Regeneration through creativity

Dynamics of a post-socialist, Eastern European society and the possibilities of a creativity-led regeneration in Budapest



Figure 1- cover: Edited photograph about the Weiss Manfréd Works in Csepel Island Public domain

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Post-socialist transition: 'The postsocialist systemic transformation is a historic process of gradual transition from centrally-planned socialist economy based on the domination of state ownership and bureaucratic regulation to capitalist free-market economy based on the domination of private ownership of the means of production and on liberal deregulation. It is an incredibly complex process, which depends on and has a bearing on factors of not only economic, but also social and political significance.'(Kolodko, 'Postsocialist Transformation'.)

 Eastern Europe: The term refers to the Eastern part of the European continent. However, there is no generally accepted classification for exactly which countries are part of it. In this thesis, the classification of the United Nations Statistics Division is used, where the following countries are part of this region: Belarus, Bulgaria, Czech Republic, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine ('UNSD – Methodology'.).

Creativity-led regeneration: The planning paradigm of the 'creative city' has been mostly developed by Charles Landry in the 1980s. He describes the concept in the book The Creative City: A Toolkit for Urban Innovators (2008). This type of regeneration uses people's creativity as a tool to increase competitiveness and liveability and it explores how people can act more creatively in the city. The idea is especially applicable in cities with an industrial past or where big economic changes happened, and whereas a consequence, the urban environment is less attractive.

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Table of contents

The context	8
Personal motivation	10
Introduction	12
Historical development	14
The post-socialist city	16
The research	36
Problem analyses	38
The aim of the project	42
Location choice	46
About Csepel	48
Socio-spatial dynamics	52
Theoretical foundation	56
Applied theories	58
Creative freedom in Hungary	60
The creative milieu	68
Future challenges	78
Theoretical framework	82
Addressing the post-socialist consequences	84
Methodology	86
Applied methods	88
Summary of the research framework	89
Research questions	90
Methodological framework	92
The design process	94
Steps of the process	96
Organisational setup	98
Stakeholders	100
Power-interest matrix	102
Analyses of the location	104
Design principles	146

Short-term strategy	160
Prioritisation of the design principles	162
Phasing	164
Test location	166
Short-term strategy map	168
Future scenarios	170
The importance of long-term scenarios	172
Steam	174
Rust	180
Rest	186
Busy	192
Sustainable creativity-led regeneration	198
Long-term phasing	200
Long-term strategy	202
Description of the desired future	204
The layers of long-term strategy	206
Long-term strategy map	212
The block structure	216
The street and public space structure	220
Details of the design	224
High streets	226
Transit streets	230
Streets with heavy traffic	234
The main entrance	240
The new height accent	252
The water tower	266
Conclusions	282
Reflection	284
Bibliography	290
Appendix	298

THE CONTEXT



'Play, imagination, and creativity are positioned as social practices that draw upon psychological functions that are themselves pathways for both the engagement with and the renewal of culture in response to changing conditions. Ultimately, it is the human ability to see and act "as if " and "other than" in play, as a basis for imagining and creating, that enables the creation of new practices along with the values that support them. These new practices reflect the dialectic between cultural continuity and change, as well as each individual's increasing capacity for moral imagination: the foundation for moral feeling, thinking, and action that creates possibilities and pathways for cultural transformation.' (Glăveanu, 2016)

Personal motivation

Budapest, the Hungarian capital was for a long time my home. This is where I grew up and spent most of my life. As I was living in this city, I never had the chance to compare it unbiased with other places. This has changed since I moved to the Netherlands. Since then, I have been able to look at my city with the eyes of a stranger.

Through these experiences, I recognized the differences Budapest has over other cities in Europe, which made me wonder about the reasons. With my thesis project, I would like to understand what shaped Budapest. Is it in any way special? Which urban design solutions could or could not work in this context?



Introduction

The last decades in the spatial development of the cities in Eastern Europe can be described as a complex outcome of the institutional and societal changes after the era change in 1989. During this time the economy of these countries was transformed from a central-planning-controlled system based on state ownership to a neoliberal one, where capitalist principles rule. Besides, the political structure also changed entirely because the socialist regimes were transformed into democracies.

Through these complex transitions, everybody's life was affected because regulations, employment and services were reorganised. These processes also had a great effect on the urban fabric and continue to affect the current development of these cities.

In my thesis, I collect the post-socialist consequences of the era change to specifically address them through creativity-led regeneration. This type of regeneration can be a catalyst to achieve an integrated design process to positively affect local communities and to reach a larger social impact through which the social and spatial consequences of the post-socialist transition can be addressed at the same time. This is demonstrated through a detailed creativity-led regeneration process in the XXIst district of Budapest, in the underused industrial area of the Csepel Works.

Map of Budapest

Municipality border

-----Border of the metropolitan region
Reliëf line (every 10 meters)
Roads
Water
Water

Ν



Map sources: OpenStreetMap

Historical development

The Second World War had a devastating effect on Budapest, its population dropped significantly and by the end of the war, most of the buildings were in ruins. After 1949, Hungary became a one-party socialist republic under the influence of the Soviet Union. As one of the first decision during the Soviet era in 1950, the border of the city was extended, and 7 smaller cities and 16 other settlements became part of it. The urban fabric of these settlements and the old Budapest was discontinuous with a vast amount of unused land in between.

