

INDUSTRIAL HERITAGE AS A DRIVER FOR PLACEMAKING

URBAN REGENERATION AND HERITAGE CONSIDERATION
IN SAINT PETERSBURG



Master Thesis in Spatial Planning
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PREFACE

Industrial heritage sites have always fascinated me with their powerful architecture and spirit. The use of heritage as an asset for cultural and socio-economic regeneration has caught my attention as a highly debated topic in spatial planning research. I grew up and lived almost my entire life in historical Saint Petersburg, and the question of how to balance heritage conservation and urban development has interested me for a long time.

Last year I moved to the Netherlands to take an exciting path in my life – the Spatial Planning master program at Utrecht University. Living abroad experience gave me an opportunity to elaborate a fresh vision on my homeland, its issues and prospects for future development.

This master thesis was written during difficult times – COVID-19 pandemics that affected everyone in the world. Staying away from my family for almost one year appeared challenging for me. Therefore, I would like to first thank my parents Valentina and Vasilii for inspiring me on following the academic path, constantly supporting me by phone calls from Russia and for giving the opportunity to study in the Netherlands, without them this exciting year at Utrecht University and this thesis would have been impossible.

I would like to thank everyone who was supporting me in the Netherlands during my study period. First, my partner Ber and his kind family for encouraging me during this challenging time. I would also like to thank my university colleagues Justine, Kate and Kinga, who became my close friends during this program.

Many thanks to my supervisor Professor Dr. Hans Renes for the guidance, advice and introduction to the heritage studies. The “Urban Heritage” course taught by Hans Renes inspired me to take the heritage path in my thesis research and perhaps in my future career.

During the thesis writing process, I have been admitted to participate in the Central European University summer course “Industrial Heritage as a Source for Social Empowerment and Economic Revitalization”. Even though the course was held online due to corona circumstances, it gave me a great opportunity to meet colleagues from all over the world who are interested in the industrial heritage topic. Moreover, during the course, I had a chance to present the first stages of this thesis to a big group of professional researches, practitioners and prominent professors, who gave me their expert feedback and helped to enrich my vision on the topic and improve this research.

Finally, I would like to thank all respondents who participated in my research. Special thanks to the Sevkael Port representatives, who shared their professional experience and contributed to this research. I hope that this master thesis will bring input to industrial heritage planning in the post-socialist context and help to improve heritage regeneration process in St. Petersburg and Russia in general.

ABSTRACT

Many former industrial buildings are considered as significant historical monuments that impose certain restrictions for private developers and public authorities. However, preservation of heritage values produces various environmental and socio-economic benefits as strength of place identity, boosting tourism and attracting the creative sector.

This master thesis aims to explore the role of industrial heritage in urban regeneration and placemaking processes in Saint Petersburg. Most of the research on this topic is conducted in the Western context. In Russia and other post-socialist countries, similar processes are taking place, but they attract less attention. This qualitative research is based on the review of relevant literature and policy documents, exploring case studies of industrial sites regeneration in Saint Petersburg, including semi-structured interviews with involved stakeholders.

To answer the main research question, firstly, the concepts of heritage planning, industrial heritage, urban regeneration and placemaking were linked in the theoretical framework. Secondly, characteristics of industrial heritage sites transformation in St. Petersburg were examined, highlighting the main barriers and opportunities for development. On the example of the Sevkabel Port project, the study described what actors are involved in urban regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals. Subsequently, the contribution of industrial heritage to placemaking was discussed.

Although various barriers (lack of investments and legislations issues) of industrial heritage revitalisation in St. Petersburg, Sevkabel Port has made it possible to find new modern functions for these industrial monuments, to restore them and to open to citizens and visitors. The case study analysis of the Sevkabel factory redevelopment project revealed that the clash in the management of the site can not only create difficulties for the diverse stakeholders but also open up new possibilities for the placemaking process, presenting the new city symbol. Through this project, the research studies how collaboration between the city government, business and grassroots organizations can be facilitated. Therefore, this research explores the contribution of industrial heritage to placemaking and community empowerment in post-socialist countries.

In conclusion, further elaboration of comprehensive regeneration and placemaking strategies would help St. Petersburg to transform its industrial heritage into the main identity sites and increase living standards.

Keywords: industrial heritage, spatial planning, urban regeneration, placemaking, Saint Petersburg

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1. INTRODUCTION

The developed industry was always one of the indicators of a high level of economic growth in a city, region or state. However, the presence of industrial enterprises in city centres causes various issues: pollution of the atmosphere, soil and water bodies, excessive load on a transport network, depressed state of surrounding non-industrial areas (Zhurbey et al., 2014). Nowadays many industrial companies previously located in city centres no longer function or occupy a place with modern and more competitive facilities. The driving forces of these processes were rapid changes in the manufacturing sector when society in developed countries started to move from an industrial towards a post-industrial economy (Zaparij, 2009). Since the middle of the 20th century, industrial enterprises are being closed or relocated, and the serious question arose of what to do with their buildings and equipment.

The United Nations (2018) forecasts that by 2050, the proportion of urban residents will reach 68%. Cities become the centres of population attraction due to the availability of jobs and conditions for a comfortable life. This leads to a shortage of vacant land for development. As a result, urban boundaries are expanding, leading to the opposite: a deterioration in the life quality and damage to the economy. The most optimal way to solve this problem is a comprehensive reorganisation of inefficient industrial zones, elimination of non-functioning production and relocation of existing enterprises outside a city centre.

Redevelopment of former industrial areas became crucial for the improvement of cities' images and their living conditions. Since the middle of the 20th century, this process became popular worldwide (Van Duijn et al., 2016). However, since a significant amount of industrial buildings are considered as substantial historical monuments, certain restrictions and financial obstacles for private developers and public authorities are imposed (Bandarin and Van Oers, 2012). Since the last decades, the World Heritage List of UNESCO has played a decisive role in addressing the global industrial heritage issue.

Nevertheless, industrial heritage conversion not only creates obstacles but at the same time gives a range of advantages for urban transformation sites. First, redevelopment is always considered as a more sustainable measure than demolition and construction of new buildings (Tiesdell, 2008). Moreover, preservation of heritage values produces various socio-economic benefits as strength of place identity, boosting tourism and attracting the creative sector (Graham et al., 2016). Therefore, many of the former industrial territories become public cultural places with art exhibitions, design workshops, concerts and festival venues.

Culture is increasingly recognized as a driving force for urban development. Today, cultural institutions such as museums, theatres or festival events are used as tools for improving a city's image, upgrading urban spaces, and providing a lively urban environment. The concept of culture-led development refers to these approaches. Heritage and heritage sites have become assets for urban development, often described as heritage-led development (Oevermann and Mieg, 2015). The emergence of the "creative city" (Landry, 2000) and,

more recently, the “creative class” (Florida, 2005) is an important discourse for industrial heritage regeneration. As a kind of cultural and creative economic urban development, it focuses on cultural institutions and creative industries as new user groups of industrial heritage sites. As a result, protected industrial heritage can serve as an attractive and unique asset.

Furthermore, some scholars (Pendlebury & Porfyriou, 2017; Janssen et al., 2017) mention heritage as a factor contributing to the quality of social space and placemaking. Indeed, heritage as a social asset can boost bottom-up initiatives and civic engagement in the creation of public places. However, there is still a gap in research on the relationship between industrial heritage management and placemaking, as the second concept is relatively recent.

Urban regeneration planning processes include the participation of various stakeholders and evolve in response to and by adjusting to the specific contexts and circumstances – political, socio-economic, and governing, which is also affected by historical backgrounds (Vujošević and Nedović-Budić, 2006). Many publications on the industrial heritage regeneration phenomenon tend to provide interesting practice examples (e.g. Douet, 2012; Stieglitz and Nefedov, 2015) rather than the role of heritage in planning processes. Moreover, most of the research on this topic is conducted in the European and North American contexts. In Russia and other post-socialist countries, similar processes are taking place, but they attract less attention.

There is hardly a region in the world that has undergone more dramatic transformations over the last thirty years than the area of Eastern Europe and the former Soviet Union (Hirt & Stanilov, 2009). Following the collapse of communist regimes in 1989 and the dissolution of the Soviet Union in 1991, the region underwent a turbulent transition from a state-planned economy to market capitalism. Despite the socio-economic and political changes, current urban planning in Russia still heavily relies on the Soviet planning tradition, which was characterized by exclusivity, arbitrariness and non-transparency (Trumbull, 2012). During the last twenty years, post-socialist forces (institutional reliance on Soviet planning culture together with entrepreneurial practices) have been shaping the transformation of the historical core of Saint Petersburg. Hence, the purpose of this study is to explore the relationship between spatial planning context and a degree of industrial heritage consideration in Saint Petersburg, where several redevelopment projects exist on former industrial sites.

Saint Petersburg is the second in Russia and the fourth in Europe largest city (by population within city limits) and has one of the world's largest and most intact neoclassical historical centres. The city centre and several palaces in the city's suburbs have been inscribed on the World Heritage List of UNESCO since 1990 (Trumbull, 2012). In addition to such types of historical and cultural heritage, the city also has a significant number of industrial heritage sites. The industrial development in the Russian Empire was significantly expanded during the Soviet period. Factories inherited by the city allowed Petrograd and later Leningrad to maintain the status of one of the leading industrial centres of the country. However, in modern

St. Petersburg, part of the factories has failed, and a comprehensive solution to the reuse of former industrial territories has not yet been worked out (Stieglitz and Nefedov, 2015).

Unfortunately, at the beginning of the 21st century, the industrial heritage in St. Petersburg was typically ignored and less actualized compared with sites in other parts of Europe. Since the past decade, St. Petersburg embarked on the redevelopment path that has already passed many European capitals. For a better understanding and solving of the conflicts between industrial heritage conservation and urban development, decision-makers tend to use practices involving urban communities in planning processes. This issue is especially of interest in post-socialist countries, where these phenomena emerged relatively recently.

This master thesis aims to explore the relationship between urban planning and heritage, examining what role can industrial heritage play in urban regeneration and placemaking processes in Saint Petersburg. The main objective of the thesis is stated by the main research question: *What role can industrial heritage play in urban regeneration and place-making processes in Saint Petersburg?* In order to reach the primary goal, the study states several sub-questions:

- 1. What are the major challenges and opportunities for industrial heritage regeneration from the spatial planning perspective?*
- 2. What are the characteristics of industrial heritage sites transformation in the post-socialist context of St. Petersburg?*
- 3. What actors are involved in the regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals? What is the role of the culture sector in these processes?*
- 4. What is the contribution of industrial heritage to placemaking?*

This research intends to link diversity of backgrounds and discourses such as industrial heritage, urban regeneration, spatial planning and placemaking. The overall aim is to deepen the understanding of industrial heritage as a complex multidisciplinary task involving diverse actors. To answer the research questions, first, the concepts mentioned before were linked in the theoretical framework. Subsequently, the peculiarities of industrial heritage sites transformation in the context of St. Petersburg were examined. On the example of the Sevkabel Port project, the study describes what actors are involved in the regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals. The case study analysis of the Sevkabel factory redevelopment project revealed that the clash in the management of the site could not only create difficulties but also open up new possibilities for the placemaking process, present the new city symbol. Therefore, the main goal of this research is to explore the contribution of industrial heritage to placemaking and community empowerment in post-socialist countries.

This qualitative study is mainly based on the review of relevant literature and policy documents, exploring case studies of industrial sites regeneration in Saint Petersburg, including semi-structured interviews with involved stakeholders.

2. THEORETICAL FRAMEWORK

This chapter presents the theoretical background of the research. Based on the literature review, the concepts of heritage planning, industrial heritage, urban regeneration and placemaking are described and linked in the theoretical framework. According to this information, an answer to the first sub-question will be given.

2.1. Urban heritage and planning

This section presents a general background in heritage and planning. Moreover, development of heritage from protection to dynamic heritage management is explained. Finally, the concepts of (culture-led) urban regeneration and placemaking are defined.

2.1.1. *What is heritage?*

Before discussing the nexus between heritage management and spatial planning, it is crucial to give an understanding of the “heritage” concept. The place of heritage in society is a subject of discussion and scientific debates in many publications (Graham et al., 2016; Ashworth, 2011; Harrison, 2010; Lowenthal, 1998). Conceptualization heritage as meaning rather than an artefact assures that this is a field of social conflict and tension, bearing simultaneously different and incompatible meanings (Graham et al., 2016).

Following the Oxford English Dictionary, Harrison (2010) defined heritage as something that “can be passed from one generation to the next, something that can be conserved or inherited, and something that has historic or cultural value”. The “heritage” notion is usually used in terms of cultural heritage that encompasses not only historic landscapes, buildings and artefacts but also intangible elements of the past like memories and stories.

Heritage is usually associated with the history of the past; however, it widely represents an image of the present (Harrison, 2010). Lowenthal (1998) argues that heritage is not about history: ‘it is not an inquiry into the past, but a celebration of it ... a profession of faith in a past tailored to present-day purposes’ (Lowenthal, 1998, p. 10). Therefore, heritage is highly contextualized, generating a wide range of debate in society.

The context of heritage is dependent on the social, historical, economic, and political environment. These different contexts affect the value and level of comfort of heritage sites. Pendlebury et al. (2018) noted how a rupture of historical narrative could change the perception of heritage value, level of comfort and acceptance of a heritage site, for example, following a change of political regime, the old regime’s industrial sites may be considered as uncomfortable by association.

Graham et al. (2016) emphasized that heritage is a spatial phenomenon since it is always strongly connected to a particular place and its identity. Moreover, heritage is both a cultural and economic asset, which is being widely commoditised nowadays. This multiple uses occur with all heritage and becomes a source of conflicts between various interest groups. To the extent that geography is linked to issues of regional development and regeneration, urban planning and tourism, heritage is a central element of these processes and various policy implementation strategies. Hence, the economic commodification of heritage is one of many factors in evaluating the success or failure of spatial development policies (Graham et al., 2016).

2.1.2. Heritage planning: from protection to dynamic heritage management

The nexus between urban heritage and planning is widely discussed among the researchers (Ashworth & Howard, 1999; Kalman, 2014; Oevermann & Mieg, 2015; Graham et al., 2016; Renes, 2016; Janssen et al., 2017). According to Kalman (2014), heritage planning is the application of heritage conservation within the planning context. However, heritage planning does not strive to freeze development of a historic place, but rather retain the significance of heritage within the modern planning context: "Preservationists are not against development; they are against *bad* development [...] that is insensitive to the existing context of a community and its significant resources and heritage" (Tyler et al., 2009, p. 269). Therefore, the main task of heritage planning is to find a balance between conservation and development, maintaining a rational dialogue among various interests.

In the European context, integration of planning and heritage has been developing since the beginning of the 20th century. Already in the late 19th century, people like John Ruskin promoted a more holistic approach for heritage conservation management, aiming to protect broad historical landscapes rather than individual monuments (Janssen et al., 2017). During the post-war period, many European countries started to elaborate on planning strategies giving attention to heritage regeneration and management (Ashworth & Howard, 1999). Subsequently, in the 1980s and 1990s, heritage conservation practices shifted from legal monument protections towards more dynamic heritage management striving for urban development (Janssen et al., 2014). Therefore, in recent years, due to the growing concern for sustainable development, heritage has become a key tool for urban regeneration.

A wide range of scholars (Douet, 2013; Bandarin & van Oers, 2012; Oevermann and Mieg, 2015; Renes, 2016; Janssen et al., 2017) noted the changing context of urban heritage management and coming towards a new urban conservation paradigm. Bandarin and Van Oers (2012) highlight six external and internal forces of change, which, due to growing globalisation, affect the practice of urban heritage conservation. These six processes are urbanisation, urban development, climate change, the changing socio-economic role of cities and tourism and, finally, the changing view on heritage values. These forces together

create a complex dynamic “conservation environment” with growing connections and competing interests of various stakeholder groups.

However, despite the growing concerns about the integration of heritage and planning, there is still a research gap between these concepts and their application in planning practice (Janssen et al., 2017). The changing perspectives on heritage require new conceptualisations, where “not only different methods for integrating old structures into new townscapes are incorporated, but also the new visions and roles of (material) authenticity” (Renes, 2016).

Based on the analysis of the Dutch spatial planning experience, Janssen et al. (2017) define three approaches to heritage planning:

- heritage as a “sector” (heritage preservation through isolation from spatial development);
- heritage as a “factor” (heritage as a tool and impulse to urban regeneration and development);
- heritage as a “vector” for sustainable urban development (heritage determines the direction of spatial projects and developments).

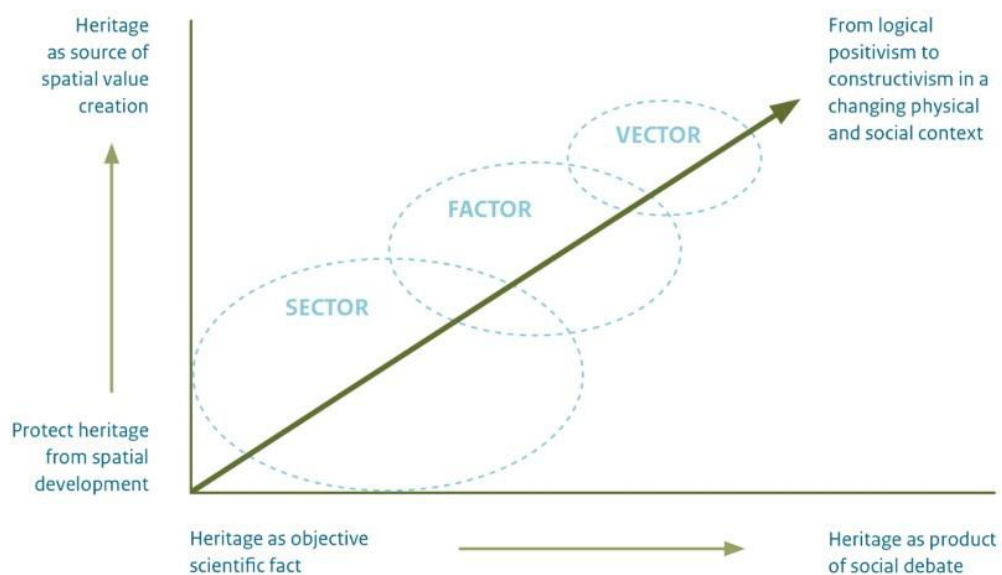


Figure 1. Shifting conceptualizations of heritage (Janssen et al., 2017).

Although these approaches appeared consequently, they did not replace each other and still coexist in the current planning practice. It allows planners to “switch between approaches in line with the specific heritage context” (Janssen et al., 2017).

