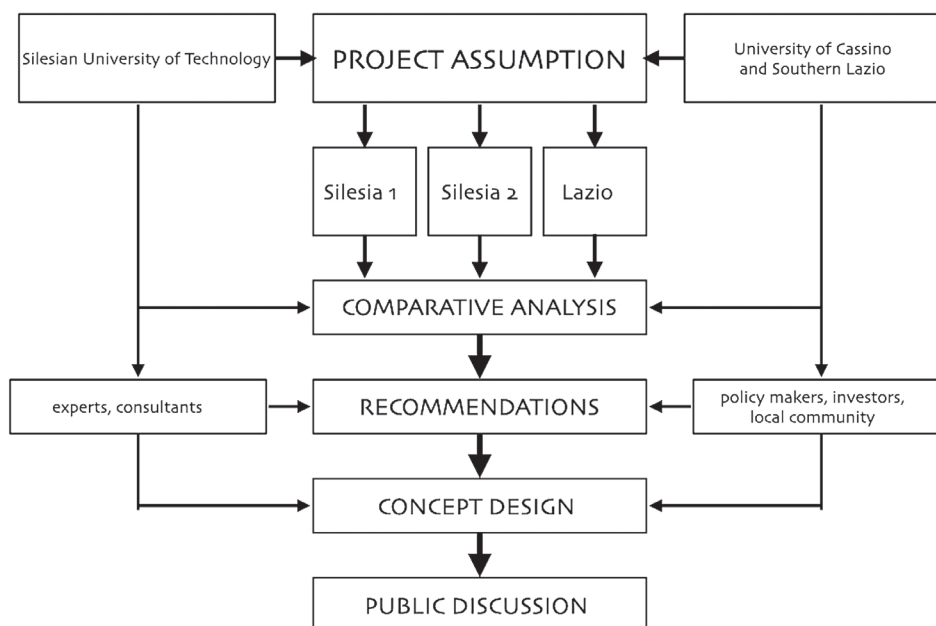


Fig. 2. Research flow diagram (elaborated by M. Żmudzińska-Nowak and A. Pelliccio)

Il. 2. Schemat procesu badawczego (oprac. M. Żmudzińska-Nowak i A. Pelliccio)

conservation guidelines, is an effective way to protect and revitalise them. The design process was preceded by a detailed analysis of selected reference sites, i.e., those sites where modernisation has been successful (or not) can provide valuable insights for formulating guidelines for sites awaiting revitalisation.

A list of research questions was also formulated:

– What are the determinants of the revitalisation process: historical, social, legal, ownership, economic and cultural?

– What could be the potential obstacles or facilitators of this process?

– Which conservation approaches and adaptation methods are preferred and most effective?

– Which sites can be evaluated as good examples of revitalisation and which cannot, and what evaluation criteria should be adopted?

Based on the characteristics of the two regions, we prepared the assumptions for the project. The conclusions of the research made it possible to formulate guidelines. The role of the working hypotheses was fulfilled by conceptual designs, which were verified and discussed during the project.

## Methods

The research method included three main stages:

1. General research: analysis of post-industrial areas (Lazio and Silesia); selection of examples and comparative analysis; conclusions and preliminary recommendations (Fig. 3).

2. Detailed research: case studies and detailed recommendations – proposals for functional and spatial solutions; the selected working methodology, based on the “research by design” approach.

3. Presentation of results and public discussion.

### General research

The general research focus was on the analysis of the conditions existing in both study areas (Lazio and Silesia) in terms of the industrial development process, its peculiarities for both regions and the current condition of the post-industrial sites. Subsequently, an analysis of the post-industrial historical substance in both regions was carried out on the basis of the available literature and



Fig. 3. Comparative analysis  
(elaborated by M. Żmudzińska-Nowak and A. Pelliccio)

Il. 3. Analiza porównawcza  
(oprac. M. Żmudzińska-Nowak i A. Pelliccio)

statistical and GIS data. Based on the collected information, sites were selected for further comparative analysis. The comparative analysis included three groups of sites, two from Silesia (I and II) and one from Lazio. The historical, economic, legal and social conditions in the three groups of examples were analysed comparatively. Additionally, the architectural values, physical condition and adaptive potential of the sites were also compared.