In 1950, the population of the city started to grow, and it continued to grow steadily until 1980. During this period a large number of prefabricated housing estates were built, which provided housing for the new residents. A zone of these prefabricated housing estates and new industrial areas were developed in the empty lands between the fabrics of the old city and its extensions. Today around 25% of the population of Budapest lives in these prefabricated socialist housing blocks.

Since 1989 three decades have passed, therefore, the effects of the era change on the urban fabric can be properly observed. The two most conspicuous differences are the depopulation and de-industrialisation of the city. The exodus of people began as early as the 1980s but markedly intensified after 1989. Despite the trend of depopulation, the urban fabric has continued to grow in the recent decades. Besides, the importance of the industry in the economy of the city has started to decline after 1989 and most of the former industrial areas are left abandoned. It is estimated that nowadays there is around 1200 ha of underused on unused brownfield land in the urban fabric.

In the following chapter, the underlying causes of these trends and other post-socialist consequences are explained in detail to discover what kind of design approach can support mitigating them.



Figure 4 The destroyed Chain Bridge and the Royal Palace, Budapest (Soviet Red Army, 1945)



The growth of the urban fabric

Municipality border before 1950 Municipality border after 1950 Dense urban fabric Non-continuous urban fabric Socialist prefab housing Industrial area Water





The post-socialist city AR3U023 - Theory paper

Since 1989 every layer of the society, the economy and the urban fabric have been affected by the changing conditions and the aftermath of the fast transition of the era change. To understand it better, the thesis uses the conceptual framework created by Sýkora and Bouzarovski (2012) to describe the post-socialist transition in an explanatory way.

They state that the post-socialist transition happened on multiple levels following a specific pattern through time. First, the more general institutional changes were achieved, which set up the framework for the new society. Therefore, the societal changes were consequences of the institutional restructuring and only when the societal changes became more prevalent, started the people to act and use the urban space differently. Hence, the urban transition does not happen without changes in politics or economic rules. These changes stimulate societal restructuring and later on, the societal restructuring initiates the transformations in the urban fabric. In conclusion, in the post-socialist transition, societal changes are prerequisites for urban change (Sýkora and Bouzarovski, 2012).

The thesis uses the levels of the framework created by Sýkora and Bouzarovski (2012) and starts out by examining and collecting the institutional, the societal and the spatial consequences of the era change.



Figure 7: The layers of transitions (Sýkora & Bouzarovski, 2012)

The consequences of the institutional transition

In the case of Hungary, the post-socialist transitional process started with basic institutional reforms, which were achieved in a couple of months after 1989. However, the elapsed time has made it possible to evaluate the new institutional structure and there are certain negative characteristics which can be observed.

After the era change, the **decentralisation of power** was an ultimate goal of the restructuring; therefore, Budapest developed a two-tier municipality system, which includes twenty-three districts with great autonomy and one greater municipality of the city of Budapest. After 30 years, however, it can be observed that achieving large-scale transformations has become difficult because of this structure. These kinds of developments would require the collaboration of several districts and this often proved to be problematic. Furthermore, there is a lack of consensus on urban vision because of the same reasons (Kiss, 2018).

After 1989, the amount of state subsidy declined and municipalities made revenues in the first years from personal income tax, which generated high-income residential suburbanization. Besides, they started privatising their properties. Today a large part of their income still comes from **privatisation** and other forms of local taxes. However, these revenues are often not enough to maintain urban infrastructure (Stanilov, 2007). Therefore, in the case of Budapest, there is a tendency that more and more public tasks are taken over by the state or by the greater municipality of Budapest and district revenues are further withdrawn by the state (Szente, 2014).

Another consequence of insufficient funding is the **race for investments**. To raise the attention of investors, municipalities often favoured their needs over consistent urban development in the first two decades after the era change (Kiss, 2018). Today, almost all of the developments in Budapest are funded by the EU or by the state. The EU-funded developments require own municipal resources to finance these projects, which has resulted in growing municipal loans. Furthermore, maintaining and managing the developed areas are often unsolved or underfunded and there is a lack of Budapest-scale collaboration in the management of such public spaces (Budapest Városfejlesztési Koncepciója Helyzetelemzés, 2011).

All the above-mentioned tendencies further reinforce the **weakened position of urban planning** (Stanilov, 2007).

Consequences on the societal level

The institutional changes and the transition to a market economy caused profound societal changes in the post-socialist countries. In general, Eastern European societies show similarities in these societal consequences (Balázs et al., 2015).

In Hungary, the **total retreat of the state from the economy** was the most important factor. Therefore, people and companies were on their own, without any help from the state. The previously state-owned companies were not able to compete anymore and went bankrupt or were privatized to foreign investors. As a result, 1,5 million workplaces were ceased, the Hungarian economy went into depression, the GDP fell

by more than 20% in a few years, there was high inflation, and the real value of wages and salaries and the standard of living has fallen significantly. As a consequence, the number of poor people started to rise and marginalization processes began, which since has been inherited through generations (Kovách, 2006). To summarize, **the inequalities in society started to grow** rapidly. In the last decades, social and economic inequalities have further increased (Balázs et al., 2015), which affected the political climate because it pushed politicians to adopt more populist attitudes.