According to Janssen et al. (2017), the main difference between these approaches lies in how they interpret the relationship between heritage conservation and development. While the “heritage as sector” approach tries to protect heritage from spatial development, the “heritage as factor” approach is using heritage as an economic asset for such development. Subsequently, the “heritage as vector” approach considers heritage as a social asset,

creating space for grassroots initiatives and citizen engagement in the heritage planning process. Moreover, this approach highlights intangible values, using it as a placemaking tool (Janssen et al., 2017).

Therefore, the proposed approaches create a framework for understanding the heritage role in urban transformation processes such as regeneration and placemaking, which will be described below.

2.1.3. Heritage regeneration

Over the past decades, urban transformations are of growing relevance since cities expand while reconstructing existing urban areas. In such transformations, heritage plays the role as one of the foundations of quality management: it has economic value and is also a starting point for citizens participation in planning processes (Graham et al., 2016). Currently, redevelopment or regeneration of existing urban areas is considered as one of the main tasks of spatial planning as every new action takes place in the districts that already have history and communities of existing residents and users. Redevelopment is an interactive process involving various stakeholders and generating tensions between them.

In the past two decades, conservation and regeneration have often been seen as mostly complementary processes. For example, historic buildings have been useful in many flagship property regeneration projects, adding quality and uniqueness to site designs — factors that have gained in importance at a time when culture-led regeneration has become increasingly fashionable (Pendlebury, 2009). Culture is increasingly recognized as a driving force for urban development. Today, cultural institutions such as museums, theatres or festival events are used as tools for improving a city's image, upgrading urban spaces, and providing a lively urban environment. The emergence of the "creative city" (Landry, 2000) and, more recently, the "creative class" (Florida, 2005) is an important discourse for heritage regeneration.

The term "culture-led regeneration" has emerged as a variant of "urban regeneration" - a central focus of national public policy in the UK over the past three decades (Vickery, 2007; Pendlebury, 2009). The singular term "regeneration" within the political context reflects and emphasizes the reconstruction and redistribution of land, usually deindustrialized land. It is primarily related to the field of environmental protection. Urban regeneration, however, implies the development of the land as a place of social habitat: it includes the development of tangible assets such as land and buildings, which corresponds to an overall strategic goal that applies equally to local populations and communities as well as to their social and cultural infrastructure (Vickery, 2007). The term urban regeneration thus has a strong social dimension.

Nowadays, the perception of the values of the historic city has expanded to encompass the symbolic and aesthetic values of places and the new use of urban spaces that define the

historic city as a living heritage. Historical sites that are considered urban heritage are of vital importance to cities today and in the future.

2.1.4. Placemaking

Pendlebury & Porfyriou (2017) mention heritage as a factor contributing to the quality of social space and placemaking. Indeed, heritage as a social asset can boost bottom-up initiatives and civic engagement in the creation of public places (Janssen et al., 2017).

Placemaking (or place-making) is an overarching approach to planning, design and management of public spaces (PPS, 2007). Placemaking capitalizes on a local community's assets, inspiration, and potential, intending to create quality public places that contribute to people's health, happiness, and well-being.

Placemaking is widely known in the world and has many implemented examples. Its story began in the 1960s when American urban planners William Whyte and Jane Jacobs began to develop the idea of arranging cities so that they are convenient not only for cars and shopping centres but also for people. In 1975, Project for Public Spaces, PPS, an organization focusing on education, design and planning, was established by Fred Kent (PPS, 2007).

Harvey (1996, p.265) noted that "placing and making of places are essential to social development, social control, and empowerment in any social order". This statement shows the importance of placemaking strategies for societal progress.

According to the Project for Public Spaces (2007), placemaking is both a process and a philosophy that strengthens the connection between people and places they share, referring to a collaborative process by which we can shape our public realm to maximize shared value.

Placemaking pays particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution, creating a sense of place and place-attachment (PPS, 2007). Therefore, the placemaking approach contributes to sustainable heritage management and social empowerment. The Place Diagram (Figure 2) is one of the tools Project for Public Spaces (2007) has developed to help communities evaluate places. The inner ring represents a place's key attributes, the middle ring its intangible qualities, and the outer ring its measurable data.

WHAT MAKES A GREAT PLACE?

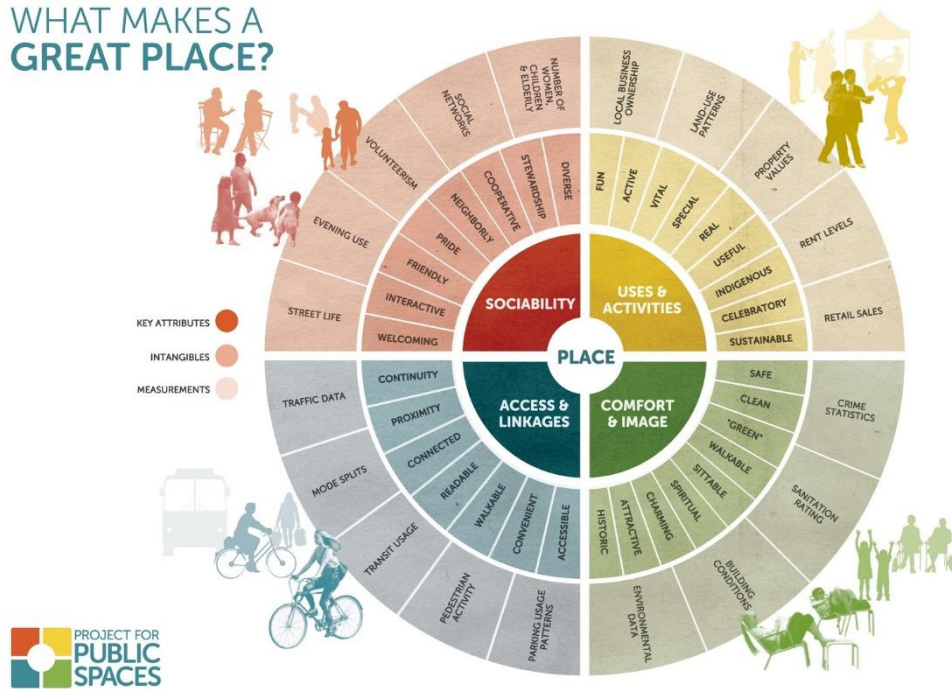


Figure 2. The Place Diagram (PPS, 2007).

Places differ from each other in many attributes that contribute to their identity and the identification of individuals and groups within them. Heritage is one of these attributes. "Sense of place" is both the input and the output of the heritage creation process (Graham et al., 2016).

Therefore, heritage plays an important role in the urban regeneration and placemaking processes. Since the 1990s, factories and other industrial environments have become subject to regeneration projects. The next section will discuss the concept of industrial heritage.

2.2. Understanding industrial heritage

This chapter will discuss what industrial heritage and its position within the heritage and planning fields is.

2.2.1. Perception of the industrial past in the post-industrial era: concept, meanings and values

The concept of "industrial heritage" arose relatively recently and has undergone some changes over the past decades. Industrial heritage, being part of the material cultural heritage, is defined as a combination of buildings and objects produced by society using

labour and considered important enough to preserve them for future generations. If for many objects of cultural heritage, such criteria as aesthetics and uniqueness are applied first, then the tangible heritage of the industrial period is valued as documentary evidence of the extraordinary nature of this period in human history (Kopylova, 2017). Study and restoration of industrial heritage help to understand industrialization - one of the most significant periods in the history of every country that is sufficiently developed at present.

Industrialization began at the end of the 18th century in England. Large-scale production, including manufacture for distant markets, has changed the world. The industrialization has led not only to lower production costs and the emergence of new products but also to changes in the structure of society, lifestyle and habitual thinking (Zaparij, 2009; Kopylova, 2017).

The industrial heritage includes the historical, scientific, and architectural values of industrial culture: buildings and machinery, factories, mines, warehouses, energy processing facilities, transport and infrastructure, as well as elements of social organisation related to production. In fact, an object becomes industrial heritage, as soon its technology becomes obsolete, and it stops working as intended (Zaparij 2009). At present, industrial heritage usually includes equipment manufactured before the changes in the post-war world in the 1950s and 1960s. Everything that was created after this time is considered post-industrial.

Zaparij (2009) proposes the following classification of industrial heritage facilities and equipment in accordance with their functions:

- Production centres (workshops, metallurgical plants and factories, mines and those places in which there was any production);
- Warehouses and storages (for storing raw materials, semi-finished products and finished products);
- Energy (places where energy was generated, transmitted and used, including the power of falling water);
- Transport (passenger and freight vehicles and their infrastructure consisting of railways, ports, roads and air terminals);
- Social facilities (housing of workers, schools, churches, hospitals).

More than forty-five years have passed since the beginning of the movement to study and preserve the industrial heritage. Since 1973, the International Committee for the Conservation of the Industrial Heritage (TICCIH) has been operating. TICCIH has been ICOMOS's (The International Council on Monuments and Sites) specialist adviser on industrial heritage since 2000, and it assesses industrial sites for the World Heritage List. In subsequent years, more than fifty industrial monuments in various parts of the world were included in the UNESCO World Heritage List.

In recent decades, the conservation of industrial heritage has gained significant importance and relevance in the world. The driving forces of these processes were rapid changes in the manufacturing sector when society in developed countries started to move from the

industrial to the post-industrial stage of economy. Since the middle of the 20th century, industrial enterprises are being closed or relocated. This process is often called deindustrialization, when “millions of industrial workers were displaced, leaving once vital economic centres stricken” (Berger & High, 2019). Therefore, the serious question arose about what to do with desolated buildings and equipment, and how the left-out communities could benefit from it.

Many manufacturing firms left the urban sites in which they were located in the 19th and early 20th century. As a result, most industrial zones have lost their original function and got abandoned. Planners and policy-makers nowadays search how to deal with the unused land, they can decide to 1) leave it as it is; 2) demolish the existing buildings and redevelop the territory; or 3) renovate the existing buildings while making them suitable for new functions (Van Dujin et al., 2016). The last alternative is especially attractive when the existing buildings have heritage value. The idea to reuse old factories became famous in connection with the words of Jane Jacobs— “New ideas must use old buildings” (Jacobs, 1961, p. 188). Indeed, it requires some imagination to conceive how run-down and abandoned industrial sites can be brought back to life. Later, Florida's (2002) creative city concept made this idea even more popular. Nowadays, many planners and policymakers throughout the world believe that regeneration and reuse of abandoned industrial sites is a tool for urban development attracting higher educated citizens, creative sector and tourists. However, the fact that many former industrial areas are considered as heritage imposes additional difficulties and barriers for developers. The main challenge of planners and policy-makers nowadays is how to balance industrial heritage conservation and urban development.

2.2.2. Industrial heritage management in the context of spatial planning

The industrial heritage sites management requires more profound rethinking in the context of urban transformations. Since the number of industrial heritage sites is continually growing, the question of how to balance protection and development becomes more crucial. This tendency poses new challenges together with increasing demand for reuse of former industrial sites as a driving force for urban development (Oevermann, 2015; Oevermann and Mieg, 2015).

Industrial heritage site management is understood as a multidimensional task that involves networks of diverse social agents and societal discourses (Oevermann, 2015). Industrial heritage together with its identity, memory and traditions belongs to cities and their transformations. Industrial heritage is considered as a planning issue: dilemmas about protection, reuse or demolition always create conflicts in urban planning practices.

Industrialization and deindustrialization together frame how industrial heritage sites are remembered in the past and, for locals, experienced in the present. Presence of the past often places history, memory, and the various public's in contested relationships (Douet,

2012). Those developing such sites deal with diverse stakeholders — cultural workers, planners, developers, state actors, funders, citizens — each invested in telling “the story”, although not necessarily agreeing.

Former industrial buildings often have a slightly looser management regime than found with more 'traditional' heritage (Pendlebury, 2013). The values placed on industrial heritage are different from other types of heritage sites, which creates different relationships and opportunities for reuse. The value is linked to previous uses of the site, including dark uses, the value placed on physical space by the community, memorial value, financial value, age, architecture, location of the site. When adapting a heritage site for reuse, it is potentially useful to consider the value of the heritage.

In their book, Oevermann and Mieg (2015) illustrate a wide variety of planning considerations for heritage conservation and urban transformations. The authors present cases from different planning contexts that introduce various planning strategies and their implementations in industrial heritage sites management. The cases show that together with a wide range of European planning traditions, there are different understandings of conservation and development. These traditions regulate urban changes with implications for industrial heritage. These implications are closely linked to values in preserving the heritage and two other planning perspectives: culture-led urban development and architectural production.

According to Oevermann and Mieg (2015), there are four understandings of conservation concerning industrial past:

- *Conservation of industrial heritage sites as a testimony to the past* – focus on traditional ideas of authenticity and integrity in terms of material documentation.
- *Conservation of industrial heritage sites as urban landmarks and cultural landscape* – focus on distinctive spatial landmarks or specific industrial landscape structure.
- *Conservation of industrial heritage sites as built infrastructure and spatial resource* – a specific identity or character of a site is maintained.
- *Conservation of architecture sites as architectural and atmospheric space* – the character of architecture manifests itself in space, materiality and atmosphere. These categories are of value for a new production of architecture and urban development.

The traditional concerns of heritage conservation – the protection and conservation of the building fabric (“heritage as a sector”) – are less prescriptive in the last two approaches.

2.2.3. Industrial heritage sites in transformation: international examples

Redevelopment of industrial territories as one of the methods of improving the urban environment is widely used in Europe; it is a part of the modern urbanisation policy (Latham, 2000). Great Britain was the first to start this activity. Large-scale works carried out in London, Manchester, Liverpool, Birmingham and other cities were the first examples of this kind. Projects of the complex redevelopment of the industrial part of London (Docklands),

Liverpool (Tea Factory), Rotterdam (Kop van Zuid) and Kassel (Unterneustadt) were carried out in similar ways. Initially, the strategic objective of developing a depressive territory was set, and then the relevant programmes and transformation projects were designed (Stieglitz and Nefedov, 2015). France carried out well-known transformation works such as the renovation of d'Orsay railway station, la Villette complex and the Menier chocolate factory. Berlin, Hamburg, Leipzig and the cities in the Ruhr basin (Germany) – are involved in the rehabilitation and transformation of vast industrial territories.

Today, the reuse of old industrial buildings with the subsequent rehabilitation of the surrounding space has become one of the main ways to resolve the contradictions that have developed in the urban environment. Awareness of the historical, cultural and educational role of heritage in the field of industrial architecture, recognition of its high artistic level revealed in it the now-lost humanistic scale, the richness of materials and forms, the elegance of detail.

2.3. Synthesis

This chapter aims to link the concepts of industrial heritage, urban regeneration and placemaking.

2.3.1. Industrial heritage regeneration and placemaking

Former industrial buildings often have a slightly looser management regime than found with more 'traditional' heritage, and often have a particular aesthetic, used in placemaking strategies. Pendlebury (2018) highlighted the central values of industrial heritage sites:

- Industrial aesthetics
- Sense of place
- Heritage status
- Cheap and flexible

Industrial heritage spaces are key assets for communities that need venues for their gatherings, cultural events, educational, sports or care activities. In the past decades, while many post-industrial heritage spaces across Europe have been left abandoned or demolished in the hope of larger profits, and others were renovated with no apparent function using public money, some of the most successful examples of adaptive reuse were results of community-led development processes (Patti & Polyak, 2018). Learning from citizen-led, locally anchored heritage regeneration projects that have succeeded in securing spaces and services for communities, protagonists of these processes have contributed to mainstreaming a set of legal instruments and policies, from heritable building right and community land trusts to co-governance mechanisms and commons regulations.

Heritage sites and community activists and artists increase the quality of the environment, which in turn increases the value of the site and surrounding area (Patti & Polyak, 2018). Temporary use of abandoned space can offer freedom, unmodified social structures and social experimentation that benefits a broader community, potentially including non-local communities. The owners of abandoned space can gain visibility and prestige by creative temporary use, although this requires clear contracts to offer security to all parties. To achieve the support of formal or informal residents of sites, they should consider what the residents want to gain by, and can contribute to the regeneration of the heritage site. A bottom-up approach should not ignore residents and should not focus exclusively on activists and people of creative industries.

Thus, cultural and placemaking initiatives can be used as tools to launch the redevelopment process. The primary purpose of the application of cultural instruments is improving the quality of the urban environment: they make the environment more friendly, attractive for life. Despite the widespread belief that it is enough to attract large developers to the territory and business, and people will come after them, reveals itself the next trend of prioritizing quality places. Developers and businesses are increasingly interested in territories where local communities begin their activity. It can lead to the controversial gentrification process that is widely discussed in urban planning research, especially in terms of heritage regeneration (De Cesari & Dimova, 2019).

Therefore, industrial heritage has both economic (urban regeneration, attracting visitors and business) and social potential (placemaking, community empowerment).

3. METHODOLOGY

This chapter provides the methodological framework of this thesis and the steps taken to answer the main research question: *What role can industrial heritage play in urban regeneration and placemaking processes in Saint Petersburg?* In the first section, the orientation of the research, research design and strategy are discussed. Section 3.2 explains the case selection for the Saint Petersburg city and the Sevkabel factory, in particular, placing the research in the context. Furthermore, the next section outlines the methods and sources used for data collection and analysis, presenting a justification of materials and procedures that have been applied. Finally, validity, reliability and suitability of the methodology are described; particular attention is paid to the limitations of the research.

3.1. Research design

The research aims to gain more insights into the role of industrial heritage in urban regeneration and placemaking processes in Saint Petersburg. The qualitative research strategy is appropriate since it offers the opportunity to use the perception of activities and considerations of various stakeholders involved in the heritage regeneration processes. Besides, the qualitative strategy can also help to determine the underlying goals, discover compromises and motives by dealing with complex subjects with uncertain aspects that may reveal new insights (Bryman, 2012).

In this qualitative research, the case study design is used for explaining the role of heritage in urban regeneration projects. A case study is relevant for this research since concrete, practical and context-dependent information about the case is needed to be obtained. According to Yin (2009), the case study is preferred in examining contemporary events, but when the relevant behaviours cannot be manipulated. The case study relies on many of the same techniques as a history, but it adds two sources of evidence not usually included in the historian's repertoire: direct observation and systematic interviewing (Yin, 2009). For this research, a "what" type of the main research question is used, that gives a justifiable rationale for conducting the exploratory case study, intending to develop hypotheses and propositions for further inquiry (ibid.)

The characteristics of industrial heritage sites transformation are investigated in the context of Saint Petersburg in general as well as on the example of Sevkabel factory in detail. It allows deeply explore the influence of various actors on the planning process of the particular case, compare outcomes with the other cases and then link it to the city context (Harrison et al., 2017). In this way, the influence of the context is discovered, which promotes the further building of a theory (Bryman, 2012).