The following criteria were adopted for the selection of examples:

**Silesia I Group.** These are selected sites and post-industrial areas that have been successfully revitalised, both in terms of conservation and adaptation to new functions. The image and economic success of the revitalisation, the widespread social acceptance of the revitalised site, the availability of materials for analysis and the possibility of in situ research were used as selection criteria. Thus, the selected facilities included the former “Katowice” coal mine, converted into the Silesian Museum in Katowice, the Guido and Luiza coal mines as an open-air mining museum, the Maciej Shaft in Zabrze, the Wilson Shaft in Katowice, the former Gliwice coal mine as the New Gliwice economic zone and others.

**Silesia II Group.** These are selected sites and post-industrial areas that are undeveloped or degraded or whose revitalisation is controversial. The following were used as criteria for selection: a high degree of degradation of the site or its liquidation and conversion to a new unsuitable form, an inappropriate conservation approach to revitalisation or an ill-chosen function destroying the image of the site. As in the previous group, the availability of materials for analysis and the possibility of in situ research were important in the selection. The selected examples included the degraded area of the former Gliwice steelworks, the facilities of the Mikulczyce coal mine, the facilities of the Szombierki power plant, the former wire factory in Gliwice, the Grodziec cement plant, the facilities of the former Gottwald coal mine converted into the “Silesia City Center” shopping centre in Katowice and the former Zabrze steelworks demolished for the Platan shopping centre.

**The Lazio Group.** This included abandoned and partially degraded facilities from the Lazio area, such as the paper mill in Ceprano, paper mills in Isola del Liri, the former Ex Sieci ceramic factory in Scauri and others.

### *Detailed research*

Detailed studies included detailed analysis, conclusions and conservation and design guidelines for selected post-industrial sites in the Lazio area, as well as the development of design concepts with respect to their conservation, modernisation and adaptation for new functions. The sites were selected from the Lazio list, where they had already been initially analysed as part of the general research.

Detailed studies of the sites included:

- analysis of documentation: archival records, maps, architectural documentation, applicable planning and strategic documents and demographic, economic and social data;
- in situ research: site visits, surveys (photographic, photogrammetry and laser scanning);

- interviews with inhabitants and local experts;
- conservation and design conclusions and guidelines;
- a draft functional and spatial concept for adaptation and modernisation.

This phase of the project is based on the “research by design” method, in which an architectural project acts as a research process during which new hypotheses (Fig. 1), discussions, conclusions and final proposals are formed. It is a process of critical thinking using the tools of graphic notation, idea sketch and variant solutions. Research by design creates a form of open discourse that makes it discussable, accessible and useful to others. This form of research assumes flexibility and variability rather than definitive results. The method assumes complete harmony between creative architectural practice and the research process (of architecture). Therefore, it can be treated as both basic and applied research. It is a kind of experiment subject to verification.

We chose this method because it proved very attractive to both students and project partners.

### *Presentation of the results and discussion*

Presentation of the results and discussion were the final stage of the project. It consisted of organising exhibitions, presenting design concepts and holding discussions with the local municipal authorities, the owner or potential investor, representatives of the local community and media participation.

### *Project flow and results*

The implementation of the project involves scientists affiliated with the two partner universities and graduate students in the research process. Therefore, the project is research and didactic in nature and open, which means that it is not limited by a time frame. Ten years of cooperation and experience have shown that at any time it is possible to start a new (parallel) research process based on a prepared scheme of conduct. Therefore, several project cycles have been successfully implemented within the framework of problem-based learning (PBL) works or master’s theses, and even summer schools. The projects were always carried out under the supervision of researchers from both partner universities.

The general research made it possible to create a list of general conclusions indicating the main problems versus enablers of the revitalisation process, as well as favourable versus erroneous approaches to adaptation. These served to verify the research hypothesis. Among other observations, the study has found that all the determinants that accompany the process of revitalising post-industrial sites can be divided into two types:

- “Hard” determinants, such as legal conditions, economic conditions or the physical condition of the site.
- “Soft” determinants, or the values of the site, e.g., architectural, cultural, historical or social capital working for it – local communities or non-government organisations. An important conclusion is that while social activity is essential in the revitalisation process as a “fly-



Fig. 4. Example of the students' concept project: Ceprano Paper Mill "Teatro di Carta" (elaborated by K. Dybała and N. Hołoś)

II. 4. Przykład studenckiej koncepcji projektowej papierni w Ceprano: "Teatro di Carta" (oprac. K. Dybała i N. Hołoś)

wheel", it does not have enough power to carry it out on its own.