Figure 8: GDP growth, inflation, and active population in Hungary 1990-2010 Blue: GDP growth compared the previous year (left axis), Red: inflation rate compared the previous year (left axis), Yellow: employment rate compared to the total population (right axis) (Mrgann, 2009)

These had a great effect on today's society because this stimulated an opportunistic behaviour. Consequently, a **high level of corruption** is still a concern, which is often appears in a form of external private interest taking over public policy formation. Although citizens' perception of corruption has improved since the era change, this is still high compared to levels in developed democracies. Furthermore, corruption holds more possible political dangers, as it can lead to the growth of authoritarian political influence and economic stagnation (Balázs et al., 2015).

The **lack of confidence in institutions,** which is an indicator for the state of democracy as well, is a typical symptom of Eastern European societies. This is significantly higher in more established democracies in Europe compared to the post-socialist countries (Balázs et al., 2015).

During Soviet times, there was no civil society as a self-organized form of opposition or control over the state in Hungary. Therefore, being part of a civil group is also a new phenomenon, which in the last thirty years has not embedded fully yet in the culture of post-socialist countries. Although civil society has progressed and changed a lot since the regime change, the number of members of these groups has not increased over time. While this rate is also declining in other parts of Europe, there



(Hungary Corruption Index, 2019)

the membership numbers are still considerably above the Eastern European level (Balázs et al., 2015). According to Balázs et al., **low civic engagement** undermines the legitimacy of these civil groups, which in return cannot fully play their part as an opposition to the government in the democracy.



Figure 10: Diagram of civil engagement index (Gallup Global Civic Engagement, 2016)

Consequences on the spatial level

The urban fabric of Budapest can be divided into four major zones according to its development and morphology (Budapest 2030 Hosszú távú városfejlesztési koncepció, 2013). The spatial consequences of the post-socialist transition are different in each segment of the city and are further examined in the following chapters.

In the current system, space is differently valued and used than in the previous era. According to Stanilov (2007), the post-socialist transition can lead to a more efficient or more wasteful pattern of use and it can affect social integration, the quality of life and the economy. The **current forces of the transition are driving post-socialist cities in a less sustainable direction**.

All these spatial processes -described in the following paragraphs- are present in Western European or North American countries as well (Stanilov, 2007). The difference is in the pace of the change because in the post-socialist countries the institutional transition happened in a couple of months, and the first spatial consequences also started to develop in a decade, while in other countries with a non-socialist past these spatial processes were more gradual and without the dramatic institutional and societal changes.

Zones of the urban fabric

The areas of Budapest can be categorised into four major zones by their morphology. This definition of the zones is based on the outline used by the municipality of Budapest to form a future strategy for the city. In their distribution, the areas next to the Danube form a separate, fifth zone, but from a morphological perspective, these areas all belong to the other four morphological entity.

Inner city Transition zone Hilly zone Suburban zone

Ν



Map sources: OpenStreetMap; Budapest Városfejlesztési koncepciója





The inner city

The building stock of the inner city of Budapest was completed before the Second World War and forms the dense core of the city. However, since 1989 these areas have **lost large percentages of their residents** ('Budapest népessége', n.d.) because a lot of the inhabitants especially with children, favoured a family house with garden, which is a rare phenomenon in the inner city.

Through this transition, apartments in inner city housing blocks were more available and were often bought as investments. Consequently, the private rental sector grew rapidly.

The innermost parts of the city have always been considered high prestige. Foreign investors also favoured the inner city; therefore, the first office buildings were reconstructions of old buildings and new infills in the city centre. Furthermore, with the change in the economy and with the rise of the entrepreneurial spirit, small businesses also took advantage of the availability of the inner city apartments and opened offices in them (Stanilov, 2007). There was essentially no control over this transformation, and it had a great effect on the community of these apartment blocks.

Consequently, the availability of the inner city dwellings has decreased over time and the prestige and accessibility of the city centre soon raised the prices which pushed many lower-income residents out. For today the innermost areas are **completely gentrified** and property prices are the highest in the whole country.

In 1990 around 50% of the housing stock was state-owned in Budapest. By 2011 this has decreased to 4,5% (Központi Statisztikai Hivatal, n.d.), which further reinforced the displacement of lower-income residents because of the **unavailability of social housing**.

Currently, these areas form a **highly mixed-use monocentric centre of employment**, where very few people can afford to live.





The hilly zone

Since 1989 this part of the city has shown similar **gentrification** processes than the inner city. However, this area is a mostly **mono-functional** zone of housing with some mixed-use office areas bordering the inner city of the Buda side.

Similarly to the center of the city, the **lack of social housing** is also present and property prices are almost as high as in the inner city. The lack of social housing further increases the division between the higher and lower-income population (Kulcsár & Domokos, 2005).



Data source: Szociális lakásgazdálkodás (2004–2019); Statisztikai egypercesek





The transition zone

In Budapest, just like in many other post-socialist cities, large socialist housing and industrial areas formed a **discontinuous ring around the inner city** (Stanilov, 2007).