The study can thus be characterized as “multi-scaled” or “embedded” concerning its case study design: Saint Petersburg was chosen as a case for identifying the planning context, while several cases on the level of the individual site were chosen for explaining their “heritage consideration degrees” (Zevenbergen, 2018). Subsequently, the case of Sevkabel factory was analyzed in detail to provide an in-depth stakeholder analysis.

Yin (2009) argues that the same case study may involve more than one unit of analysis; this occurs when, within a single case, attention is also given to a subunit or subunits. He suggests the “embedded case study design”, where “embedded units can be selected through sampling or cluster techniques; no matter which units are selected, the resulting design would be called an embedded case study design”. Alternatively, Yin (2009) notes that if the case study examined only the global nature of a program or an organization, a “holistic design” would have been used. Using the embedded case study design, the subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case (Yin, 2009).

In this research, the embedded exploratory case study will help to analyze how processes of industrial heritage regeneration and placemaking are structured in St. Petersburg, what stakeholders are involved in particular projects and what is their relation to cultural heritage.

3.2. Case selection

Explaining the choice of particular city, it is necessary to mention that Saint Petersburg is the second in Russia and the fourth in Europe largest city (by population within city limits) and has one of the world's largest and most intact neoclassical historical centres. The city centre and several palaces in the city's suburbs have been inscribed on the World Heritage List of UNESCO since 1990 (Trumbull, 2012). Besides, Saint Petersburg has rich industrial past, which is performed in a wide range of former industrial territories, creating the so-called “Grey belt”, where many of those buildings listed to the protected heritage sites are still abandoned.

Industrial heritage redevelopment path that St. Petersburg embarked on several years ago has already passed many European capitals, which makes it interesting to analyze these planning processes and compare it with examples of various cities. Moreover, the case of Saint Petersburg may serve as an example for other post-socialist cities, many of which still face the same issues.

Saint Petersburg, unlike other Russian cities, has a strong heritage protection community, which is represented by various grassroots movements of experts, activists and ordinary citizens. These urban communities often influence planning and decision-making processes, preventing the city government and developers from adjusting the historical appearance of the city. This peculiarity makes it interesting to research a social aspect of heritage planning processes and growing importance of citizen participation.

After Saint Petersburg was chosen as a research location, several sites were selected to illustrate the general situation with industrial heritage in the city. The chosen areas include abandoned, neglected or destroyed heritage buildings, controversial and successful examples of industrial regeneration. In 2019, Saint Petersburg became the winner of The Jean-Paul-L'Allier Prize for "Redevelopment of industrial cultural heritage sites and their territories for public projects" from of the Organization of World Heritage Cities (OWHC 2019). The city has been awarded for its five projects of restoration and reuse of old industrial buildings in the historic centre and its adjacent neighbourhoods. One of these projects, Sevkabel Port, was selected as the main subunit of the case study to explore the culture-led regeneration and place-making processes in detail that would support further research.

Sevkabel Port, since its opening in 2018, is one of the most popular cultural public spaces among citizens and tourists, which makes it an exciting and unique example of a successful redevelopment project. According to Flyvbjerg (2006), a representative or a random case may not be the most appropriate strategy to achieve the most significant possible amount of information on a given phenomenon, since a typical or average case usually is not the richest in the information. He argues: "atypical or extreme cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied" (Flyvbjerg, 2006). Therefore, such an atypical, in a positive way, example as Sevkabel can be a good case to achieve the main research objective.

3.3. Research methods

The techniques for data collection and analysis are shaped by the research methods applied in this thesis. The research design provides a structure that guides the execution of research methods and the analysis of the obtained data (Bryman, 2012). A combination of qualitative methods was used for the purposes of this study: (1) narrative literature review, (2) online news articles social media content analysis, (3) analysis of territorial plans and policies, (4) field observation, (5) in-depth expert interviews with key stakeholders, and finally, (6) stakeholder analysis. The results of all the methods will be analytically consistent with providing a synthesis of theory and processed empirical data upon which possible recommendations will be based.

3.3.1. *Data collection and sources*

This thesis includes both primary and secondary data. Firstly, the literature review was used to provide a general theoretical framework of industrial heritage, urban regeneration and place-making concepts within spatial planning research to gain insights and integrate different fields of study. It has been obtained in the previous chapter and provided the answers for the first sub-question. For these purposes secondary scientific literature both in

English and Russian languages was used, it was gathered only from available online sources due to the closed libraries because of COVID-19 measurements, which was generally enough for this research. In addition, participation in the CEU summer course “Industrial Heritage as a Source for Social Empowerment and Economic Revitalization” helped to enrich the theoretical framework of this thesis with new visions, articles and cases.

Secondly, desk literature research was applied to collect all relevant contextual information on industrial heritage planning in Saint Petersburg. Besides scientific articles, data collection was supplemented by a policy document review, including sources on historical data, planning documents, maps, promotional materials and other relevant secondary sources such as online newspapers, magazines and social media. The policy and planning documents on heritage conservation and regeneration, territorial plans and maps were publicly available and collected from the official city government websites. The most popular social media services in Russia such as VK (Russian online social networking service) and Instagram were used for gathering information on industrial heritage sites (history, photos), urban protection communities (articles, video recordings of meetings, discussions) and local activists (blog posts, comments).

Subsequently, more detailed relevant information was compiled on the Sevcable factory project: perceived heritage values of the site, recent and current spatial development, spatial planning regulations applicable to the site, placemaking strategies and the involved stakeholders, their positions, mutual relations, actions, motives and visions.

All the data mentioned above was collected with a narrative review method that seeks “to arrive at an overview of a field of study through a reasonably comprehensive assessment and critical reading of the literature” (Bryman, 2012, p.102) and intends to encompass all the available sources of information. Consequently, these data form guidelines for the interviewing strategy and stakeholder analysis that will be outlined further.

Following, the primary source of data for this case study was the city and the heritage sites observation in July, November and December 2019. It was done so that heritage consideration could be determined in the field. Unfortunately, due to the COVID-19 pandemic, the field trips planned in spring 2020 had to be cancelled.

Finally, other important primary sources of data for this research were eight individual in-depth interviews with stakeholders involved in the industrial heritage redevelopment process in Saint Petersburg, including representatives of business (Sevkabel factory), the Sevkabel Port project curator, city government, municipal deputy, place-making NGO curator, architect and a prominent industrial heritage expert. The interviews took place between 27th of June and 8th of August 2020, and due to the COVID-19 measures were conducted by telephone, audio-recorded and then transcribed for later analysis. The language of interviews was Russian; therefore, no language barriers occurred.

To understand insights of particular planning context, it is crucial to know the positions, perceptions, motives and visions of various actors involved in the redevelopment process. For

this reason, qualitative semi-structured expert interviewing has been chosen as a research method, as there is a greater emphasis on the interviewee's perspectives and his point of view (Bryman, 2012). During the interviews, the strategy “the interviewer as co-expert and accomplice” (Bogner & Menz, 2009) was used; thus, good preparation beforehand was necessary. As a preparation, it was crucial to learn about interviewees and their expertise, as well as to study carefully the plans and topics related to it to assure that the interview was well prepared. The respondent was provided with credible information about the research and the main issues of the interview beforehand. The interview began with an introduction and a small chat to release the tension and gain rapport (Bryman, 2012). For each interview, the question lists were established (see Appendix A); however, the interviews were semi-structured and hence flexible. A semi-structured interview is done according to an interview guide, which provides a combination of questions, but also leaves freedom to modify them when needed (Bryman, 2012). All the interviews were opened for changes in the order of the questions and left space for a possible initiative of interviewees. Therefore, different stakeholders were slightly asked different questions accordingly to their professional activity.

All the respondents were selected based on their specific professional positions or the insights they could provide as stakeholders in processes of heritage planning in Saint Petersburg in general and in the Sevkavel case in particular. The main goal was to show the diversity of the actors involved; thus, all the chosen participants have different professional backgrounds and belong to various stakeholder groups. The recruitment of respondents took place in several ways where potential interviewees were asked if they would like to participate in this study. First, some of the contacts were found via websites and social media platforms. Besides, connections have been made through the network of the researcher. Finally, respondents were gathered through recommendations of the previous interviewees or the "snowball sampling" method (Bryman, 2012, p. 202). The number of interviews was chosen, ensuring the theoretical saturation by conducting interviews until new data no longer provides new insights. All the interviewees are listed in Table 1.

Table 1. The list of interviewees.

Number	Name of an interviewee	Professional position	Date
1	Anna Dmitrieva	Event and investments manager of Sevkabel Port	27.06.2020
2	Alexey Onatsko	Curator of the Sevkabel Port project	13.07.2020
3	Albina Motor	Initiator and producer of the "Waterfront" project	22.07.2020
4	Olga Morozova	The head of the Sector for Preservation of the Historical Landscapes of the Department of Protection Zones of Cultural Heritage Objects of the St. Petersburg Committee for the State	22.07.2020

		Inspection and Protection of Historic Monuments	
5	Olga Galkina	Deputy of the Morskoy Municipal formation (okrug), Vasileostrovsky District, St. Petersburg. Coordinator of the social movement "Protect Vasilyevsky Island!" (NGO)	28.07.2020
6	Georgiy Snezhkin	The leading architect of the architectural bureau "CHVOYA", that designed the Sevkabel Port project	29.07.2020
7	Alina Pchelintseva	The head of public relations department LLC PK Sevkabel	29.07.2020
8	Margarita Stieglitz	Professor of architecture, industrial heritage expert, vice-president of ICOMOS Russia.	08.08.2020

3.3.2. Data analysis

On the stage of data analysis insights gathered from the different sources were integrated to answer the research questions. The interview data analysis encompassed transcribing and coding the interviews, analysis of personal notes from the interviews and later related to the data provided by the other sources.

After careful transcription of the interviews audio recordings, the data uploaded in NVivo, a software program for the processing qualitative information, the analysis started from coding all the transcripts according to common topics. According to Gibbs (2007), in qualitative research, coding is "how you define what the data you are analysing is about". Firstly, the entire transcript has been read, where notes of the relevant passages are made to give a general impression of the interview. Secondly, categorization was made based on the most important observations and theories from existing literature, supplemented by findings from the other empirical data. The code tree with nodes made in NVivo clearly shows what respondents said about specific topics (see Appendix B). Later, the themes were categorized to confront, complement and answer the second, third and fourth research sub-questions. The most notable quotes were translated and used to illustrate the main arguments in the text. The data gathered from the interviews and other sources were subsequently used for the stakeholder analysis in the results chapter.

3.4. Validity, reliability and limitations

Bryman (2012) highlights two main criteria in establishing and assessing the quality of social research: reliability and validity. Reliability refers to the consistency of the research measures and evaluates the extent to which the results can be reproduced by using the same methods under the same conditions (Bryman, 2012, p. 47). With a comprehensive literature review and the interviews question list created after, the research aims to provide a consistent structure and answers to the research questions. By transcribing and coding of the interviews, it was possible to create results and provide insights with the analysis of responses, which also contributes to reliability (Creswell, 2017). In general, this study could be seen as repeatable, as the details of the interviewees are given (see Table 1, Appendix A and B). Besides, all the empirical data required for this thesis was collected using publicly available sources, which increases reliability. Although the context may change over time and the views of the respondents may differ, for qualitative research, as Bryman (2012, p. 47) argues: “replication in social research is not common”.

Validity criteria define how accurately the research methods measure what they intend to measure. Moreover, “validity is concerned with the integrity of the conclusions that are generated from a piece of research” (Bryman, 2012, p. 47). However, for the qualitative case study research, only the external validity or generalizability is of great concern. It shows how a single case can generate outcomes that can be applied more generally to other cases (Bryman, 2012, p. 69). Some researchers claim that since a case study research includes one or few cases, it does not have an ability for scientific generalization; similar case studies need to be examined in a wider variety of contexts from theory through the practice of grounded theory eventually. However, Flyvbjerg (2006) believes that formal generalization is an overrated method of knowledge gathering in the scientific inquiry and that not all theories have to be formulated through the process of formal generalization. From practical examples, he shows that even through single case studies, rigorous theories have been developed. Since the case study used in this thesis focuses on the specific context of Saint Petersburg, it may be hardly possible to apply the research findings to different contexts. However, the results of this thesis might be generally used in the contexts of Russian and other post-socialist cities.

Above all, this study took into account ethics, in particular in the form of the respondents' personal data protection. During the interviews, it was therefore asked whether participants wanted to remain anonymous even though all the respondents allowed using their personal information in this research. Finally, this research took place during the COVID-19 pandemic, so awareness of the possible research weaknesses should be mentioned. The measurements set by the Dutch and Russian governments made it impossible to travel to the research destination, conduct field observations and interviews in-person. However, the fact that the author is personally familiar with the research context made it possible to collect all the necessary empirical data using modern online technologies.

4. INDUSTRIAL LANDSCAPE OF SAINT PETERSBURG

This chapter will present the empirical research of the thesis, illustrating the case study of Saint Petersburg. First, the context of St. Petersburg is described, showing the historical and geographical backgrounds of the city's industrial landscape. Second, the chapter presents urban conservation and development issues of Saint Petersburg. Subsequently, controversial and successful examples of industrial heritage sites redevelopment are demonstrated. The next section presents the case study of the Sevkael Port project, describing what actors are involved in the regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals. Finally, the general conclusions were drawn on the characteristics of industrial heritage sites transformation in the post-socialist context of St. Petersburg.

4.1. The context of Saint Petersburg as an industrial city

Saint Petersburg, formerly Petrograd (1914-1924) and Leningrad (1924-1991) is a Russian port city on the Baltic Sea coast that served as the capital of the Russian Empire for two centuries. The city is located in the northwest of the Russian Federation and considered the cultural centre of the country. St. Petersburg has more than five millions inhabitants that makes it the second in Russia and the fourth in Europe largest city (by population within city limits).



Figure 3. Location of Saint Petersburg (Britannica, n.d.)

St. Petersburg has one of the world's largest and most intact neoclassical historical centres (Trumbull, 2012). The city centre and several palaces in the city's suburbs have been inscribed on the World Heritage List of UNESCO since 1990 (UNESCO, 2013). St. Petersburg bears the

status of Russia's cultural capital and the most European city being a mecca of historical and architectural landmarks. In addition to such types of historical and cultural heritage, the city also has a significant number of industrial heritage sites.

4.1.1. Historical background

Saint Petersburg was founded by Tsar Peter the Great in 1703 as Russia's "window to Europe". Between 1713–1728 and 1732–1918, Saint Petersburg was the imperial capital of Russia. Since its founding, the city played a significant role in Russian history (Britannica, n.d.): it was the main scene of the February and October Revolutions of 1917 and remembered for its severe defence while being besieged during the Second World War.

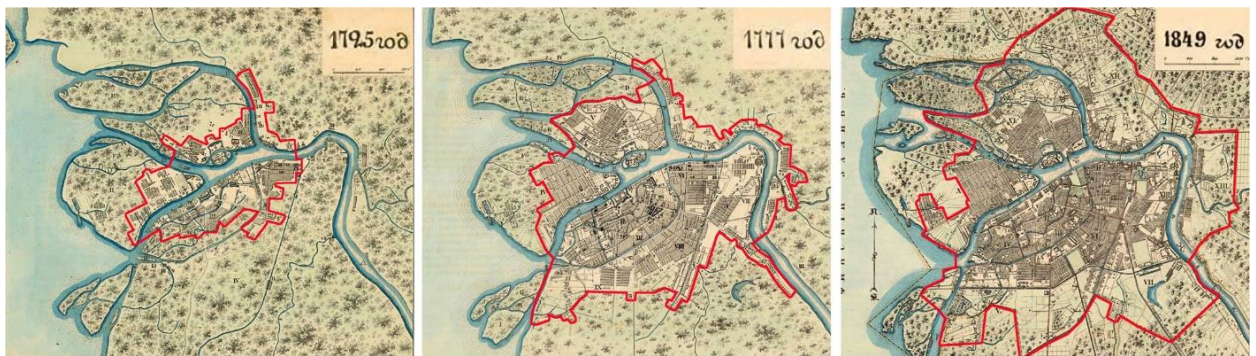


Figure. 4. Development of St.Petersburg in the 18th-19th centuries (St. Petersburg Government, 2020a)

Saint Petersburg as an industrial centre is another Peter's plan, which was successfully implemented in the 18th century and reached its peak by the turn of the 19th-20th centuries when Russia was experiencing an industrial boom and was one of the five leading countries in terms of industrial growth. The industrial spirit of St. Petersburg was also reflected in culture: poetry and prose, painting and architecture captured not only the front facade of the capital but also the powerful, intense look of the industrial city (Fontanka, 2019). The water orientation of industry is also typical for St. Petersburg, which was built not only as capital but also as a major port. Port and shipbuilding complexes, textile and cotton factories occupy vast territories along the city waterfront (Stieglitz and Nefedov, 2015).

The revolutionary movement, which had a significant impact on world history, originated in the factories of St. Petersburg at the turn of the 20th century. Therefore, the industrial heritage of St. Petersburg occupies a special place in the cultural space of the city (Stieglitz, 2006). The most famous view of St. Petersburg is the imperial city and the northern capital; but industrial heritage is the opposite of this image, encircling the centre with redbrick buildings, massive chimneys and water towers.



Figure 5. Workers of the Putilov plant at a meeting dedicated to the elections to the Petrograd Soviet, 1920 (Rossiyskaya Gazeta, 2019)

According to its internal architectural structure, St. Petersburg consists of three cities - separate belts or zones (Vorobyev and Shtiglitz, 2014). The first zone was built entirely in the tsarist time, during the 18th -19th centuries. It is a historical centre known throughout the world for its magnificent architecture, palaces, embankments, wide boulevards and cathedrals. The second zone is the industrial areas, which began to appear in the late 19th - early 20th centuries. This belt is of interest to historians because it was the home to the proletariat, which played a central role in the three Russian revolutions of 1905 and 1917. Later, it was the place where the new Soviet government and its avant-garde fellows did their first preliminary experiments in imparting architectural forms to the new Soviet way of life (Shtiglitz, 2006). There we can still find striking complexes of constructivist schools, factories and workers' residential buildings. The third St. Petersburg (Leningrad before 1991) is represented by large-scale post-war housing construction, which is still developing, promoting a massive urban sprawl of high-rise districts.

The "How old is this house" online interactive map with the age of all houses of St. Petersburg (Figure 6) illustrates the architectural landscape of the city with its three historical belts (How old is this house, 2020).