The lessons from the analysis of examples can provide a valuable set of recommendations for undertaking further revitalisation activities. However, it is not possible to copy patterns. Therefore, it is not possible to create universal recommendations, but only certain models of conduct that are adapted to the local conditions.

At the stage of detailed research, the joint Polish and Italian partners allowed each other to supplement and exchange the necessary data. For example, the partners from the University of Cassino made a lot of materials helpful for conceptual designs, such as survey measurements of paper mill facilities, photogrammetry of the site and 3D models.

A very important element of the project's implementation and evaluation was the participation of experts directly related to the sites under development (to include owners, investors and local authorities) and also the local community, which joined the debate on the proposals. Finished conceptual projects for specific post-industrial areas in Lazio were presented in the form of exhibitions, accompanied by academic debates at both universities. For example, the presentations "Lazio–Silesia Brownfields" in Gliwice and Cassino in 2015, the exhibitions of the project (to which the

University of Pisa was also invited), "Lazio–Tuscany–Silesia" was held in Gliwice, Cassino and Pisa in 2019 and the final exhibition, "Lazio Region Paper Mills", was in 2021 in Gliwice and Isola del Liri, together with a debate involving the city authorities and residents (Fig. 4).

### Summary of the project results

The project described above, initiated in 2014, has been ongoing for ten years and is constantly being developed. It consists of a series of activities carried out according to the presented methodology. The project is a very successful attempt to conduct research in cooperation with a foreign partner. The clear definition of the topic, purpose and scope of the study, as well as the joint implementation of the study, translated into high-quality individual outcomes. The project is a valuable experience in terms of both methodology and content. In both these dimensions, it should be evaluated very positively, given both the significant scope of the study and the complex process of implementation, including data acquisition, analysis and verification of the results, with continuous engagement with the foreign partners and the preparation of project concepts. The methodology of "research by design" develops valuable skills of working in international groups, jointly

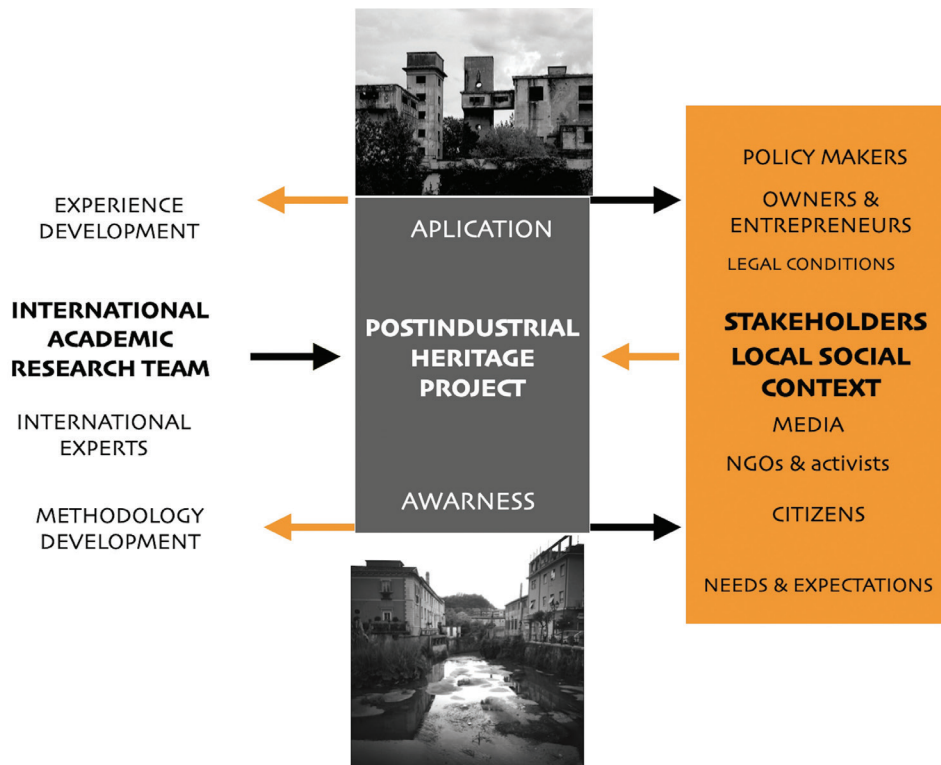


Fig. 5. Diagram of the project results (elaborated by M. Żmudzińska-Nowak and A. Pelliccio)

Il. 5. Schemat przedstawiający wyniki projektu (oprac. M. Żmudzińska-Nowak i A. Pelliccio)

formulating conclusions and presenting the results of the work. During the ten-year span of the project, we carried out more than 300 conceptual designs based on research, with the participation of students.