In the last thirty years, however, the structure of the economy of the city has changed drastically. Since, the era change the share of the service sector has been growing steadily and dynamically, in parallel with the decline of the industrial and construction sector. Therefore, the previously state-owned, large industrial businesses mostly closed down since 1989, when they needed to compete in the new capitalist economy, leaving **large unused or underused**, **often contaminated brownfield areas** in the urban fabric. The privatization of these areas took place spontaneously after the era change when there were no urban planning strategies about the development of these industrial zones. Thus, a chaotic system emerged, and it has become very difficult to carry out large-scale development plans due to their **disjointed ownership pattern** coupled with a mosaic of diverse (industrial and non-industrial) activities, which have since occupied these places (Kiss, 2018).

Since the change of the era, some of these smaller lots have been regenerated, but this also happened spontaneously, and investors favoured the easier, greenfield developments with good connectivity and clean soil. As of today, the unused capacity of the brownfield areas has been recognized by the city, however, there are **no incentives in place** and investors do not want to waste their money on challenging regeneration processes. The extent of these industrial areas in 1985 was covering approximately 4600 hectares or 8.6 per cent of Budapest's territory (Kiss, 2007). Today the unused or underused brownfield areas cover around 1200 hectares (Barnamezős területek fejlesztése Tematikus Fejlesztési Program, 2014).

To sum up, the transitional zone is the location of the two most distinguishable characteristics of the post-socialist city, the **large socialist apartment block** neighbourhoods and the disproportionately high amount of former industrial areas. This zone has become **the most important part of the urban fabric of Budapest** because it presents the most possibilities for future developments.



Figure 18: Proportion of employees by economic sector in all sectors (red: industry, black: services Data source: STADAT – 5.1.3.; Kok & Kovács, 1999





The suburban zone

The areas surrounding the transitional zone are homogeneous, **monofunctional suburban neighbourhoods**. These areas (formerly 7 towns and 16 villages) became part of the city only in 1950 when the border of Budapest was extended. Until then, the settlements of this zone had been independent and as of today, the urban fabric shows this distinction.

Furthermore, these areas are the **cheapest parts of the city**, where the polluted air from the car traffic of the city centre is blown over. Nonetheless, these are the only areas, where the population in the last thirty years has increased slightly.

The suburbanization processes in Budapest have been also reinforced by the fact that after 1989 more and more people could afford a car. The **rising level of car ownership** has generated a lot of pollution and car traffic on the major roads of the city to and from the city centre, which led through this zone (Kulcsár & Domokos, 2005).



Figure 21: Number of cars (million) in Budapest (red) and in the agglomeration (black) Data source: STADAT – 6.4.6.2., n.d.; Tiner, 1993

Suburbanisation

This map shows the suburbanization trends of the last thirty years. The innermost part of the city lost more than 40% of its population, while the population in other inner city districts have decreased a lot as well.

The only districts which grew slightly with around 10-20% are in the suburban, eastern part of the city. While in the outskirts, there are several small settlements which doubled or even tripled in population.

This restructuring of the living areas was not followed by the restructuring of the workplaces, which are often situated in the inner parts of the city. This causes pollution and congestion on the roads.

Population increase

Population decrease





Ν



Map sources: OpenStreetMap; Budapest Népessége, Lakossága

Population density

The map shows that despite the depopulation, the outside ring of the inner city area still has the highest population density in the city. The other areas with higher population density coincide with the areas of the prefabricated housing estates in the transition zone, which house around 25% of the population of the city.

- Road structure

Density (people/ha) 250-500 100-250 80-100 60-80 40-60 20-40

Ν



Map sources: OpenStreetMap; Budapest Városfejlesztési koncepciója; Barnamezős Területek Fejlesztése Tematikus Fejlesztési Program.

Transition zone

The map shows that most of the unused, industrial and commercial functions are situated in the transition zone. Furthermore, this is the place where the prefabricated housing neighbourhoods from the Socialist era were also built. This zone forms a non-continuous ring around the inner city of Budapest.

Railway lines Transition zone Industrial areas Unused land Commercial areas Prefabricated socialist housing

Ν



Map sources: OpenStreetMap; Budapest Városfejlesztési koncepciója; Barnamezős Területek Fejlesztése Tematikus Fejlesztési Program



THE RESEARCH


Problem analyses

The typical inherited characteristics of the past, described in the previous chapter, precondition the future trajectories of the post-socialist nations. This **path-dependency**, the ability of the past to impact the future, has been recognised in several academic papers (Kiss, 2018; Stanilov, 2007). It can also be observed in the case of Hungary. The country has been a democracy for 31 years and a member of the EU for 17 years, nonetheless, the past still affects the present, because some of the consequences of the rapid era change still exist or even grow larger.

These consequences are present due to the very fast transition from a socialist to a neoliberal economy. During the short period of the era change, systematic changes were introduced, and the society did not have the time to fully get accustomed to the new capitalist principles of life. This led to uncontrolled transformations of the urban fabric. As a consequence, **the negative spatial and social signs of capitalism** such as gentrification, suburbanisation, growing segregation and inequalities, **are more prominent** because the elapsed time simply has not been enough to develop counteractions. These processes degrade people's right to the city (Lefebvre, 1968).