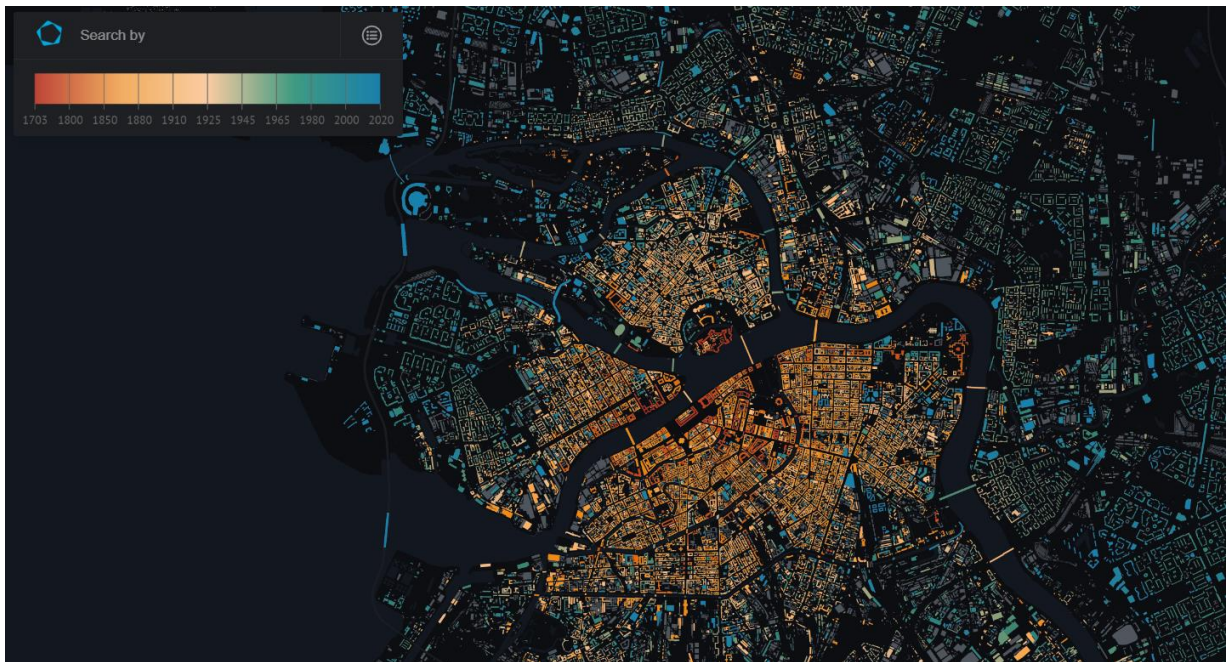


Figure 6. "How old is this house" map with the age of all houses of St. Petersburg (How old is this house, 2020)

The industrial development in the Russian Empire was significantly expanded during the Soviet period. Factories inherited by the city allowed Petrograd and later Leningrad to maintain the status of one of the leading industrial centres of the country. However, in modern St. Petersburg, part of the factories has failed, and a comprehensive solution to the use of former industrial territories has not yet been worked out.

The historically developed industrial zone became an intermediate zone between the centre and the new socialist districts. These "closed" industrial areas cover a territory three times larger than the historic centre (Stieglitz and Nefedov, 2015). It is an opportunity for relieving the city load from historical sites and accelerating the formation of new spaces and landscapes. All of this presupposes the development of an urban strategy for the transformation of industrial territories, taking into account the historical landscape and urban environment.

4.1.2. Location of the industrial zones: the "grey belt"

The industrial territories of St. Petersburg, commonly named as the "grey belt", cut the urban fabric, separating the historical centre from the peripheral areas where the most significant part of the population lives (Khitrina et al. 2014). In some places, the width of the "grey belt" reaches 7-8 km. This territory has vast development potential, as located in the immediate surroundings of the city centre and can be used to improve the economic, housing, transport and environmental, situation. Today 26 industrial zones are included in the "grey belt" (see Figure 7), the total area of these zones is about 6100 ha, which is around 30-35% of the central part of the city (Peterland, 2015). The "grey belt" transformation strategy can significantly boost the investment attractiveness of the city, give importance to industrial heritage and

improve the quality of the citizens' life. Nowadays, the transformations of the industrial zone cover only 11% of the territory (Stieglitz and Nefedov, 2015).

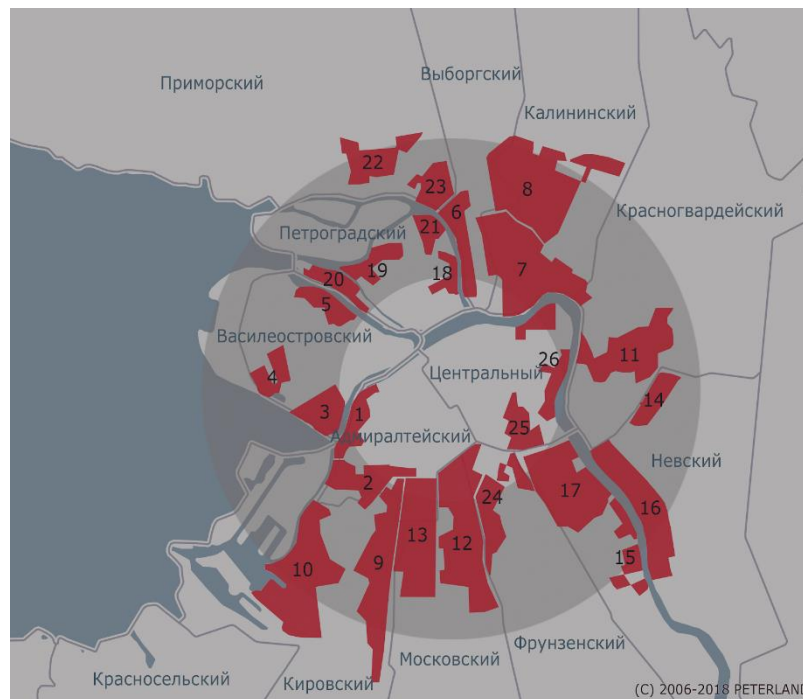


Figure 7. Location of industrial zones for redevelopment (Peterland, 2015)

The “grey belt” contrasts with the appearance of ceremonial St. Petersburg. However, this contrast is urgently needed for a lively, multifaceted metropolis with a great history, in which not only the imperial brilliance and luxury were found, but also the relentless rhythm of the industrial city that ensured victory and achievements of the whole country. Today most of the old industrial enterprises are worn out by 60-70%, and many of them have turned into a kind of “bureaus for renting out workshops.” The post-industrial situation turned the “grey belt” into a depressive zone, into a wide cord tightened on the body of the city, hindering its life and development. These zones are located almost in the centre of the city and occupy large territories, including Vasilievsky Island and the Neva river embankments.

Against the backdrop of a spreading city, the “grey belt” represents a “blank spot” of opportunities. It is an area located between the historical centre and the belt of densely populated micro-districts through which daily transit half of the city moves, significantly losing time and material resources. Today there are only a few people live there, activity (by the data of social media) is limited (MLA+, 2016). The “grey belt” lies in the middle zone of the city between the historic St. Petersburg and Soviet Leningrad. This zone does not belong to any of these eras and is open for new meanings. The “grey belt” is a unique territory of St. Petersburg that represents the history of the first industrial city in Russia.

Among the objects of the “grey belt”, there are many identified monuments of regional (Saint Petersburg) and federal (the Russian Federation) significance. Most of the industrial buildings of this “industrial belt” are examples of unique styles such as Art Nouveau, “brick style” and constructivism (OWHC 2019). The most careful attitude to them is necessary: to preserve and

fit these objects into the territory of a residential quarter is a task for developers not only as responsible entrepreneurs but also as citizens.

Nevertheless, time changes, the former power begins to decay, and a modern city that has long stepped over the “grey belt” spreads further and further. The industrial belt future remains in question for the city authorities, developers and residents.

4.1.3. Opportunities and barriers to the industrial belt development

The practice of urban development through the expansion of territories and the construction of new areas has proven to be unsuitable around the world. This approach is economically inexpedient since it requires vast budgetary costs for the construction and further operation of modern transport, engineering and social infrastructure. Development and modernization existing abandoned or unused areas of the city with simultaneous modernization of the transport frame is the optimal way for the strategic development of St. Petersburg as a modern metropolis.

In 2015, the St. Petersburg Committee for Economic Policy and Strategic Planning conducted a research “Perspectives of the Socio-Economic Development of the Grey Belt Territory”. One of the results of the study was the analysis of the land property structure of the territory. The research took in consideration 6754 land plots that have passed the cadastral registration with a total area of 7076 hectares. Figure 8 represents the land ownership structure in the identified industrial zones.

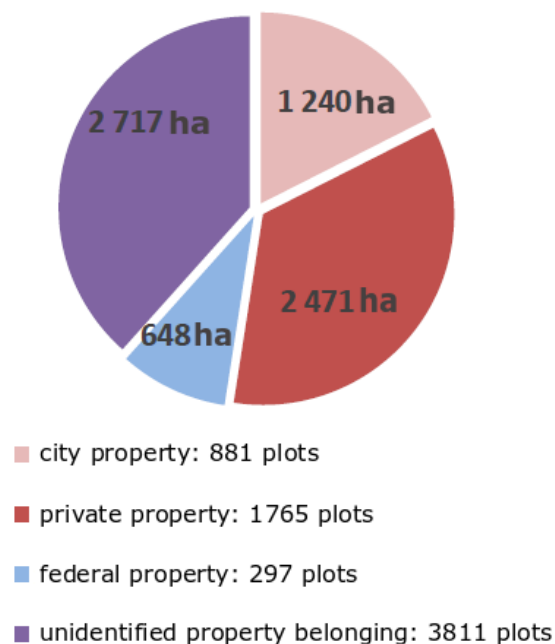


Figure 8. Land ownership structure in the “grey belt” (St. Petersburg Government, 2015), adapted by the author

The results show that a significant part of the “grey belt” belongs to private owners. In addition, the largest property share remains unidentified. The high percentage of private property (45%) is also shown in Figure 4, which illustrates the analysis of industrial land plots with an area of more than 20 hectares.

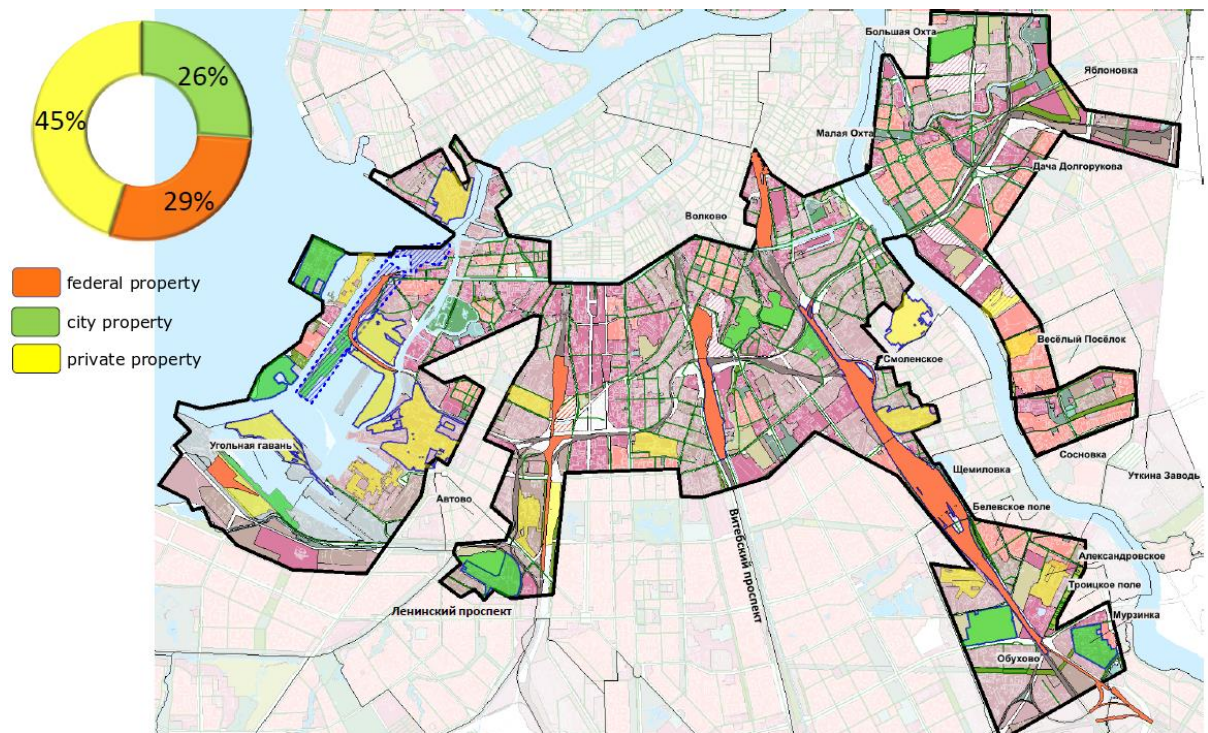


Figure 9. Analysis of industrial land plots with an area of more than 20 hectares by type of property (St. Petersburg Government, 2015), adapted by the author

The high percentage of scattered private property is one of the main barriers of the “grey belt” development. The involvement of these areas in economic circulation as objects for residential and business development, for cultural purposes is impossible simply because they are located in a depressed area. The deputy of the St. Petersburg Legislative Assembly Alexey Kovalev stated:

“The owner cannot transfer a plot to a residential area; he cannot sell a plot located somewhere on the embankment of the Obvodny Canal, among factories, on contaminated land. And no global investor will agree to renovate such a huge territory. Therefore, only a complex solution is possible, following the example of other countries, where the municipality buys out vast territories of former industrial zones, renovates them, and then sells them for construction.” (Nedelya, 2014).

The successful development of the industrial belt around the historic centre of the city is possible only under the condition of the centralized, planned development of industrial territories. This requires the city to buy out land plots for development purposes, or enter into a public-private partnership with the landowners.

"But many objects are in private ownership, and here it already depends not only on the city's strategy but also on the ability and desire of the owners to transform these territories. Taking into account, of course, those procedures that are regulated by law, because these are still objects of cultural heritage or within the boundaries of the historic environment, this certainly imposes its requirements and obligations." (Interview 4).

However, not all respondents agree that the main issue is private ownership. For instance, the prominent industrial heritage expert Margarita Stieglitz argued:

"Well, private property is a problem, but the state itself cannot do anything. Therefore, the owners do better than the state because the state does nothing at all. Of course, all the owners are different". (Interview 8).

Weak involvement of the government institutions to regeneration processes is another issue that limits the development.

"Unfortunately, the system in Russia is structured in such a way that our officials can simply be helped to do their job well. In some countries, they do not need to be helped, but here we need to help them." (Interview 3).

In 2016, the Committee for Urban Planning and Architecture organized an international closed architectural and planning competition "The Grey Belt. Transformation", where nine teams took part working on the concept of St. Petersburg historical industrial belt development. According to the results of the competition, 30% of the territory should be given to recreation areas, 30% to production and business facilities and 40% to housing (St. Petersburg Government 2020a). The competition concepts planned to be used in work on the new General Plan of St. Petersburg started in 2018.

However, the city government still has not elaborated any consistent strategy for the industrial zone development. The representative of the Committee for the State Inspection and Protection of Historical Monuments (KGIOP) Olga Morozova claimed that the complexity of this problem and lack of finance are the main barriers to the development of a united strategy:

"Here, everything is individual. Somewhere it is just a great desire of owners, and then the success of the project is pulled up. In other cases, it is difficult to predict a beneficial function, its good vision and development. Again, the financial component is important, because these can be costly decisions to bring an object into a new desired form. Proceeding from the idea that all objects are unique, it is challenging to select any unified formulas and answer this question in a certain way." (Interview 4).

In general, the fact that industrial heritage sites have its uniqueness gives it more opportunities for adaptive reuse:

"The potential of industrial architecture objects is probably in the wide possibilities of various functions that can be incorporated" (Interview 4).

Despite the difficulties listed above, the city government is working on a consistent policy document for industrial territories development that will bring the “grey belt” to a new life.

4.2. Issues of urban conservation and development

4.2.1. Heritage conservation conflicts

Many enterprises situated in the industrial zones did not survive the economic crisis of the early 1990s. In many cases, small businesses, light manufacturing, and warehouses now occupy their sites. Still, a large part of the facilities is not occupied at all, and the buildings remain empty or being destroyed. However, despite these tendencies, the majority of the closed factories remain empty because they are too expensive to renovate and retrofit for other uses (Vorobyev & Shtiglitz, 2014). If the buildings remain vacant and ignored, they fall into disrepair, irrespective of whether redevelopment projects are planned for them.

“But after all, St. Petersburg does not preserve it, this is the problem. Here are these crumbling buildings. If they were so much afraid, then we would not have so much trash in the historical centre of the city, we would not have nets, crumbling mansions, decayed wooden houses if we thought about heritage. That is, this is absolute hypocrisy, in my opinion.” (Interview 3)

The case of Krasny Treugolnik can adequately illustrate the issue of heritage decay. Krasny Treugolnik (“Red Triangle”) factory is one of the oldest Russian industrial enterprises in St. Petersburg, specializing in the manufacture of rubber products, created in 1860. Now it is in decay, and many discussions are going on about its future. The territory of the factory is scattered among several private owners, which implies additional difficulties in dealing with the industrial heritage buildings.

“The same Krasny Treugolnik, this is a heritage site, it cannot be demolished, and nothing happens there, architecture, as we know, without a person's presence dies rapidly. And it certainly makes me very sad” (Interview 3).



Figure 10. Krasny Treugolnik nowadays. Source: <https://alex-anv.livejournal.com/542812.html>

"Krasny Treugolnik is a very problematic territory now - a huge object and nobody knows what it is like. To master it, only to deal with all the owners - it must be some special holding or company that would deal with this, so it must be a public-private partnership that could work on this territory" (Interview 8).

Another example is the Bavaria brewery, one of the oldest breweries in Russia founded in 1863. In 1999, the Belgian concern "Interbrew" took possession of the company's shares, and the plant brewed more than 1.5 dekaliters of beer per year. However, in 2005 the plant stopped its work. The plant's production facilities have been closed, some of the old buildings have been demolished, and some are awaiting reconstruction (Redeveloper, n.d.).



Figure 11. Bavaria brewery in the 19th century (Redeveloper, n.d.).



Figure 12. Bavaria brewery nowadays (Redeveloper, n.d.).

"Bavaria brewery on Petrovsky Island, there is only an office and a malt house left, which they still cannot adapt. The owners there do not do anything themselves and do not give to others. There were interesting buildings and basements, but they are no longer there. Therefore, heritage is reduced to a minimum" (Interview 8).

In many cases, a developer that is required to deal with industrial heritage considers, first, how to remove it from the registry of monuments and demolish it: very few are prepared to discuss how to transform a building. Instead, the preference is for a fast profit, and it is much cheaper and more profitable to erect a new building on these valuable sites (Vorobyev & Shtiglitz, 2014). Moreover, the state does not provide any special incentives, such as preferential loans or tax breaks, for entrepreneurs to conserve the old buildings.