The research contributed to a better understanding of the mechanics of the complexity of the conditions and the revitalisation process of post-industrial areas and sites in both Silesia and Lazio. The recommendations made it possible to present valuable design concepts for selected sites in Lazio. The concepts were highly appreciated during subsequent presentations and debates. They can provide practical material for further studies. In addition to projects, workshops and exhibitions, the cooperation has resulted in joint scientific publications and monographs (Pelliccio, Żmudzińska-Nowak 2015; Żmudzińska-Nowak 2019; Żmudzińska-Nowak et al. 2020).

The critical analysis of reference sites from the Silesia region yielded a number of conclusions which could be implemented into the Lazio projects, and which were subject to verification in the course of the work. In addition to the most obvious ones (described above), there were also very important threads:

- the special role of industrial sites for preserving the identity of a place;

- the role of the former industrial function in the revitalised sites as an important narrative thread building historical continuity of the places;

- the role of public awareness and acceptance of transformations at every stage of revitalisation projects;

- inappropriate approaches to a post-industrial site (e.g., extreme commercialisation, profound transformations leading to disintegration of sites) negatively affect not only the site itself, but also its broader context (Fig. 5).

Despite the differences in the post-industrial substance resources of Silesia and Lazio, many conclusions are surprisingly convergent.

An important final point to emphasise is that during the course of the project we have steadily observed an increase in interest in post-industrial sites in the Lazio area. We are very pleased that during debates and joint discussions, the term “post-industrial sites” is being replaced with “industrial heritage”, as it is a record of history with its technological and spatial processes finding its representation in the landscape and thus is worth protecting.