In Hungary, urban life has become a commodity, even more so than in other European democracies without the socialist past, where the development of countermeasures happened in a longer period and was supported by a society which got used to capitalist principles and was aware of its negative effects. If these inherited, post-socialist consequences are not addressed they will continue to grow larger.

Maps about the growing inequality

The first map shows the average property price per square meter compared to the average net income in Budapest in 2013. The second map shows the same in 2018. The growing difference illustrates the growing inequalities in the urban fabric because most of the districts of the city have become less accessible over time.

Average property price/ average net income per month







The importance of mitigation of the social consequences

In the EU report called 25 years after the fall of the Iron Curtain: the state of integration of East and West in the European Union, Balázs et al. (2015) states that:

'Citizens of post-communist countries had high expectations after the fall of the Iron Curtain, as they believed that democracy and welfare would come together and that their countries would catch up with Western European levels quickly. This was one of their expectations concerning EU-accession as well. However, this has proven not to be the case in the past 25 years. Social and economic inequalities have increased, thus pushing political leaders to adopt more populist stances. Instead of offering consolidated policymaking, too often a cycle of elitism and populism has polarised politics and policies.'

As a direct effect of the post-socialist societal consequences, such as the high level of corruption, low civic engagement, lack of confidence in institutions, increasing social and economic inequalities, **the institutional framework in Hungary has become less democratic** in the last couple of years. This happened through political decisions, which have gradually degraded the democratic system ('Freedom in the world 2019 Hungary', 2019).

However, attempts to degrade democracy are not only occurring in Eastern Europe but in other parts of the world as well. Still, a healthy democratic system, where people are aware of the rights and public responsibilities, has enough resilience to cope with the degrading attempts. The civil society in Hungary is less developed, and this is problematic, because the low number of members undermines the legitimacy of the civil groups. Therefore, they are less able to influence policy-making processes, to protect just spatial development and people's right to the city, or to raise their voices in destructive decisions (Balázs et al., 2015). To achieve a more vibrant and stable democracy and to prevent its decline **achieving higher civic engagement is necessary**.

The importance of mitigation of the spatial consequences

The question of whether the observed spatial trends of the post-socialist transformation will continue in the future is a question in the realm of speculation. However, according to Stanilov (2007), there are 4 possible development directions, which could characterize the future of post-socialist cities.

According to the first scenario, Eastern European countries will continue to develop to be more similar to other European cities, where the suburbanisation is more in control, with vibrant inner cities and where the level of public services are good and social stratification -although present- is greatly reduced.

In the second scenario, a high level of privatisation is present, with a high degree of suburbanization and a firm separation of urban areas by income and ethnicity. This

scenario follows the development trajectory of North American cities.

In the third scenario, post-socialist cities take up the characteristics of cities in the Third World, where the growth of the population in urban areas exceeds the ability of the government to provide services.

The fourth scenario is similar to the development of East Asian cities with rapid economic growth, commercialisation and strong cultural traditions.

Today, some of the characteristics of all the above mentioned four scenarios are present in the post-socialist cities (Stanilov, 2007). Budapest has a vibrant inner city, similarly to other European cities, but the uncontrolled North American privatization and suburbanization is also present. With the characteristics of poorly maintained public spaces and services typical in Third World countries, for example the lack of maintenance of developments, and the absence of basic public services, such as drainage, in some parts of the city. Furthermore, the post-socialist transition was characterized by the rapid commercialization described in the fourth scenario.

To influence the still uncertain future development direction of post-socialist cities in order to eliminate **growing segregation and inefficient, polluting and inflexible urban growth** which are more and more present in the urban fabric and degrade people's right to the city, the spatial consequences of the post-socialist transition need to be specifically addressed. To achieve this, the knowledge obtained in other European countries about managing urban growth since the end of the Second World War can be used by the urban designers of Eastern European countries. These experiences, however, need to be adjusted to the specific post-socialist context.

Problem statement The negative spatial and societal trends following the post-socialist transition have further strengthened since the era change. These consequences degrade people's right to the city and they need to be specifically addressed to reduce growing segregation, inefficient, polluting and inflexible urban growth. Furthermore, the weak civil society can not fully play its part in the democratic system because low civic engagement undermines the legitimacy of civil groups. Consequently, it is necessary to raise public awareness and increase civic engagement.

The aim of the project

Research question:

How can the negative spatial and societal consequences of the post-socialist transition be mitigated through creativity-led urban regeneration?

The thesis addresses the negative trends described in the problem field by answering the question of how the spatial and societal consequences of the post-socialist transition can be reduced in the city of Budapest. These consequences cause growing segregation, inefficient, polluting and inflexible urban growth, furthermore, they reduce people's right to the city and endanger democracy through low civic engagement.