Butler et al. (1999) showed that the costs associated with historic preservation in St. Petersburg were significantly greater than for new construction. To make a reasonable rate of return on historic preservation, developers would make a square meter price of residential space affordable by only a small segment of the population. The authors recommended that several legal and economic policies should be changed simultaneously to stimulate additional private investment in heritage preservation.

Today, in the territory of the "grey belt", point rather large projects, mainly adjacent to the zones of influence of urban infrastructure, key avenues. The regulatory framework is very limiting complex architectural solutions. Developers prefer to demolish existing buildings and erect from scratch objects, in the same typology that is implemented on the outskirts of the city. Citizens call new high-rise residential buildings "anthills" (SPb Vedomosty, 2020).

"I do not know of a single example of a sparing reconstruction of a plant in St. Petersburg, which would lead to the preservation if we are talking about housing. Everyone is trying to build housing, and all these people are destroying the industrial heritage. Even if they are ordered to keep it under the law, even, in this case, there are attempts to make it emergency, break it at night; in general, they are engaged in lawlessness. Then on this parched desert, they build houses from slag, concrete and glaze them. And people live there, and everyone is unhappy." (Interview 6).

The Petmol factory example can demonstrate this issue. Petmol (former Leningrad Dairy Plant) was relocated outside the city, and in 2012, the territory of the plant was "cleaned up" for developers. In 2015, a new high-rise residential complex appeared a typical example of an "anthill" architecture.



Figure 13. Residential complex "Vremena goda". Source: <https://www.yuga-build.ru/sankt-peterburg/admiralteyskiy/zhk-vremena-goda>

In 2019, on the other side of the plant territory, one of the main buildings of the factory Petmol (built in 1932-1934) was destroyed. Now developers are planning to build a business-class residential complex. Several years ago, the All-Russian Society for the Protection of Monuments wanted to get permission to place the building under protection, but the Committee for the State Inspection and Protection of Historical Monuments (KGIOIP) did not give permission for this. Many examples of the Soviet industrial architecture are still not included in the heritage protection lists even though they have historical value.



Figure 14. Demolition of the Petmol plant building, 2019. Source: <https://moika78.ru/news/2019-03-23/207837-na-moskovskom-snosyat-zdaniya-petmola/>

"There are mostly Soviet buildings; I think they will all be demolished, unfortunately. However, it seems to me, that the Soviet buildings also have a right to exist and give a certain value to this housing by preserving the memory of the place. It is interesting to live not just in a typical concrete house but to live in a building where before you in 1939 someone riveted cables. Everyone loves it; they do it all over the world; this is very expensive housing" (Interview 6).

Many authentic industrial buildings are still not in the protected list. The process of obtaining an official status often is long and contains much bureaucracy.

"From the procedure, everything here is settled for us; this is Federal Law 73, it contains the whole mechanics of the issue of identifying an object of cultural heritage, which includes the justification of the historical and cultural value, how it is considered, and a decision is made. That is, this procedure has already been formed and established. Of course, the process is not quick, and you need to send this application, it must be considered, it must be a balanced decision, and then it is possible to be included in the register, the Ministry of Culture maintains it" (Interview 4).

According to the Committee for the State Inspection and Protection of Historical Monuments (KGIOP) representative, the former industrial buildings still have a chance to be included in the heritage list in order to be saved from potential demolition.

«Well, I think, there is potential for this. Many industrial ensembles in our country are already objects of cultural heritage, but something is "identified" at this stage, which means it has a chance of being included in the list. We have a vast number of cultural heritage sites in St. Petersburg, so many things have an opportunity to be identified in the future to obtain such a status. But the most iconic objects, of course, already have this status today» (Interview 4).

However, the heritage expert Margarita Stieglitz suggests that industrial heritage should be more open for transformations, which will attract more investors for adaptive reuse and prevent buildings from decay:

«You need to understand the industrial specifics: on the one hand, to preserve the industrial image, on the other hand, to adapt something. Here every change is subject to dilemmas. The specifics of industrial transformations should be more open, in my opinion» (Interview 8).

Therefore, if the trends listed above will continue to happen, the city will lose everything unique in the "grey belt" and remain with unresolved problems: binding the territories, creating public spaces and greening. New policies should be implemented to encourage investments in heritage preservation.

4.2.2. Urban development issues

The main issue of St. Petersburg urban development is a lack of quality public spaces and limited access to open water. St. Petersburg is a city on water, where one of the most popular tourist attraction is walking along the rivers and canals. However, even though Petersburg is a harbour city, it is quite hard to see the sea from here. Historically, the areas with the best views to the sea from the mouth of the River Neva has been taken up by shipyards, and their supporting factories, the industrial zone's red brick line embraces the historical centre.

"In school, we were taught this stereotype: 'Petersburg is the Northern Venice, the city of rivers and canals'. However, we travelled around Europe, and St. Petersburg certainly has nothing to do with Venice. No matter how romantic it may sound, when I came here as a tourist, all these bodies of water amazed and I thought, 'How great people live here, they have where to walk'. However, when we moved here, we found out: here is the Neva River, here is the Moika River, here are all the canals, but it does not work, this is only for tourists, for very short raids. The city does not live in the mode of everyday human interaction with embankments and water." (Interview 3).

Another problem is a shortage of green spaces and parks in the city, especially in the centre. Olga Galkina, the coordinator of the "Protect Vasilyevsky Island!" social movement noted:

"Firstly, we have a severe shortage of green spaces on Vasilyevsky Island, because the main green spot on the district map is the Smolensk cemetery. It is certainly not very positive and optimistic about walking there with children and spending free time. Therefore, at the first opportunity, we are fighting for the preservation and creation of new parks, squares, in general, any green areas." (Interview 5)

Indeed, Saint Petersburg, unlike other Russian cities, has a strong urban protection community (Vorobyev and Shtiglitz, 2014), which is represented by various grassroots movements of experts, activists and ordinary citizens fighting for green spaces and heritage preservation. These urban communities can influence planning and decision-making processes, preventing the city government and developers from adjusting the historical appearance of the city.

"Our citizens are very active city defenders. They often defend even what they do not know is valuable. They just see that something is being destroyed and immediately start to worry" (Interview 8).

Over the past few years, planning systems in many Western countries have shifted from top-down governance to more horizontally organized and bottom-up planning approaches. However, in post-socialist countries, this shift is happening much more slowly. In Russia, urban planning still relies on the Soviet state-controlled planning culture, which was characterized by exclusivity, arbitrariness and non-transparency (Trumbull, 2012). This tendency also seriously affects the Russian society and explains the lack of citizen participation in the planning process.

"We have many trust issues, there are such problems with the trust of the community in general all over the world, but in Russia of a new formation, especially since the 90s, the issues of people's trust in each other and especially among people in third-party organizations, the state, it is very low. " (Interview 3).

Nevertheless, in recent years, civic activity has been growing, especially in St. Petersburg:

"Over the past 10-15 years, citizens' self-awareness and activity have significantly increased. Therefore, I hope that social activity is growing and civil society is developing despite everything" (Interview 5).

Therefore, the urban development and social issues listed in this section create opportunities for rethinking the city values and opening new quality public spaces with green areas and views on the water. Industrial heritage sites can play an essential role in stimulating the placemaking process and civic engagement.

4.3. Redevelopment in the industrial belt

Since the past decade, St. Petersburg embarked on the industrial heritage redevelopment path that has already passed many European capitals. The tendency is developing across Russia in general, with Moscow leading in this process. St. Petersburg is slowly developing the industrial belt, although in recent years the situation has changed to some extent.

"On the one hand, we are losing much value over the past ten years. On the other hand, something has been transferred to the category of monuments. However, something is already adapting and changes are taking place, because developers have already exhausted all the possibilities in the center and interested in industrial areas. So there is such a multidirectional process: both negative and positive." (Interview 8).

To demonstrate that the topic of industrial heritage regeneration is becoming more relevant in St. Petersburg, it is important to mention the establishment of the ICOMOS Scientific Committee on Industrial Heritage and Engineering Objects, which organises discussions devoted to the fate of industrial facilities and the best ways to reuse them (Interview 4). Based on the Sevkabel Port and the Architecture Club space, the interdisciplinary meetings are held primarily focused on the professional discussion: architects, historians, restorers, urban planners – anyone who is not indifferent and can share professional experience and vision on the industrial heritage adaptation.

"If the redevelopment practice has already confirmed itself positively, naturally we try to support it. The discussion club is one of the forms of such support because some kind of consolidated professional advice is obtained that can be very useful to form some criteria or general recommendations, or vice versa, recommendations for a specific project." (Interview 4).

However, because there is no unified concept for the regeneration of industrial heritage territories, the fate of any historical building depends on the will of its new owner. The next sections will provide examples of industrial heritage redevelopment that will better illustrate the main tendencies and issues of this process.

4.3.1. Controversial examples

In the previous chapter, the heritage conservation issues such as ignoring and demolishing of the historical sites were discussed. At the same time, there are some examples of the incompetent reuse of historical buildings that are often preceded by the strategy of intentional negligence (Vorobyev & Shtiglitz, 2014). For instance, the former Varshavsky (Warsaw) railway station built in 1851, whose architectural value was destroyed when a shopping mall was installed inside the main building and a residential complex built on its territory.

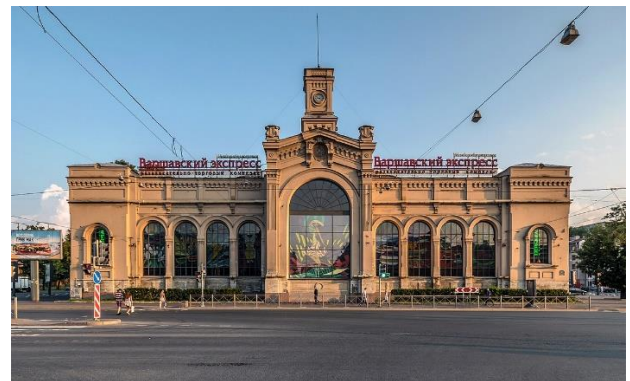


Figure 15. Varshavsky Station in 1904. Source: <https://pastvu.com/p/115692>

Figure 16. The Varshavsky Express shopping mall after the former railway station reconstruction. Source: <https://commons.wikimedia.org/w/index.php?curid=34345175>

"Well, there is no ignoring of heritage, but they try to reduce it with all their might. For example, the Varshavsky railway station, there was an industrial area, all these workshops, industrial buildings at the station – they were reduced to a minimum. With great efforts, they preserved the power station, the sheds for the imperial trains, and the water tower. However, the warehouses were demolished even against the law. You see, even the court admitted that it was illegal demolition of one of the warehouses. The territory was scattered, it lost its integrity, although some buildings remained, the main building was preserved, but they also wanted to demolish it. The rest was scattered; they built a residential quarter, which is rather indifferent. There was a museum with retro steam locomotives, but it was relocated to the Baltic station. Therefore, the atmosphere of this territory was gone, but something remains." (Interview 8).

Another case that can illustrate this issue is the Krasnoye Znamya textile factory built in 1926-1930. The constructivist power station building in the shape of a ship, built in 1926 by the project of one of the most famous authors of the avant-garde era, architect Erich Mendelsohn, has long been in decline, and its fate caused severe concerns among city defenders (Stieglitz and Nefedov, 2015).



Figure 17. Krasnoye Znamya in 2016. (Citywalls, n.d.)

A development company became the new owner of Krasnoye Znamya and received permission to build a residential complex on the territory of the former factory, while the power station building became a kind of encumbrance. According to the contract, the company had to preserve and restore the building. Margarita Stieglitz was the leading expert of this project:

“Well, with the Krasnoye Znamya, there was a massive struggle, I did not succeed in everything, but I managed to speed up the process of restoration of this power station. We did not manage to fight and reduce the height of the residential complex so that it would not argue with the station; the capital won there. Therefore, they restored a power station really under the pressure of expert representations.” (Interview 8).

As a result, the power station was well restored, although the territory was built up with housing. However, the owners and the city administration still cannot find a new function for the building:

“That is, such a problem - they do not know what to do. City officials keep walking, gasping and saying, they will take it for this, for that, but the city has not yet undertaken anything, except for visits” (Interview 8).



Figures 18 and 19. Krasnoye Znamya in the 1930s and 2018 (The Constructivist Project, n.d.)

Therefore, although the main heritage buildings are being preserved, the main issue remains that territories of formal factories are losing spatial integrity and “sense of place”.

“In general, the main buildings will be preserved, but space itself has already been lost. Basically, we are losing space, the spatiality of these territories.” (Interview 8).

4.3.2. Successful examples

Despite the difficulties described above, which lead to the use of negligence and demolition as strategies for dealing with industrial heritage in St. Petersburg, there are also some good examples of industrial heritage buildings that have been restored and reused for new goals, while preserving their spatial identities. All the projects listed below were regenerated with culture as the main driver, creating popular spots among citizens and tourists.

The Loft Project-Etazhi cultural centre is located close to the centre of St. Petersburg, occupying five floors of the former Smolninsky bread factory. The project has tried to conserve the factory's interior, which is rich in detail, including metal-clad concrete columns, a drilling machine, and ovens, by treating them as elements of the design.



Figure 19. Loft Project-Etazhi. Source: <https://kuda-spb.ru/place/loft-proekt-etazhi/>

In the historical part of St. Petersburg, on the embankment of the Obvodny Canal, a mysterious tower rises – the gasholder built in 1884. In November 2017, the gasholder was transformed into the world's largest Planetarium.



Figure 20. Gasholder Building – New Planetarium (Organisation of World Heritage Cities, 2019)

Street Art Museum is a unique territory of art combining a gallery space, street culture and functioning Laminated Plastics Factory. The Museum was founded in 2012 after a graffiti party held in one of the abandoned factory's workshops.

“To be honest, if the owner had the opportunity to build housing or a shopping centre on this piece of land, the Street Art Museum would not have happened. There, for various reasons, this cannot be done (power lines, contaminated land) and so the museum appeared. The interest of this project that there is an operating plant on the territory is unique.” (Interview 3).



Figure 21. Street Art Museum. Source: <https://tourspb.com/the-museum-of-street-art-opened-a-new-season-in-st-petersburg/>

Berthold Centre is a multifunctional project created to popularize the creative business and develop the cultural aspect of the city. The project seeks to unite various spheres of the creative industry. The cultural centre is located in the buildings of the former Herman Berthold foundry, a factory for creating typographic fonts for manual typing.



Figure 22. Berthold Centre. Source: <https://antennadaily.ru/2020/08/22/galereya-24-x-4/>

In the main building of the former spinning and weaving mill, a creative space "TKACHI" (weavers) was established, comprising art galleries, an exhibition centre, and studios.



Figure 23. Creative space "TKACHI". Source: <https://www.be-in.ru/mall/3169-kreativnoe-prostranstvo-tkachi/>

Another interesting example is the New Holland Island (Novaya Gollandiya), a triangle islet that formerly served for ship timber storehouses (18th century). This work of early classicism became one of the city's symbols, but a complex was a closed area during the Soviet period to use for this for military storehouses. In the 1990s, there were failed attempts to regenerate "experimental" pool in New Holland, due to which rare machinery and engineering heritage were lost, and valuable archives and small factory museums disappeared (Stieglitz and Nefedov, 2015).

However, after all the transformations and changes, in 2012 the new project investors (the company of Roman Abramovich) decided not to proceed with the original plan to clear the grounds to build a new building. Instead, they chose to organise a full-fledged city park, complete with a modern and convenient infrastructure, adapted to the public at large. The island continues to host cultural programs, as well as grand-scale civic initiatives (Organisation of World Heritage Cities, 2019). New Holland now is one of the most popular city spots.



Figure 24. New Holland Island before and after (Organisation of World Heritage Cities, 2019)

«Well, New Holland is just perfect. Because, firstly, this is a unique monument, almost Peter's times. Secondly, there is an amazing investor, a huge amount of money has been invested there, you can see it. Someone was not greedy and did everything perfectly. It even seems to me that there is some opposite effect – you come there, and you are afraid that you will be kicked out now because you are not well-dressed enough. Such an already too refined place. But of course, the heart rejoices when you look at how granite is laid out there, how these buildings have been restored, how new windows have been inserted, how everything is done inside, it's just perfect. I really like it. But this is a unique case.» (Interview 6).



Figure 25. New Holland Island before and after (Organisation of World Heritage Cities, 2019)

The case of New Holland raises the controversial question of the gentrification effect.

“Everyone knows who the investor of New Holland is. Abramovich bought out most of the buildings around New Holland and made a higher bid there because of New Holland. He makes money in other territories, 10-15 buildings, and this is a much larger amount of investment and probably earnings” (Interview 1).

Although the transformation from a planned economy to a market system generally made gentrification possible, as for now, it has not yet become a significant issue in Russian cities. “Even the most prestigious areas with a proper supply of commercial infrastructure typical for gentrification still have a very mixed population in social terms, and this picture has rarely changed over the last 25 years” (Bernt, 2016).

“It seems to me that there are no such examples of gentrification in Russia, we are still in a rudimentary state. There is no such thing as in Berlin and New York, whole districts; we do not have such a thing.” (Interview 3).

«Rather, these are only positive effects. You can talk about gentrification, of course, something may have been reflected somewhere. However, it is necessary to assess the scale directly, how big is the gap, and is it possible to judge any negative effect. In my opinion, the effect is extremely positive, so far now, because the spaces have really healed with new life. Everyone likes it, everyone feels good there, and of course, it is impressive that the owners do not stop; they have big plans for further development.” (Interview 4).

In 2019, Saint Petersburg became the winner of The Jean-Paul-L'Allier Prize for "Redevelopment of industrial cultural heritage sites and their territories for public projects" from of the Organization of World Heritage Cities (Organisation of World Heritage Cities, 2019). The city has been awarded for its five projects of restoration and reuse of old industrial buildings in the historic centre and its adjacent neighbourhoods. These sites are “New Holland”, “Planetarium No. 1”, “Sevkabel Port”, “Petrovsky Arsenal” and “Tkachi”, most of them were mentioned above. In the past, these sites were used as factories, but today they have been converted into unique heritage sites and have gained a second life as places for

different kinds of social activities like festivals, exhibitions, lectures, concerts and many others. Most of them are restored, but the process of restoration is still in progress (Organisation of World Heritage Cities, 2019).

Despite various barriers for industrial heritage revitalization in St. Petersburg, owners made it possible to find new modern functions for these industrial monuments, to restore them and to open them to citizens and visitors. Further elaboration of a comprehensive regeneration strategy would help the city to transform its industrial heritage into main identity sites, bring economic benefits and increase living standards. One of the successful projects awarded with The Jean-Paul-L'Allier Prize was Sevkabel Port, which will be particularly discussed in the next section.