*Translated by  
Magdalena Żmudzińska-Nowak,  
Assunta Pelliccio*



## References

- APAT. *Report for the Agency for Environmental Protection and Technical Services, Proposal of guidelines for environmental recovery and economic valorization of brownfields*. I.G.E.R. s.r.l. Editore, 2006.
- Arcese, Francesco, Mauro Martini, Pier G. Monti, and Onoriana Ruggieri. *Immaginando Ceprano – Memorie, Mappe e Rappresentazioni*. Edizioni Museo Archeologico di Fregellae, 2014.
- Binney, Marcus. *Our Vanishing Heritage*. Arlington Books, 1984.
- Dell’Orefice, Anna. *L’industria della carta in Italia (1861–1914). Innovazioni tecnologiche e sviluppo industriale*. Giannini, 1984.
- Douet, James, ed. *Industrial Heritage Re-tooled: The TICCIH guide to industrial heritage conservation*. Routledge, 2012.
- Eley, Peter, and Worthington John. *Industrial Rehabilitation: The use of redundant buildings for small enterprises*. The Architectural Press, 1984.
- Falconer, Keith. “The Industrial Heritage in Britain – the first fifty years.” *La revue pour l’histoire du CNRS* 14 (2006): 1–12. <https://doi.org/10.4000/histoire-cnrs.1778>.
- Jadecola, Constantino. *C’era una volta un Castello. Anzi, c’è ancora: L’antica dimora dei Boncompagni ad Isola del Liri*. Quaderni della ferrovia della valle del Liri, 2019.
- Jędrusiak, Tadeusz. “Turystyka kulturowa w obiektach poprzemysłowych – zagadnienia ogólne.” *Turystyka Kulturowa*, no. 6 (2011): 17–35.
- Kaczmarek, Anna, and Arkadiusz Przybyłka, “Wykorzystanie potencjału przemysłowego i poprzemysłowego na potrzeby turystyki. Przykład szlaku zabytków techniki województwa śląskiego.” *Prace Komisji Krajobrazu Kulturowego*, no. 14 (2010): 207–28.
- Mancini, Stefano. “Le cartiere del Liri.” In *Delli Aspetti de Paesi. Vecchi e nuovi Media per l’Immagine del Paesaggio*. Cirice, 2016.
- Monti, Pier G., Francesco Arcese, Aldo Cagnacci, Rocco Cassandri, and Mauro Martini. *Storie di Ceprano. Archeologia, ferrovia e memorie urbane*. Il Passo di Ceprano Edizioni, 2020.
- Murzyn-Kupisz, Monika, Dominika Hołuj, and Jarosław Działek. *Spoleczno-ekonomiczne oddziaływanie dziedzictwa kulturowego. Stan badań oraz perspektywy i potrzeby badawcze w kontekście polskim*. NID, Uniwersytet Jagielloński, 2022.
- Pelliccio, Assunta. *I luoghi delle industrie dismesse. GIS & HBIM per la loro valorizzazione*. Edizioni Efestò, 2020.
- Pelliccio, Assunta, and Magdalena Żmudzińska-Nowak. “Representation for the revitalization of brownfields: a comparison between Italian and Polish experience.” In *Disegno & Città. Cultura – Scienza – Arte – Informazione*, edited by Anna Marotta, Giuseppa Novello. Gangemi Editore, 2015.
- Preite, Massimo, and Gabriella Maciocco. *Rediscovered Factories Industrial Heritage and Architectural Project in Italy*. Edizioni Effigi, 2022.
- Wicke, Christian, Stefan Berger, and Jana Golombek, eds. *Industrial Heritage and Regional Identities*. Routledge, 2018.
- Zwegers, Bart. *Cultural Heritage in Transition: A Multi-Level Perspective on World Heritage in Germany and the United Kingdom, 1970–2020*. Springer, 2022.
- Żmudzińska-Nowak, Magdalena. *Local Heritage in the Integrated Approach – research, protection, education*. Wydawnictwo Politechniki Śląskiej, 2019.
- Żmudzińska-Nowak, Magdalena, Assunta Pelliccio, and Rafał Radziejewicz-Winnicki. *Lazio–Tuscany–Silesia: Heritage Sites in Conservation Perspective*. Wydawnictwo Politechniki Śląskiej, 2020.
- Żmudzińska-Nowak, Magdalena, and Rafał Radziejewicz-Winnicki. *About Industrial Heritage of Tarnowskie Góry Land*. Wydawnictwo Politechniki Śląskiej, 2017.

## Streszczenie

### *Dawne papiernie regionu Lacjum vs. poprzemysłowe obiekty Górnego Śląska: dziedzictwo przemysłowe jako przedmiot badań, projektów oraz międzynarodowej wymiany doświadczeń*

Przedmiotem badań są obiekty dawnych papierni w dolinie rzeki Liri, w regionie Lacjum, stanowiące cenne dziedzictwo kulturowe wymagające interwencji konserwatorskiej i projektowej, a także aktywizacji przy wsparciu władz lokalnych i instytucji społecznych.

Głównym celem międzyuczelnianej współpracy międzynarodowej, rozpoczętej już w 2014 r., są działania badawcze i dydaktyczno-projektowe oparte na wymianie doświadczeń i dobrych praktyk, które wypracowaliśmy w regionie Górnego Śląska w zakresie rewitalizacji obiektów poprzemysłowych. Zastosowana metoda oparta jest na łączeniu badań z pracą projektową – koncepcyjną (*research by design*). Przygotowywane projekty koncepcyjne spełniają funkcję hipotez, które są weryfikowane na każdym etapie pracy przez konsultacje i dyskusje z partnerami – ekspertami, decydentami, zarządcami i właścicielami obiektów, a także lokalną społecznością mieszkańców.

Rezultaty projektu w postaci ponad 300 koncepcji projektowych wykonanych w ciągu 10 lat z udziałem studentów z obu uczelni stały się podstawą do debaty publicznej na temat dziedzictwa przemysłowego regionu Lacjum. W ramach projektów wykazano, że mimo występowania uwarunkowań wspólnych dla obiektów poprzemysłowych kluczową rolę w procesie rewitalizacji odgrywają uwarunkowania szczegółowe stanowiące o specyfice i odmienności poszczególnych przykładów i ich kontekstów. Właśnie ta specyfika jest kluczowa dla właściwego poprowadzenia procesu adaptacji obiektu i sukcesu działań.

**Słowa kluczowe:** dziedzictwo przemysłowe, rewitalizacja, Lacjum, Górny Śląsk