To specifically address these post-socialist characteristics during the regeneration process, I summarize them in Figure 23 and collect the **main objectives which the design process should aim for**. Considering these characteristics can help in addressing them and can also influence the successfulness of any design attempts in the post-socialist context. To sum up, small-scale, local transformations achieved through local initiatives, increased civic engagement and co-creation should be in the focus of such a design project. Furthermore, it should focus on the development of the least 'desirable' parts of the city, preferably in the transition zone, in strategic locations to public transport by creating mixed-used areas and new sub-centres of employment to improve people's right to the city through providing equal access to jobs and possibilities or to create new and affordable housing, which can be desirable to several people.

To achieve these design objectives the thesis develops a **holistic approach**, where **urban design can create social change**. The idea that urban transformation can be a tool to achieve wider effects on the societal and later-on, on the institutional level have been described in several books in the academic literature (de la Peña et al., 2017; Lydon et al., 2015). A similar idea is represented in Lefebvre's vision about the Right to the City (1968). He proposes that the transformation of urban spaces should be controlled not only by the state or by the capitalist principles, which affects social interactions and equal access to resources in the city negatively, but by the inhabitants of these spaces. Based on these ideas, Harvey (2008) describes the right to the city as follows:

'The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights.'

Post-socialist transitional consequences	Main objectives of the regeneration
difficult to achieve large-scale transformations	 small-scale transformation
weak civil society	 increased civic engagement
increasing social and economic inequalities	 equal access to jobs and possibilities
suburbanisation	 new and affordable housing, new lifestyle, which can be desirable to several people
gentrified inner city areas	 development of the least 'desirable' parts of the city
monocentric centre of employment	 mixed use areas, which can create new sub-centers of employment
rising level of car ownership, pollution and car traffic	 reuse of space first in strategic locations to public transport
non-continuous ring of large socialist housing and underused industrial areas	 connecting the inner city and the suburbs in the transition zone by regeneration of these areas
disjointed ownership pattern of industrial areas	 small-scale developments through co-creation to involve the owners in decision-making
no incentives in place to regenerate brownfield areas	 regeneration through local initiatives

To describe this approach the framework of Sykora and Bouzarovski (2012) is used as a starting point (see Figure 9). According to them, first, the large-scale, systematic institutional changes happened after 1989, which triggered changes in society. The urban transition only started after the societal changes were more prevalent and people started to act and use the urban space differently. Therefore, in the postsocialist transition, societal changes are prerequisites for urban change.

The thesis challenges this idea that societal changes are prerequisites for urban change and aims to create an **urban transition which can also affect the society through increasing civic engagement and improving people's right to the city**. The typical transitional process defined by the framework of Sykora and Bouzarovski (2012) is therefore turned around and first, the urban transition is realised through co-creation to achieve higher civic engagement and more interest in the public common from the inhabitants. In this process, **the toolbox of the creativity-led regeneration is used** because this concept uses the people of the city to influence their environment and it is capable to address the post-socialist spatial and societal consequences at the same time.



Location choice





About Csepel

The chosen area is on the Csepel island, which forms the XXIst district of Budapest. The **200 ha industrial site of Csepel Works** occupies large parts of this island next to the Danube river. Although it is in a valuable location in the city, currently it is a mostly neglected industrial area with around 400 active businesses and large valuable building stock. It was chosen through overlapping different layers of demographic data with the location of unused or underused industrial areas in the transition zone to find a place for creativity-led regeneration, which can serve as a prototype for other, similar areas in the city. As this is by far the largest such area in the city, if the regeneration is successful here, it can be used as **an example to other areas as well**.

It is an area, which lost the competition for investments when the capitalist principles were introduced. A degrading place, where certain areas show the signs of marginalisation because people who moved here after the era change, are in worse socio-economic status than the people who live here longer (Hegedüs et al., 2015). With the regeneration of the Csepel Works, new possibilities are created for the residents, which can improve their chances in life and their access to the city's resources, therefore their right to the city.



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Figure 27: Satellite photo of Csepel source: GoogleEarthPro





Figure 28: Photograph about the Weiss Manfréd Works in Csepel Island

Socio-spatial dynamics

The XXIst district is one of the most disadvantaged by all social, income and property market indicators in Budapest. The traditionally low prestige of Csepel as a "working district" still affects the opinion of the citizens of Budapest. This has been further reinforced by the fact that the industrial activities reduced drastically since the era change which resulted in a **decrease of the available workplaces in the district**. As a consequence, higher quality, new housing developments also avoided the area (Hegedüs et al., 2015).

Figure 29 illustrates the inequalities between the more liveable, more expensive north-western and the more and more segregating south-eastern side of the city, with the transition zone in between. As the spatial analyses about the post-socialist consequences showed, the transition zone has the most potential for development because it contains a large amount of unused and underused land. Furthermore, it can be a connector between the inner city and the suburban zone, where it can act as a catalyst in the development of the whole south-eastern side of the city.

Figure 29: The morphology of inequalities

The figure illustrates the inequalities between the more liveable, more expensive north-western and the more and more segregating south-eastern side of the city, with the transition zone in between. As the morphological analyses showed, the transition zone has the most potential to develop with a large amount of unused and underused areas. Furthermore, it can be a connector between the two areas, where it can act as a catalyst in the development of the whole south-eastern side of the city.