4.4. The case of Sevkabel Port

Sevkabel (or Sevcable) Port is a project to transform the historical “grey belt” of St. Petersburg Harbour into a public cultural and business space. Sevkabel Port was opened in September 2018 and continues to develop. Since its opening, Sevkabel is one of the most popular public places in the city.

The project is based on the Sevkabel industrial complex, the first cable manufacturer in Russia, which is the main initiator and investor of the project. Part of its territory facing the embankment was donated by the factory for the establishment of the cultural cluster Sevkabel Port. The closed industrial area in the past is one of the most welcoming and hospitable spaces on Vasilyevsky Island today.

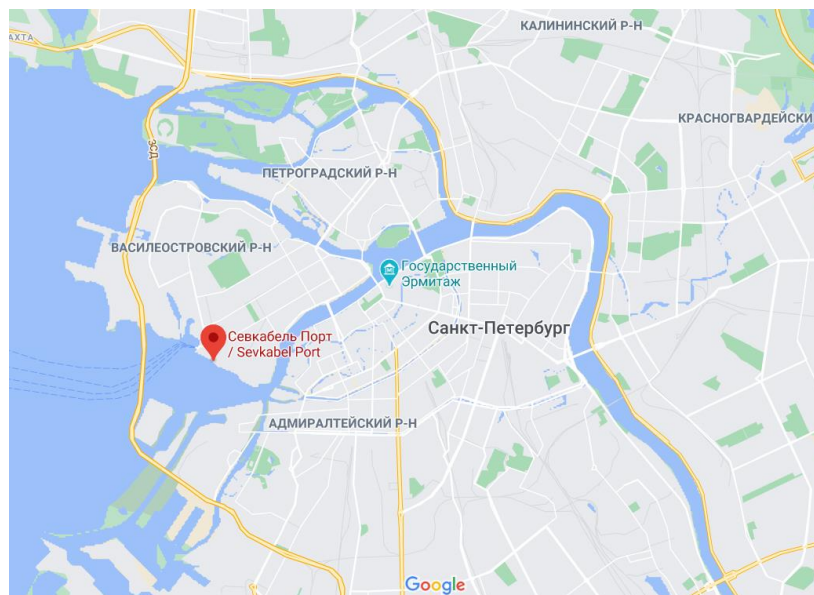


Figure 26. Location of Sevkabel Port on the map of St. Petersburg (Google maps)

The infrastructure of Sevkabel Port is created for people of any age. The place is unique due to the open view on the Gulf of Finland, the WHSD highway bridge and the Marine Station. The embankment quickly became one of the most favourite attraction spots for residents and visitors of St. Petersburg, as it is one of the few places in the city where you can take a walk while enjoying the sea view. The complex of buildings is divided into various functional areas to accommodate multiple projects for work, spending free time, participating in the creative process and doing sports.



Figure 27. Sevkabel Port embankment (Sevkabel, 2020)

4.4.1. History of the Sevkabel plant

The first cable plant in the Russian Empire was founded by German engineers Siemens and Halske in 1879 as a manufactory of the Siemens & Halske trading house. The plant began its existence with a project for the electrification of St. Petersburg (Sevkabel Port, 2020). In 1916, United Cable Plants, the former Siemens & Halske plant, was nationalized and given a new name – Sevkabel (Northern Cable Plant).

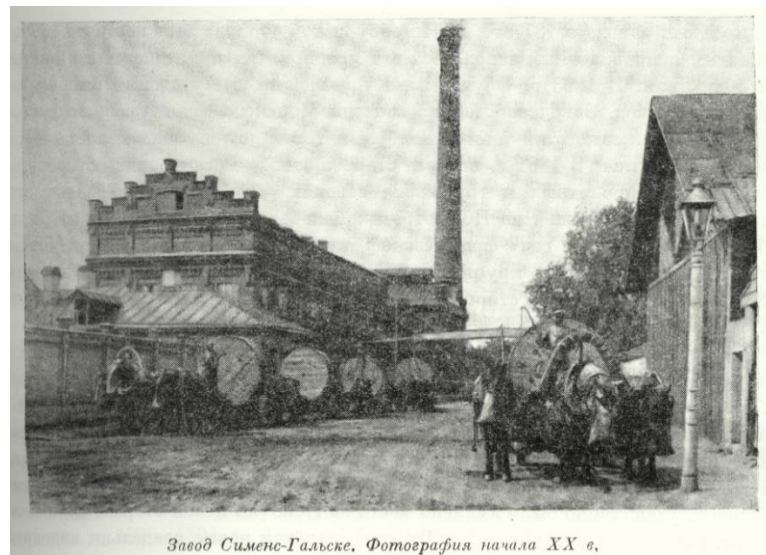
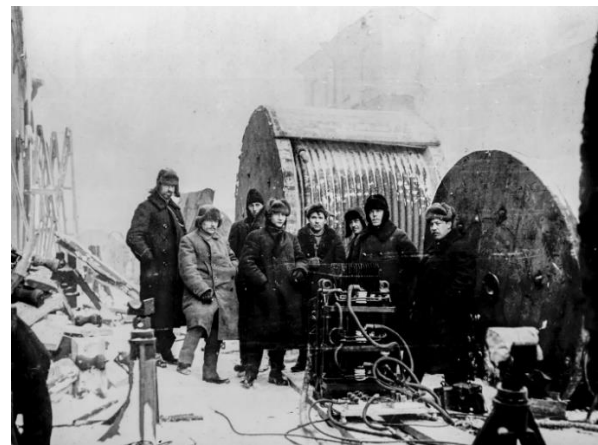


Figure 28. Siemens & Halske plant at the beginning of the 20th century. Source: <https://pastvu.com/p/130579>

In its history, Sevkabel supplied cables and wires for naval and ground forces in the First World War, was engaged in the electrification of St. Petersburg, produced the "Life Cable", which was laid along the bottom of Lake Ladoga to return energy to the besieged Leningrad. Sevkabel also provided cable to the largest construction sites in the country: almost all hydroelectric power stations and nuclear power plants, Magnitogorsk and Kuznetskstroj, the Olympics-80, the Moscow and St. Petersburg metro, and much more (Sevkabel Port, 2020).



Figures 29 and 30. Sevkabel plant in the 20th century (Sevkabel Port, 2020)

In the course of modernization in 2017, the introduction of new technologies made it possible to free part of the territory and relocate production lines. Twenty percent of the territory with access to water was freed up, and it was decided to create a cultural and business space with empty areas for various cultural events. A distinctive feature of this example of modern redevelopment of an industrial site is not just an art cluster on the ruins of a deceased plant, but the direct result of the modernization of the existing industry, because the plant itself stands across the street and continues to work.

"The plant management moved 20 % of the workshops to the other side. When times were hard for the plant, the new anti-crisis managers came and launched a project to renovate production, reduced the number of workshops and introduced a smart workshop system: fewer territory and fewer employees. But at the same time, the plant remained, it works, it produced even more than three years ago, the revenue is growing, it does not close, no one will be fired to make a territory for parties." (Interview 1).



Figures 31 and 33. Sevkabel plant nowadays (Sevkabel Port, 2020)

The idea of reorganizing the territory and introducing modern breathing came directly with the support of the management of the Sevkabel Group Company. A rare case when industry intelligently uses the territories it does not need, earning not only renting out premises but also providing the city residents with a new authentic venue with access to the sea, where various festivals are held. Nowadays, Sevkabel Factory is still well functioning, and it is one of the largest cable manufacturers in Russia.

4.4.2. The Sevkabel Port project concept

The benchmark for the development of the Sevkabel Port project was the successful experience of the European development of former industrial zones in Helsinki, Amsterdam, Stockholm, London, Barcelona (Sevkabel Port, 2020), where former shipyards, factories and warehouses were transformed into modern urban spaces that harmoniously combine the historical, architectural and social context, as well as business activity.

In the long term, the primary developmental goal is to create one of the most friendly and advantageous urban spaces and cultural infrastructures of the 21st century in St. Petersburg and improve the quality of the environment in the Vasilyevsky Island harbour.

The core values of the Sevkabel Port project coincide with the concept of placemaking:

- Creation of the quality public space that meets modern standards;
- Preservation of the territorial context and its industrial heritage, renovation of existing buildings;

"Of course, first, we are trying to preserve industrial identity; we have great respect for the monuments." (Interview 1).

- Creation of conditions for the new creative and entrepreneurial initiatives development;

"When it comes to important social, urban, public and other projects, we always find some kind of compromise. Sometimes we even provide a platform for free and help organize an event, for example, with charitable foundations" (Interview 1).

- Generation and development of products in the field of services, education and entertainment;

"People begin to think differently about their leisure and the financial component of their lives. It means that the money needs to be spent on impressions, on some pleasant moments, on receiving educational services. You can do it here more than in a shopping centre. We position ourselves as a social and cultural space because we are socially active" (Interview 1).

- Involvement of diverse citizens and guests: inclusive place;

"We, as a social and cultural space, adhere to the policy that we should be for everyone. We should not have some kind of target audience, for example, "people of 30-35 years old, without children and animals." No, we just adhere to the fact that a boy of 10 years old can come and go for a ride on a skateboard, and in the evening, his father can come and drink beer in a bar. It will be a comfortable place for both of them" (Interview 1).

- All the residents of Sevkabel Port share the main idea of the project - the creation of a harmonious and balanced community for the development of creative initiatives that contribute to the city;

"We call tenants who are located in our project as residents. For us, these are not just tenants who rent premises from us and do whatever they want, but this is a whole group of people who communicate with each other, collaborate their projects, they are interested in working with each other, they interact with us, and this is such a living organism, which interacts with each other. We select residents so that they are comfortable with each other so that they can interact and do business."(Interview 1).

- Flexible, multifunctional, affordable and accessible public space;

Sevkabel Port includes bureaus, workshops and offices, exhibition, concert and sports halls, children's studios, shops and showrooms, restaurants, cafes and bars. The entrance is free, and everyone can visit the embankment and enjoy the sea view.

- The renovation project of the Sevkabel territory takes place over time and is continually changing, adapting to new challenges.

"But this is a living, moving story, today the skate park is here, tomorrow there, today there is a construction site, and tomorrow there. This is the beauty of Sevkabel that it is not a static story, but a constantly evolving and changing one. There was no playground - it appeared, the embankment lasted. There the fence broke down, here the territory was also connected - this, I think, is the beauty." (Interview 6).

Sevkabel Port has three key concepts that are embodied in the design of the space and promoted on social media (Sevkabel Port, 2020). First, the embankment became the new seafront in the city: "The place where the city meets the sea". The pedestrian promenade overlooking the Gulf of Finland, which was opened by Sevkabel Port, is a new symbol of the city. Georgiy Snezhkin, the leading architect of the bureau "CHVOYA", that designed the project, states:

"This is the place where the city meets the sea. In St. Petersburg, paradoxically only a few such places exist in the historical centre of the city, where you can get to the seafront and sit quietly there. Therefore, this is the key to the success of this project. We first thought about this, and this is the main thing. The main slogan of our project." (Interview 6).



Figure 34. Sports event on the waterfront (Sevkabel Port, 2020)

The second concept of the Sevkabel Port is "Event factory". More than 600 events are held on the territory every year: educational programs, performances, concerts, exhibitions, sports activities, markets, film screenings, gastronomic and music festivals – this is the liveliest event venue in Russia (Sevkabel Port, 2020).



Figure 35. Cultural event at Sevkabel Port. (Sevkabel Port, 2020)

Finally, Sevkabel is “The driver for urban development”. Sevkabel Port combines the best practices of transforming industrial heritage into a regional centre of cultural and entrepreneurial activity. In 2019, more than 1,650,000 guests, including 300,000 tourists, visited Sevkabel Port (Sevkabel Port, 2020).



Figure 36. Sevkabek Port in winter (Sevkabel Port, 2020)

4.4.3. Heritage values

Sevkabel Port carefully restores the monuments of industrial architecture that exist on its territory, endowing them with new modern functions, and the concept of the project delicately emphasizes the historical memory of the place.

There are several historical buildings on the territory of Sevkabel:

- Building 40D along the Kozhevennaya line is an architectural monument. The former factory management, boiler room and climate laboratory in the 19th-century building now houses a brewery, design showrooms, an architectural and exhibition project, as well as the administration office and the Sevkabel Port team (Sevkabel Port, 2020).



Figure 37. Factory management building 40D before (2016) and after renovation (2018).
Source: <http://kanoner.com/2018/08/22/160413/>

- The historical building 40E is also redbrick but is not a monument (Interview 6). It served as the central department of the Siemens and Halske plant in the 19th century, the research institute of the Sevkabel plant in the Soviet and post-Soviet times. Now, this building houses cafes and restaurants, offices and bureaus.



Figure 38. The research institute building 40E in 2020 (Sevkabel Port, 2020)

- The UKT building was a cable packaging section, where reels were stored, on which the cable is wound. Now UKT is the most popular platform for events of various formats: from dance masterclasses to markets, from music festivals to scientific conferences. To the left of the UKT is a food court (Sevkabel Port, 2020).



Figure 39. The UKT building is hosting a festival (Sevkabel Port, 2020).

The main architect of the project emphasized that all the historic buildings were carefully restored and easily adapted to new functions:

“We did everything quite carefully. To be honest, concerning the monuments, our level of implementation was very modest and was limited to repairs. We did not carry out major alterations of the monuments, also because we did not get involved in reconstruction - it is hard, long, expensive and difficult. However, because these buildings are quite versatile, it is easy to adapt them to any function without any outstanding reconstruction.” (Interview 6).

The historical buildings not only remain restored but also telling the industrial stories of both Siemens & Halske and Sevkabel plants. Both of the plants contribute to the development of this territory. As a result, the territory has become complex and ambiguous. (Interview 6).

“In fact, even the names of the buildings that have remained inherit this industrial memory in one way or another. We have a UKT (cable packaging section), they made coils there, there is the Research Institute building, which designed and implemented new methods of cable production. There is an ABK (administrative building). One way or another, all this inherits exactly the industrial memory.” (Interview 6).

Furthermore, Sevkabel is translating its history through events, local history and theatre festivals, educational excursions and online platforms:

“We have our social media, in which we broadcast certain historical things, we are interested in, and we dig them up. In addition, we do all sorts of excursions with partners, also about the

historical past of these places. There are local organizations that include such things in their programs." (Interview 2).

"We also have the Instagram page of the Sevkabel plant, where they publish historical photos and write historical details." (Interview 1).

Moreover, Sevkabel is telling its story by using heritage details like machines and coils in the public space design:

"We collected small machines that remained as rubbish, restored them to a museum look, we did it ourselves; this thing is not very valuable, and there are many of such machines. We used them in the design; for example, some coils and tools are the base of a new glass table. Therefore, industrial relics are used in modern design." (Interview 1).

In the spring of 2020, a new industrial object appeared in the public space – the "Tesla" generator. For half a century, a direct current generator worked in the high-voltage laboratory of the plant. Technologies have changed long ago, became more compact and more powerful, a bulky generator was idle for a long time until it was decided to install it on the Morskaya square and designate it as a monument to the beauty and power of the Soviet cable industry (Sevkabel Port, 2020).



Figure 40. "Tesla" generator in 2020 (Sevkabel Port, 2020).

Apart from this, even the intangible heritage is used in the design of Sevkabel Port:

"We also use history in design, in graphic design, some elements remain within the corporate identity. Even the font that we have in our corporate name, we took from the bomb shelter at Sevkabel, stylized from there." (Interview 2).

СЕВКАБЕЛЬ ПОРТ SEVKABEL PORT

Figure 41. Corporate identity of Sevkabel Port (Sevkabel Port, 2020).

In the heritage field, there is a common discussion, whether it is necessary to create a museum to keep the memory of a place. The curator of Sevkabel Port project Alexey Onatsko mentioned that they are planning to create a museum about the industrial history of the site (Interview 1). However, the representative of the plant argues that the museum is not necessary:

“In my opinion, there is no need for any museums on the territory of the Port, because it will rather look like a tombstone - we already have enough problems with explanations that the plant is not dying, but is moving. After all, the plant functions and will function, just in a different place” (Interview 7).

Therefore, the Sevkabel Port project uses the industrial heritage values in its design, telling the story of the plant's past and preserving the place identity.

4.4.4. Plans and barriers for future development

The Sevkabel Port project is a prospect for the development of the entire sea line of Vasilyevsky Island. The project curator Alexey Onatsko informed about the future development plans of Sevkabel and other former industrial territories located nearby. Together with the city government, Sevkabel is working on a significant concept of connecting all the industrial territories along the waterfront to create a large transit embankment, where every former plant will carry a particular meaning, functions and historical context (Interview 2).

However, the project development now is limited by transport accessibility, since there is no metro station within walking distance.

“The problem of transport accessibility limits us, we were really looking forward to the opening of the metro, a new branch was supposed to open near us, but this did not happen.” (Interview 1).

To solve this issue, Sevkabel Port launched a direct transfer from the closest metro station, a taxi collaboration with a discount and made an additional parking lot. Another opportunity to attract visitors is the creation of water routes from the city centre. Moreover, the architects are planning to reveal access to the open water for visitors so that the name Port will justify itself even more.

"We hope eventually to make such an amphitheatre that would go into the sea, and you could touch it with your hands. It is difficult for coordination, ships sail there, ice freezes in winter, and a storm can blow up this amphitheatre. The organization of the port, which deals with everything that stands on the water, does not allow us to do this for now." (Interview 6).



Figure 42. The Sevkabel Port project by the architectural bureau "CHVOYA" (Sevkabel Port, 2020).

Another plan of the Sevkabel management is total relocation of the plant from its territory. Nowadays, eighty percent of the territory is still occupied by the working factory that is neighbouring with the cultural public space. The Sevkabel plant will soon begin releasing its historical site and relocate to the Kirovsky plant this year. According to the Sevkabel representatives, the relocation of the plant is not related to the development of the public space, but it is mostly due to the logistical accessibility of the plant location.

"It is not profitable and not modern to keep a serious large production within the framework of the city centre. Because of this, we have serious problems with logistics, many restrictions associated precisely with the fact that we are at Vasilyevsky Island. When the factory was built in 1879, this piece was not the central part of the city. Then it was fine, but after 140 years it is not at all the same." (Interview 7).

After the plant relocation decision was publicly announced, many newspapers and city activists started to question what would replace the Sevkebel plant. According to the new General Plan for the development and territorial planning of the city, the sites of the plant will change their purpose and will be transferred from industrial land to land of public and business development with the possibility of constructing residential buildings (Aleshina, A., 2020). The changes in the territories zoning confirmed the fears of the public – instead of placing art spaces or parks, which the residents of the Vasileostrovsky district wanted, the landowner will develop housing.