Maps about the city

- average property prices (Budapest ingatlanok statisztikája)
 average proportion of people with higher education (Központi Statisztikai Hivatal)
 life quality index (Hol jó ma élni?)
 average income (Net Income Map of Budapest 2016 » GeoIndex)
 proportion of leading intellectual workers (Baji, 2015)
 average number of people in a household (Központi Statisztikai Hivatal)

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Theoretical foundation

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Applied theories

The post-socialist city

The setting of the post-socialist city creates a highly complex structure of institutional, societal and spatial characteristics which are special for Eastern Europe. In the thesis, these conditions are in-depth examined in the description of the context to fully understand their complexity as the base of the research.

Socio-spatial dynamics

Through observing the socio-spatial dynamics of the post-socialist transformational consequences the spatial redistribution of the society is mapped. It is used to study the transformation of the urban fabric and the societal changes to identify tactical locations for regeneration processes.

Creativity-led regeneration

The planning paradigm of the 'creative city' has been mostly developed by Charles Landry in the 1980s. He describes the concept in the book The Creative City: A Toolkit for Urban Innovators (2012). Creativity-led regeneration is a method to create a strategic plan which explores how people can act more creatively in a city and through this process their environment can become more liveable and vital by the talent of its people (Landry, 2012).

As described more in detail in the following chapters, in the context of Hungary, creativity-led regeneration is an ideal approach to overcome the growing societal and spatial consequences of the post-socialist transition at the same time and to empower the residents of Budapest to gain more control over spatial, social and institutional transformations.

58



Creative freedom in Hungary

Creativity and innovation often concentrated in particular places throughout history. Serafinelli and Tabellini (2017) found that this concentration of innovations happened in places with great political freedom. However, their research showed an inconsistent connection between the concentration of creativity and the size of the city or between income. Therefore, they concluded that **open and democratic institutions are required to support innovation-based growth** because these institutions protect and guarantee the freedom for creators and have the ability to attract talent. The most important factor in this process is the protection of personal and economic freedom in an inclusive environment because this kind of environment is more open to new ideas. Here the materialistic incentives of creation often changed to be meritocratic.

On the other hand, the fact that **creativity is less supported in closed and intolerant cultures** have also been observed (Glăveanu, 2016). This happens because ideologies of hierarchical systems and their monotony or the control of such societies hinder creative thoughts to be born. People living in such environments tend to be passive and more conservative. This idea is further supported by the fact that in such countries fewer patents are registered. Csikszentmihalyi (2014) argues that creativity is not only a product of an individual, but it is of a larger field who evaluates the importance of a newly born idea. This field can be a group of scientists, artists, censors or the society in general. He states that the more autocratic the field is, the less likely it is to encourage experimentation and more likely to stick with the status quo.

These observations are underpinned with the development of the art scene in Hungary during the 20th century. In the period between 1944 and 1989, the country had a one-party, Socialist system. On the one hand, this meant that the consumer market for cultural goods has expanded to a previously unprecedented scale, but on the other hand, creative freedom as the essence of art disappeared (Glăveanu, 2016).

The monopoly of the art form of realism suppressed all other approaches. By implementing institutional censorship, art became a tool and was used for propaganda, while science was used to confirm the political ideology (Bolvári-Takács, 2011). Whenever someone violated these rules, they excluded him from the professional communities and isolated him as much as possible. All focus was put on the working class, while artists and scholars were treated as a class living off of them. These classes were further suppressed by being kept under strict surveillance. Access to resources and interpersonal contact was greatly limited, voluntarily relocation or travelling abroad was strictly controlled. All these restrictions hindered cooperation, socializing and resulted in a lack of development in many domains (Glăveanu, 2016).

Later on, after 1960 the oppression decreased a little and since then until the



Figure 32: With the eyes of others - The artwork symbolises the observation, where appearance overshadows the truth (Kismányoky, 1973)

era change, Hungary was characterized by relative prosperity compared to other socialist countries. The people who did not confront the power could live their daily lives without major disruption. The work of artists, symbols and gestures they used, however, were carefully analysed by the censors for meaning and content. Therefore, they were still forced to create art 'between the lines' (Kaplan, 2017).

After the era change, the situation of the creative class started to improve. The freedom of creation was again possible. However, as of today the art institutions and artist still depend on the financial support from the government because the contemporary art market is not that well developed yet. This situation is continuously threatening the existence of art-related institutions (Drtinova, n.d.).

On the other hand, the **creative industry**¹, which is a wider notion than only contemporary art, has gone through fast development and growth in the last thirty years and research shows the shift towards a knowledge-based economy in Hungary. Egedy & Kovács (2010) found that the sector of creative industries could, therefore, form the **base of creativity-led regeneration processes**.

Still, this development of the creative industry is continuously endangered by the societal consequences of the post-socialist transition. According to Egedy et al. (2014), the biggest challenge in the creative economy in Hungary is the lack of cooperation between the decision-makers and other actors, the high level of bureaucracy, the corruption, the lack of transparency and the cultural and ethnic intolerance. Furthermore, as the institutional system in Hungary has become increasingly autocratic and less democratic in the last decade, it might further endanger the development of this sector, because as Serafinelli and Tabellini (2017) found, its potential depends on the development of the democratic institutions.