“There will be residential buildings; a developer will come and build housing. Well, that in principle is good, it is logical. It will be low-rise buildings because here you cannot build higher than Bolshoy Avenue, there is a 30-meter limit.” (Interview 2).

However, some experts, NGOs and local activists are sceptical about these plans:

“I am rather wary of the appearance of new residential areas because the infrastructure of Vasilyevsky Island is not designed for such an influx of permanent residents, and this is a big problem. In my opinion, this is certainly better than factories, but worse than parks, squares and public spaces.” (Interview 5).

Therefore, on the one hand, these transformations boost the development of the whole district, attracting new business, residents and visitors. On the other hand, it can lead to the possible pitfalls of the gentrification effect.

“On Vasilyevsky Island, housing prices have increased dramatically over the past two years due to all these new transformations.” (Interview 3).

Thus, the development of the cultural cluster affects the territory of Vasilyevsky Island and St. Petersburg in general. This topic raises a number of discussions among various actors involved in the project and affected by it. The next section will demonstrate the stakeholders engaged in the planning process of Sevkabel and show the relations between them.

4.4.5. Stakeholders involved

This section will discuss the actors that participated in the creation of the Sevkabel Port and its further development. Subsequently, the stakeholder analysis will be provided.

Private sector

The Sevkabel plant company initiated the Sevkabel Port project, and it remains the main stakeholder of the project.

Owners

Since 2010, the plant territory is the property of the investment fund of Bank Saint Petersburg. The plant company LLC “GK Sevkabel” has a long-term lease agreement for this area (Interview 7).

Several years ago, the plant undertook modernization: the old production machines were replaced with more modern ones, and the “GK Sevkabel” management decided to give part of the vacated territory for public and business space (Kazakov, 2017).

Miles & Yards developing company was engaged in the strategic development of the project. Based on “GK Sevkabel”, LLC “K40” company was created to manage the Port project.

Culture sector

Culture and creative industries have become the main driver of the Sevkabel plant redevelopment project. They came up with an idea for new cultural functions that will fill empty industrial buildings, revitalize them and attract visitors.

Alexey Onatsko with his creative agency "Dreamers United" came up with an idea of Sevkabel Port, its concept and strategic development. He remains the curator of the project:

"Somehow, placemaking was always interesting for us. It just started with some parties in unprepared places, in gardens, in abandoned factories, in forests. In the end, parties turned into festivals and then into some kind of permanent places and their attempts, and then it became such a story as Sevkabel Port." (Interview 2).

The "CHVOYA" architectural bureau was involved in the project: within a year, the workshops were gradually relocated to other areas, and a global reconstruction began in the vacated buildings.

The leading architect of the project Georgiy Snezhkin noted that the bureau almost did not have to interact with the city administration and other actors:

"It was a happy accident, relatively; we did not interact with anyone. Because this is the inner territory of the plant, it relates to the city government in historical buildings, which we changed minimally, we were allowed to do all the internal work without special approval." (Interview 6).

Public sector

The government of St. Petersburg

As noted in the previous chapters, one of the barriers, hindering the "grey belt" development is the weak involvement of the city government in regeneration processes.

The executive branch of the city government consists of departmental committees. Committee for the State Inspection and Protection of Historical Monuments (KGIOP) is the most important institution dealing with heritage regeneration. The role of KGIOP in projects can be divided into two blocks according to their competence: consulting assistance and popularization support (Interview 4). As stated in the previous chapter, Sevkabel Port was one of the projects that helped the city represented by KGIOP to win The Jean-Paul-L'Allier Prize from the Organization of World Heritage Cities (OWHC, 2019).

"There are many international projects in St. Petersburg now, and there will be even more. KGIOP organized this international competition. Here we are with them, they won, and we were part of their victory. Any committees within the city and administration constantly compete with each other. They have their own KPIs, their achievements, for which they are given much money." (Interview 2).

KGIOIP also participates in the new development concept, within the framework of which it is planned to redevelop some heritage objects.

"KGIOIP needs to preserve monuments, restore monuments, adapt them for modern use, well, not by itself, but it is an agency for these changes. There is a stunning 19th-century Brusnitsyns' mansion - a monument of national significance. There are some industrial artefacts, buildings of Siemens, Brusnitsyns, and factories of Vera Slutskaya. All these elements, of course, need the right approach for conservation." (Interview 2).

Besides KGIOIP, for the new development plan, Sevlabel Port interacts with several other committees: Tourism Development Committee, Transport Committee, and Investment Committee. This is important for Sevkabel to become a partner to the city since the neighbouring territories for further development are owned by the city.

"It is necessary to become a partner to the city, taking the development and giving them part of the shares in the future enterprise. Only in this way everything can be done." (Interview 2).

Therefore, the city government plays a supporting rather than an active role in this project.

District administration

St. Petersburg is divided into eighteen districts for the implementation of the powers of the executive bodies of the St. Petersburg government.

Administration of Vasileostrovsky district did not engage in the Sevkabel Port planning process. However, the public space hosts many local social events, doing a service for the administration (Interview 1).

"Administration of Vasileostrovsky district did not participate in any way; it did not interfere. This is also participation, in fact. This is important in Russia. It did not interfere and we, in turn, followed the necessary policy, gave them some opportunities that they asked for, this mainly concerns holding events on preferential terms. That is, in principle, we do tasks that they will not need to do." (Interview 2).

"Therefore, the city is on our side. I will not say that he actively supports us, but treats us well." (Interview 1).

Local self-government (municipal formation)

In St. Petersburg, every district is divided into several municipal formations, within which the state government is supplemented with local self-government independent of the state governance institution to manage local affairs. Municipal powers are quite limited and often overlap with specialized departments of the executive branch (Interview 5). Deputy of the Morskoy municipal formation Olga Galkina noted:

"In my opinion, this is the closest power to the people and, ideally, it should be a link between residents and the state executive authorities of the city. It does not always work out that way,

and the status of a municipal deputy does not always help in some social and political affairs, and the lack of this status for an activist is not always a decisive factor, it all depends on a specific person.” (Interview 5).

Therefore, municipal powers do not have enough power to influence on regeneration projects. However, sometimes they can engage with local communities, city protection activists and NGOs to participate in planning processes. In the case of Sevkabel, municipal formations play the role of an intermediary between the public space management and locals.

“We strive to maintain a dialogue with locals, but this usually happens through some activists we know or through local self-government bodies, municipalities. We let them hold events, meetings of alumni or veterans, whatever they need. If they ask us, we give them free tickets somewhere and so on.” (Interview 2).

Citizens

As mentioned in the previous chapter, public participation is not yet developed in the Russian spatial planning system. However, active citizens always get involved in planning processes, and the Sevkabel project is not an exception. For a successful public project, it is especially important to involve residents – this is the key principle of placemaking.

First, the core of the Sevkabel Port management team consists of residents of Vasilyevsky Island:

“I did this on purpose when I was recruiting a team so that they all live on Vasilyevsky Island, where we create our project, and this is important because then they want to get a little more from this job than just working on it. Their friends and relatives come here, and they are more responsible for what they do here. I personally have such an approach; I moved to the island when I started this project to feel the connection better.” (Interview 2).

Second, the Sevkabel Port team maintains the dialogue with residents through social media groups (VK, Facebook, Instagram) and invite them to urban events.

“Because those who live closest, they most often visit, and of course, it is important for them that this place carries a piece of their opinion. It does not mean that we will definitely do the way they want, but we are always happy to talk about it, we ask what do they lack, what they like or dislike, we usually conduct surveys. Based on this, we draw some conclusions. Sometimes we have some urban events, open lectures, to which they come, we invite them and communicate there.” (Interview 2).

Nevertheless, the project architect claims that there is no need for complete participatory design when creating a public space:

"It seems to us that there is no need to interact with residents to create public spaces. We do this sometimes, and we have experience with such participatory design and, as a rule, it turns out worse. Perhaps the problem is with us. Undoubtedly, this is valuable and useful information if we can ask the residents what aspirations, hopes, and problems they have. However, to design together, it seems to me a mistake. Everyone must do their own job." (Interview 6).

In general, Sevkabel Port monitors any feedback and try to involve citizens. However, sometimes it is difficult to explain the project concept to a new audience.

"We follow our feedback very closely. Sometimes a person comes without understanding the concept, says that it is not worth it, and laughs at something. Some people are dissatisfied with the financial component. Yes, our cost of receiving services is above average, often visitors do not like it. It is because we provide high quality and unique project. The stratification of society is making itself felt." (Interview 1).

Factory employees

One of the most important social groups that are involved in the project is the Sevkavel plant workers. Some of them were directly affected when several production lines were relocated to free the space for the new changes.

"At the same time, of course, there is probably a certain dissatisfaction of some of the employees; we have a classic "they destroyed the plant". It is difficult to explain that the plant is not standing still, and where previously there were 100 people, now 10 people are needed. Because technologies are changing and this is not our fault, as a public space, but completely different things." (Interview 2).

"In general, there were no problems, but there were questions: What will happen here? Who is doing this? What are the plans? Because at first, when it all just started, no one explained. Later, we have done some work with internal communications, explained why this is needed, why, what opportunities this opens up for the city and citizens, including what bonuses there are for employees. I think, thanks to this, there was no conflict." (Interview 7).

Some employees did not like events that appeared in the new space, especially night parties with loud music.

"Of course, there were also disgruntled workers. When the KPD nightclub worked, it held quite powerful and crazy parties, which sometimes ended at 10 in the morning. Employees who go home from the night shift or, conversely, go to the morning shift on Saturday or Sunday, did not really like the neighbourhood of such an institution. However, there were no serious precedents; therefore, there were no special conflicts." (Interview 7).

Most of the employees are not interested in the Port facilities and events:

"To be honest, most of the plant employees, except for the management and office workers, are not exactly Port's audience. It is not because we are not happy to see them, but because they have other interests. They are not ready to change their lifestyle. Perhaps this is a problem of our state; we have a huge gap in society. We have a huge gap between ordinary industrial workers and people with higher education, this is not visible in big cities, but it is very noticeable in small towns and enterprises. A noticeable difference in mentality and attitudes in life, levelling this gap takes decades." (Interview 1).

However, Sevkabel Port also created many benefits for the plant workers. Some of the technical staff work additionally for the public space and receive additional income. Some workers come to relax with their families, and they have discounts for events and boat trips. Besides, Sevkabel Port became a platform for corporate holidays (Interview 2).

"We have, above all, a bonus system for the employees of the plant. Most of the residents give discounts on their services and goods with an employee pass (shops, cafes, and bars). For example, Neva Travel offers a 25% discount on ship departures from Sevkabel Port. For some other events in Porto, we make discounted tickets for employees." (Interview 7).

Finally, the Sevkabel plant is moving from its historical territory to another location, and this obviously affects all employees. In general, there are no conflicts on this matter since the new place – the Kirovsky plant – is well located.

"Of course, we have many people who have been working here for decades. I guess it may be emotionally difficult for them, and I understand them perfectly. However, everyone objectively understands that this is necessary. This location, the territory and infrastructure that the plant has, does not suit it now. For example, some areas are redundant for us; we just pay for what we do not use – this is pointless." (Interview 7).

Heritage experts

The role of an expert in such projects is palpable. Margarita Stieglitz, a prominent industrial heritage expert in Russia, usually gets involved in such regeneration projects. At Sevkabel, she was a member of the jury of the project.

"This famous Sevkabel, which nevertheless does something. They somehow take this industrial area and retain at least its spirit of the place – it is clear that there was production there. This area is interesting, there is such an embankment, young people and this is a real public space, and very popular." (Interview 8).

Experts interact with the Committee for the State Inspection and Protection of Historical Monuments, but they cannot always influence the decision-making process.

"Sometimes it turns out to influence the decisions of business and authorities." (Interview 8).

NGOs

In St. Petersburg, there are many non-governmental organisations involved in the protection of cultural heritage and green spaces.

"Protect Vasilyevsky Island!"

NGO "Protect Vasilyevsky Island!" is officially registered movement created in 2005. Their goal is to solve the problems of the residents of the district: environment, transport, housing and communal services, protection of monuments and other issues.

"Our movement was created by an initiative group of residents, when the city's plans for the construction of the WHSD road, the reclamation of the western part of the VO and the construction of a passenger port became known. Residents of the district united to convey their position on these projects to the city authorities. The movement is one of the oldest in the city." (Interview 5).

Coordinator of the movement Olga Galkina supports the Sevkabel Port project:

"Of course, I have a positive attitude. I believe that all enterprises should be removed from the city centre to the maximum. I am glad about this trend, and the fact that public spaces are being created in place of enterprises is excellent. This is one of the few places of attraction for completely different social groups, and it is great." (Interview 5).

"Waterfront" project

"Waterfront" is an international interdisciplinary project implemented by the Street Art Research Institute and the Danish Cultural Institute in St. Petersburg. The focus of Waterfront is the city's embankments, coastal areas and the problems related to their use. The goal of the project is to study how the industrial territories in the Baltic Sea region are being transformed into new cultural and public spaces. They strive to create continuous contacts between specialists from Northern Europe and experts from the North-West of Russia and build a dialogue, thanks to which comfortable coastal spaces will appear in Russia.

"As part of the Waterfront project, we strive not only to change the spaces of city embankments but also to motivate citizens to reconsider their role in these processes. We want to develop and establish ways for residents to interact with representatives of local authorities, business and the art community. The collaboration of these groups is the key to creating a comfortable and modern urban environment that is open to everyone." (Interview 3).

"Waterfront" project is the resident of Sevkabel Port. The project involves activating several public spaces in the city, engaging locals using tactical urbanism and placemaking. Interdisciplinary teams are involved in the project: sociologists, economists, architects, landscape designers, artists, anthropologist, filmmaker, and people from the business. As a result, the project turned into a communication platform (Interview 3). Waterfront is trying to

be mediators of the dialogue between the authorities, professionals (architects, urban planners), developers, business investors and ordinary citizens.

“We could help businesses and developers work with placemaking, work with the city. We have experienced, we are a bottom-up initiative, but at the same time with experts. I would like to do it all further.” (Interview 3).

Hence, the “Waterfront” is trying to develop placemaking in St. Petersburg, encouraging bottom-up initiatives and citizen engagement. As for Sevkabel Port, it is evident that the placemaking approach was partly implemented in the project of the public space. However, the practice of open citizen participation was not used in the initial stages of the project.

“I would not call it total placemaking, no one participated in the creation of the space from an architectural and design point of view. Placemaking from a mental point of view – yes. We all know that people create this energy.” (Interview 3).

Stakeholder analysis

To demonstrate the stakeholders involved in the Sevkabel Port planning process and to show the relationship between them, the power-interest matrix is used. Mendelow (1991) suggests analysing stakeholder groups based on power (the ability to influence a strategy or project resources) and interest (how interested actors are in the organisation or project succeeding). Figure 43 illustrates the power-interest grid of the Sevkabel regeneration project.

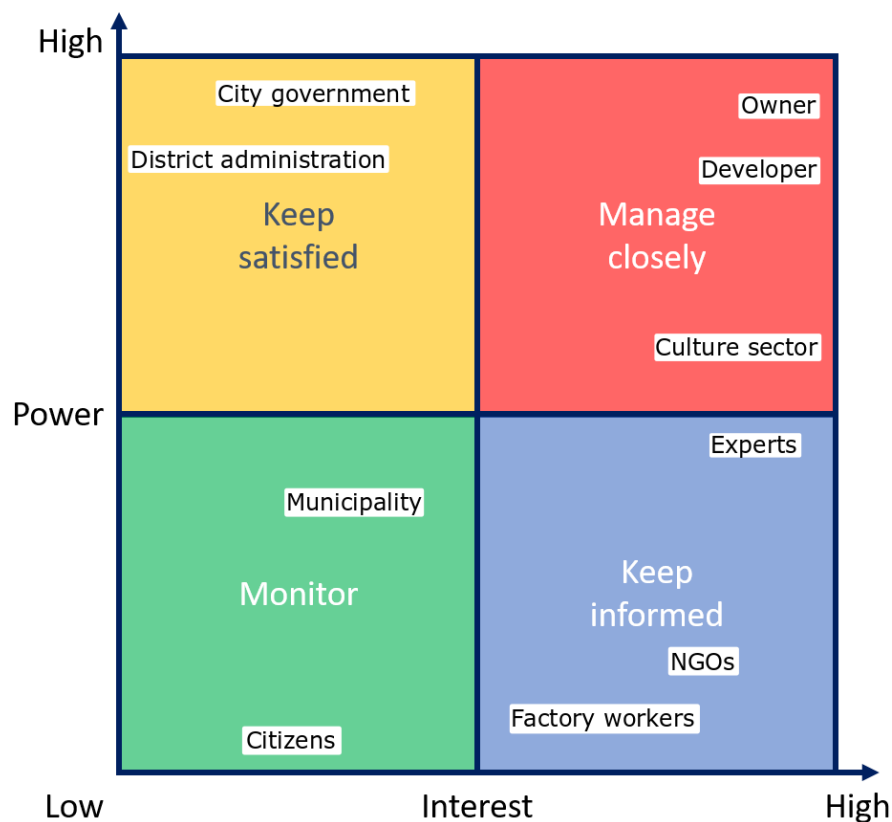


Figure 43. Power-interest matrix of the Sevkabel Port project, created by the author

Therefore, the stakeholder analysis of the Sevkabel project showed that development is strongly private-led. Even though the public sector has much administrative power, they are not highly involved in the private regeneration project. Culture sector plays a significant role in the process, creating the concept of heritage reuse. Heritage experts can also influence on the decision-making process concerning historical buildings reuse. Citizens have no power and low interest that does not allow being fully involved in the planning process. Using the placemaking approach can boost civic engagement.

The stakeholder power-interest matrix of the Sevkabel project can also be used to describe most of the examples of industrial heritage redevelopment in St. Petersburg.

4.4.6. Reasons for the project success

Since its opening in 2018, Sevkabel is one of the most popular public places in Saint Petersburg and can be considered the most successful practice of industrial heritage redevelopment in the city. Based on the analysis of the Sevkabel case in the previous sections, the success of the project can be explained by the following factors:

- The Sevkabel plant and its territory are privately owned, which significantly simplifies many issues related to the management of the site, which makes it possible to neutralize conflict situations;
- Location: Sevkabel Port located near the city centre and has the picturesque waterfront site;
- Lack of public spaces on Vasilyevsky Island and in the city in general;
- The high-quality design of space and event content;
- The Sevkabel Port team and residents create a networked community and cooperate;
- The project is aimed at dialogue with local citizens, which contributes to civic engagement;
- Sevkabel Port carefully restores the monuments of industrial architecture, uses heritage values in design, telling the story of the plant's past and preserving the place identity and "sense of place".

Industrial heritage plays an important role in the successful creation of Sevkabel Port. The leading architect of the project (Interview 6) highlighted three main reasons:

1. The first reason is functional. It lies in the fact that industrial buildings, due to their versatility, are well suited for almost any content. Historical red brick buildings contain large spaces with high ceilings and steel riveted structures inside. In general, Soviet industrial buildings that are not considered as historical monuments can be more flexible for transformation: take out slabs, remove pieces of a facade, and replace them with something new.

2. The second reason is that the architecture of industrial buildings is of high quality. Industrial monuments have particular aesthetic qualities that everyone knows and loves. Industrial heritage sites have a corresponding aura and some kind of pleasant characteristic.
3. Finally, the third aspect is the environment that arises: the territory between the buildings create complex, atypical and pleasant spaces that "direct you somewhere." (Interview 6).

Therefore, one of the key success factors is that Sevkabel keeps an industrial memory of the place and the same people are developing it. It is not just an abandoned factory, which was picked up by some developers that eventually transformed into a residential complex. Moreover, this is the precisely continuous development of the plant, when the production is reorganized, becomes technological, makes room and can become a full-fledged part of the city and public space.

4.5. Sub-conclusion

4.5.1. *From Sevkabel back to the larger picture*

The case of Sevkabel Port showed that such industrial heritage regeneration projects affect surrounding territories and the city in general. The Sevkabel project aims to develop the industrial site and not to remain an enclave, but to influence the environment around. Sevkabel becomes a new hallmark of the city, creating a large-scale functional promenade along the seacoast. On the one hand, these transformations boost the development of the whole district, attracting new business, residents and visitors. On the other hand, it can lead to the possible pitfalls of the gentrification effect as price increase and community displacement.

The stakeholder analysis of the Sevkabel project demonstrated the main trends of urban regeneration in St. Petersburg: private-led development and weak involvement of the city government. Culture sector plays a significant role in the process, creating the concept of heritage buildings reuse while preserving their spatial identities.

Sevkabel Port can serve as an excellent example of the industrial heritage redevelopment, using heritage values in design and telling the history of the plant. However, the success of Sevkabel Port will be difficult to repeat in other industrial heritage sites of the "grey belt" since this case is unique:

"The problem is that there are many factories, but there are very few well-located factories. Sevkabel's experience will be difficult to repeat at the Red Triangle plant, for example. Because Sevkabel is a compact, classy cluster, rich in architecture and environment, located

on the seashore and a 15-minute drive from the metro station, and when there is another metro station, it will be walkable. This is a perfect place, rather a unique location and a unique situation" (Interview 6).

Nevertheless, the case of Sevkabel and other successful examples demonstrated in this chapter showed that culture could serve as a tool in the heritage regeneration process creating popular spots among citizens and tourists. Moreover, industrial heritage sites can play an important role in stimulating the placemaking process and civic engagement.

The analysis of the St. Petersburg industrial belt development shows that the majority of measures for the transformation of these territories in the city take place rather chaotically, bringing barriers and conflicts in the heritage conservation field. The main reason constraining the pace of Saint Petersburg's redevelopment is that the city authorities do not have a comprehensive strategy for industrial territories development. Therefore, several legal and economic policies should be elaborated to stimulate additional private investment in heritage preservation that will bring the "grey belt" to a new life.

5. CONCLUSION

This master thesis aimed to explore the role of industrial heritage in urban regeneration and placemaking processes in Saint Petersburg. To answer the main research question, firstly, the concepts of heritage planning, industrial heritage, urban regeneration and placemaking were linked in the theoretical framework. Secondly, the characteristics of industrial heritage sites transformation in the context of St. Petersburg were examined. On the example of the Sevkabel Port project, the study described what actors are involved in urban regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals. Subsequently, the contribution of industrial heritage to placemaking was highlighted.

This chapter brings together all the theoretical and empirical findings to answer the overarching research question. Firstly, each of the sub-questions will be answered and after an answer to the main question will be presented. Finally, general policy recommendations for improving the “grey belt” redevelopment process will be provided.

5.1. Answering the research questions

5.1.1. What are the major challenges and opportunities for industrial heritage regeneration from the spatial planning perspective?

The nexus between urban heritage and planning is widely discussed among the researchers (Ashworth & Howard, 1999; Kalman, 2014; Renes, 2016; Janssen et al., 2017). The main task of heritage planning is to find a balance between conservation and development, maintaining a rational dialogue among various interests (Oevermann & Mieg, 2015; Graham et al., 2016).

Over the past decades, urban transformations are of growing relevance since cities expand while reconstructing existing urban areas. In such transformations, heritage plays the role as one of the foundations of quality management: it has economic value and is also a starting point for citizens participation in planning processes (Graham et al., 2016). Currently, redevelopment or regeneration of industrial heritage is considered as one of the central planning issues: dilemmas about protection, reuse or demolition always create conflicts in urban planning practices.

A systematic approach to the protection of industrial monuments is being formed in Europe with the advent of a new, post-industrial era. However, at times, industrial objects are thought primarily as a functional and not as a memorial component of society. The main problem faced in the preservation of the industrial monuments is that the industrial heritage was created for the purpose of production and did not claim to possess historical, scientific,

architectural, technological and social values. This heritage is not a piece of art and is not preserved for contemplation, but a better understanding of the development of the era.

Integrating heritage values in urban transformation projects can bring opportunities for socio-economic development: boosting tourism, recreation and other cultural activities of the post-industrial society. However, one of the main threats of such development is the controversial gentrification process that can lead to social issues like price rise and community displacement (De Cesari & Dimova, 2019). Therefore, it is highly important to involve citizens in the regeneration processes in order to avoid possible conflicts.

Culture-led city regeneration advocates prioritising the "experience" of place as the driver for successful placemaking. Unlocking the potential of heritage in its everyday context will not only enhance place identity and historic spatial connectivity of the urban landscape but also help to involve citizens in such projects.

5.1.2. What are the characteristics of industrial heritage sites transformation in the post-socialist context of St. Petersburg?

Despite the socio-economic and political changes that have been happening since the 90s, current urban planning in Russia still relies on the Soviet planning culture, which is now firmly combined with entrepreneurial practices (Trumbull, 2012). During the last twenty years, post-socialist forces have been shaping the transformation of the historical core of Saint Petersburg.

The industrial territories of St. Petersburg, commonly named as the "grey belt", cut the urban fabric, separating the historical centre from the peripheral areas. The rich history of Saint Petersburg reflected in the city's unique architecture creates restrictions on the formation of urban policy. As many objects are included in the list of protected objects, the transformation of the central districts of the city becomes a challenging task for prospective investors.

The "grey belt" is a very problematic zone of the city, which consists of many deprived heritage sites. The main issues of the industrial zones consist high percentage of scattered private property, lack of financial and legislative preferences for redevelopment initiatives and weak involvement of the governmental institutions. The city administration has not yet elaborated any comprehensive strategy for the "grey belt" regeneration.

During the past twenty years, the majority of the industrial sites transformations in the city took place rather chaotically, leading to the demolition or incompetent reuse of historical sites. However, recently created cultural projects like Sevkabel Port, New Holland Island and Planetarium show that regeneration of industrial heritage sites in St. Petersburg is coming to a new level of development. In these projects, industrial heritage buildings have been carefully restored and reused for new goals, while preserving their spatial identities. Most of the

successful redevelopment projects in Saint Petersburg were managed with culture as the main driver, creating popular spots among citizens and tourists.

Therefore, since the past decade, St. Petersburg embarked on the industrial heritage regeneration path that has already passed many European capitals, although the city is following its way.

5.1.3. What actors are involved in the regeneration processes, and how do they combine the preservation of heritage values with achieving spatial development goals? What is the role of the culture sector in these processes?

This thesis aimed to deepen the understanding of industrial heritage as a complex multidisciplinary task involving diverse actors: private sector, governmental institutions, citizens, factory employees, experts, culture sector and NGOs.

The stakeholder analysis of the Sevkabel project showed that development is strongly private-led. In this case, business, together with the culture sector played an essential role in the regeneration process, creating the concept of heritage reuse. However, in many cases presented in the previous chapter, developers tend to remove industrial heritage from the registry of monuments and demolish it: very few are prepared to discuss how to transform a building. Instead, the preference is for a fast profit, and it is much cheaper and more profitable to erect new housing on these valuable sites.

Even though the public sector has much administrative power, they are not highly involved in private regeneration projects. In St. Petersburg, the city government plays a supporting rather than active role in industrial heritage regeneration projects.

Citizens have no power and low interest that does not allow being fully involved in the planning process. Over the past few years, planning systems in many Western countries have shifted from top-down governance to more horizontally organized and bottom-up planning approaches. However, in post-socialist countries, this shift is happening much more slowly since they still rely on the state-led planning culture. This tendency affects Russian society and explains the lack of citizen participation in the planning process.

However, since the past decades, many activists and non-governmental organizations have been involved in the protection of cultural heritage and green spaces in St. Petersburg. As a result, civil society is developing.

5.1.4. What is the contribution of industrial heritage to placemaking?

Some researchers (Pendlebury & Porfyriou, 2017; Janssen et al., 2017) mention heritage as a factor contributing to the quality of public space and placemaking. Indeed, heritage as a social asset can boost bottom-up initiatives and civic engagement in the creation of public places.

Moreover, industrial heritage sites have unique values that contribute to placemaking (Pendlebury, 2018): industrial aesthetics, sense of place, heritage status, flexibility and universality of the buildings for adaptive reuse.

The same industrial values contributed to the placemaking process in the Sebkabel Port project, where heritage values are actively used in the concept and design.

5.1.5. The main research question: what role can industrial heritage play in urban regeneration and place-making processes in Saint Petersburg?

To answer the main research question, we will refer to the conclusions that have already been made in the sub-questions. Industrial heritage has both economic and social potentials that contribute to the development of Saint Petersburg.

First, industrial heritage is approached “as a factor” (Janssen et al., 2017) in the urban regeneration process. Heritage is used as an economic asset for attracting visitors, tourists, creative sector and business. In the case of Sevkabel, this approach helped to create a successful cultural space and boost urban development of Saint Petersburg in general.

Second, industrial heritage is approached “as vector” (Janssen et al., 2017) to social development and placemaking. Heritage is considered as a social asset, creating space for grassroots initiatives and citizen engagement in the heritage planning process. Indeed, heritage protection issue unites many activists in St. Petersburg, involving them in the planning process. Moreover, this approach highlights intangible aesthetic values, using it as a placemaking tool, for example, in Sevkabel Port.

Nowadays, the perception of the values of the historic city has expanded to encompass the symbolic and aesthetic values of places and the new use of urban spaces that define the historic city as a living heritage. Historical sites that are considered urban heritage are of vital importance to cities today and in the future.

In conclusion, this research explored the contribution of industrial heritage to urban regeneration, placemaking and community empowerment in the post-socialist context of St. Petersburg. Some general policy recommendations for the industrial heritage redevelopment in St. Petersburg will be presented in the next section.

5.2. Policy recommendations

This section will provide general policy recommendations for improving the "grey belt" redevelopment process.

First, the successful development of the "industrial belt" around the historical centre of Saint Petersburg is possible only under the condition of a comprehensive strategy that should be elaborated by the city administration.

Second, the government does not provide any special incentives, such as preferential loans or tax breaks, for entrepreneurs to conserve the old buildings. Several legal and economic policies should be implemented to stimulate additional private investment in heritage preservation.

Moreover, it is necessary to use public-private partnerships to solve the problems associated with disparate private property and abandoned industrial facilities. The city administration can participate in cleaning up contaminated territories.

Subsequently, cultural initiatives can be used as tools to launch the redevelopment process. The primary purpose of the application of cultural instruments is improving the quality of the urban environment. Developers and businesses are increasingly interested in territories where local communities are active.

Finally, residents are an asset that can be used for a positive renewal, as they determine the identity of the territory, observe their unique traditions and daily rituals. Positive community networking can influence business and state decision-making through participatory planning.

6. DISCUSSION

This research contributes to the research on the relationship between industrial heritage management and placemaking. Moreover, it contributes to the heritage planning debate in the post-socialist context.

The analysis of the St. Petersburg industrial landscape regeneration process can serve an example for other cities in Russia or other post-soviet countries. The recommendations can help to improve heritage regeneration process in St. Petersburg.

6.1. Reflection

The theoretical research was challenging since the placemaking field is relatively new and therefore, no comprehensive theories are yet proposed. Moreover, the theoretical framework was not perfectly elaborated, as there is a research gap in the connection between industrial heritage and placemaking. More details could have been presented on the urban regeneration topic and the actors involved. Possibly, the Actor-Network Theory (Latour, 1997) could have been used.

Regarding the methodology, the qualitative research strategy was appropriate and led to the main aim of the research – to gain more insights into the role of industrial heritage in urban regeneration and placemaking processes in Saint Petersburg. In general, concepts used for explaining the studied mechanism, resulted from the data, fitting the qualitative character of the used methods and exploratory nature of the research approach.

Despite the COVID-19 pandemic measures imposed during the whole thesis writing process, empirical research was quite successful. The interviews conducted by telephone made it possible to gain perceptions of activities and considerations of various stakeholders involved in the heritage regeneration processes. However, the industrial sites visits could have been useful to gain more insights and photo materials.

Finally, The Sevkabel Port case study made it possible to get concrete, practical and context-dependent information about the site.

6.2. Future research recommendations

First, the research has shown that there are still many aspects of placemaking that could be analysed further. This thesis focused only on a general description of the approach; however, specific cases can be presented in detail, conducting interviews with a bigger number of actors, also including representatives of different organizations.

Second, placemaking and citizen participation in the post-socialist context can serve as an interesting topic for further research, where several cities can be analysed.

Moreover, the controversial gentrification process can be researched in the context of heritage regeneration, bringing new input to the current debates.

Finally, a comparative study can be conducted in two different contexts: western European and post-socialist Russian. Two cities can be compared in terms of the heritage regeneration process.

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8. APPENDIX

Appendix A. List of interview topics

Questions on Saint Petersburg industrial heritage regeneration:

1. What changes with the industrial heritage regeneration have taken place in St. Petersburg over the past ten years?
2. What problems exist in the city?
3. Are there any good examples of industrial heritage redevelopment in St. Petersburg?
4. What do you think about the Sevkabel Port project?
5. How are you involved in redevelopment projects? What is your role?
6. How are city residents involved in the planning process?
7. What do you think about placemaking?
8. What is the role of the culture sector in the regeneration process?
9. Is there gentrification in St. Petersburg?
10. What is the role of industrial heritage in urban development?

Questions on Sevkabel Port project:

1. How was the project created?
2. What are the central values of the project?
3. How did the redevelopment of historic buildings take place?
4. Who was involved in the project planning process?
5. How do you interact with the city government?
6. How do you interact with locals?
7. How do the plant workers feel about the emergence of a cultural space?
8. What are your plans?
9. How do you tell the story of the project?
10. What is the role of industrial heritage in the success of Sevkabel?

Appendix B. The code tree imported from NVivo

Name	Memo Link	Files	References	Created On	Created By	Modified On	Modified By
StPetersburg		0	0	21-9-2020 19:39	VN	22-9-2020 17:33	VN
Tendencies		3	3	21-9-2020 20:41	VN	22-9-2020 16:21	VN
Stakeholders		0	0	21-9-2020 20:03	VN	21-9-2020 20:03	VN
Waterfront		1	5	21-9-2020 21:13	VN	21-9-2020 21:27	VN
NGO ZOV		1	3	21-9-2020 21:46	VN	21-9-2020 21:54	VN
Municipality		1	1	21-9-2020 21:54	VN	21-9-2020 21:55	VN
Experts		1	3	21-9-2020 20:09	VN	21-9-2020 20:23	VN
Culture sector		2	3	21-9-2020 21:30	VN	21-9-2020 22:14	VN
City gov		3	9	21-9-2020 20:07	VN	22-9-2020 17:38	VN
Citizens		4	7	21-9-2020 20:24	VN	21-9-2020 21:53	VN
Architects		1	1	21-9-2020 21:30	VN	22-9-2020 16:14	VN
Placemaking		1	3	21-9-2020 21:23	VN	22-9-2020 17:34	VN
Opportunities		4	8	21-9-2020 19:43	VN	22-9-2020 16:23	VN
Issues		6	16	21-9-2020 19:42	VN	22-9-2020 16:30	VN
Public space		3	3	21-9-2020 21:18	VN	22-9-2020 17:06	VN
Industrial Heritage		3	7	21-9-2020 19:40	VN	22-9-2020 16:28	VN
Positive examples		5	6	21-9-2020 19:48	VN	22-9-2020 16:54	VN
Negative examples		2	4	21-9-2020 19:48	VN	21-9-2020 21:17	VN
Controversial examples		1	5	21-9-2020 20:00	VN	21-9-2020 20:23	VN
Gentrification		4	6	21-9-2020 20:21	VN	22-9-2020 16:44	VN
Discussions		2	6	21-9-2020 20:04	VN	22-9-2020 17:03	VN
Comparison with Europe		3	5	21-9-2020 20:27	VN	21-9-2020 21:40	VN
Sevcable		1	1	21-9-2020 19:40	VN	21-9-2020 21:20	VN
Public participation		3	3	21-9-2020 21:33	VN	22-9-2020 16:17	VN

Project History		1	3	22-9-2020 16:38	VN	22-9-2020 16:50	VN
Problems		2	4	22-9-2020 16:30	VN	22-9-2020 16:58	VN
Private sector		2	3	21-9-2020 22:08	VN	21-9-2020 22:43	VN
Placemaking		3	4	21-9-2020 21:35	VN	22-9-2020 17:34	VN
Heritage		4	7	21-9-2020 21:35	VN	22-9-2020 16:13	VN
History		1	2	22-9-2020 16:07	VN	22-9-2020 16:11	VN
Design		2	2	22-9-2020 16:07	VN	22-9-2020 16:42	VN
Gentrification		3	3	21-9-2020 21:42	VN	22-9-2020 16:58	VN
Feedback		3	5	21-9-2020 19:58	VN	21-9-2020 21:47	VN
Factory workers		3	5	21-9-2020 22:11	VN	22-9-2020 16:49	VN
Events		1	3	21-9-2020 21:59	VN	22-9-2020 16:53	VN
Development plans		5	7	21-9-2020 21:47	VN	22-9-2020 16:57	VN
Concept		2	11	21-9-2020 19:50	VN	22-9-2020 16:58	VN
City gov		3	5	21-9-2020 22:03	VN	22-9-2020 17:38	VN
Benefits		3	4	21-9-2020 19:49	VN	22-9-2020 16:55	VN