¹ What sectors belong to the creative industry is not precisely defined, however, most of the Hungarian academic literature uses the classification of the Department for Digital, Culture,

Media & Sport of the United Kingdom. Here, the following industries are listed in the group of the creative industry: advertisement, architecture, art and antique market, crafts, design, designer fashion, film and video, interactive leisure software, music, performing arts, publishing, software and computer services, television and radio. (Creative Industries Mapping Documents 2001, n.d.)









64

Creative workplaces and businesses

The first map shows the ratio of creative workplaces, while the second shows the ratio of creative and knowledge-intensive businesses in the metropolitan region of Budapest. The two maps demonstrate the same pattern, that the inner city and the hilly zone of Budapest and the continuing areas to the northeast in the metropolitan region are the most attractive for such businesses, while the south-eastern side of the city is less attractive.

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The concentration of culture

The scenes of culture are mostly situated in the inner city, while the outer areas are usually only provided with libraries or small museum and municipal cultural centres.

- Theatres
- Museums Universities
- Libraries
- Art centres
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The creative milieu

To understand how creativity can help in mitigating the post-socialist transitional consequences, it is necessary to explain how a creative milieu looks like. Although every creative cluster is unique, there are a few general principles, which can be applied.

According to Johnson (2011), an environment which fosters creativity contains **diverse elements to encourage the formulation of new combinations** of ideas and to enhance experimentation. These elements can not only be part of the physical environment (hard infrastructure) but can also be surprising, **temporary functions or uses**¹.

Here the tools of **placemaking**² and **tactical urbanism**³ are used to encourage people to meet, network and exchange ideas (soft infrastructure). Through these tools, local communities can also be involved in the regeneration projects, which further increases the diversity of people and the discoveries of new connections.

It is necessary to shift the focus from the solely urban engineering-based paradigm of city-making because it requires an urban design which encourages the combination of **hard and soft infrastructural elements** to promote people to work with their imagination (Landry, 2012).

In the case of Csepel, the empty buildings and plots create abundant possibilities to formulate such places. With new developments or reconstructions of the old buildings, the element of experimentation should be taken into account. It is also necessary to encourage the existing and future members of the creative industries in the area to use the tools of placemaking and tactical urbanism to achieve such an environment. Through these tools, local communities can also be involved in the regeneration projects, which further increases the diversity of people and the discoveries of new connections.

¹ The temporary use of empty buildings of plots is a practice used in urban regeneration projects to improve the use of the area and to prevent the deterioration of the building stock. These spaces can be used for different cultural and social functions of the community and manifest the needs of the community which would otherwise be left undiscovered ('Temporary Use', 2019).

² Placemaking is "a multi-layered process within which citizens foster active, engaged relationships to the spaces which they inhabit, the landscapes of their lives, and shape those spaces in a way which creates a sense of communal stewardship and lived connection" ('Connecting People & Places', 2014)

³ Tactical urbanism is an approach to improve a neighbourhood's physical environment by activating it through short-term, low-cost and scalable interventions carried out by the community in order to achieve a long-term change (Lydon et al., 2015).





The area is a temporary use of polluted land. Nowadays it is an eco-focused hub for creative and social businesses which are housed in old living boats, while the land is being cleaned through Phytoremediation. The unexpected reuse of materials and combination of ideas create a unique place, which symbolises well how a creative milieu can encourage new combinations and experimentation.

Figure 35: The concept of De Ceuvel (The concept of De Ceuvel, n.d.) Figure 36: Photo of De Ceuvel in Amsterdam, the Netherlands (De Ceuvel in Amsterdam, 2018)

The elements of hard infrastructure:

This kind of environment encourages the creation of **in-between places**, which are not workplaces, nor living places because these are spots where people can meet and knowledge spillover⁴ can happen. These are public spaces which can be peaceful or inspiring ones, with amenities which help to promote their public use, like outdoor furniture, green areas or small food stands (Landry, 2012).

The **aesthetic of such places** plays an important role, therefore these often accumulate in strategic locations with favourable views and atmospheric architecture, and in the creation of such spaces, the frequency of use of the buildings and the transparency of the ground floor façades are also important factors (Aten & Romein, 2020).

In Csepel, the existing industrial buildings have different façades according to their former functions. Some have large windows which allow the passers-by to see what is going on inside. Others are more closed. Furthermore, currently, there are no outside public facilities (like benches to sit, or food stands) in the area.

The **architectural atmosphere** of a creative milieu, which is naturally closely linked to the aesthetic of a place, is also very important. According to Smith (2010), empty warehouses and old industrial buildings are renovated and used because these buildings are authentic in their very functional and practical setup, with their raw materials and they do not have the artificial feel of today's office buildings to them. Furthermore, warehouse and industrial buildings are often affordable to rent and are suitable for any unusual needs because of their high ceilings, large windows and their flexibility and adaptability in the interior divisions (Smith, 2010). Therefore, creative businesses tend to favour them.

In Budapest, however, the existing atmosphere and the history of these buildings and places are often destroyed when developers regenerate such areas. For example, in the case of the Közvágóhíd, the former slaughterhouse of the city, almost all the historical and architecturally valuable buildings were recently demolished and are replaced by new apartment blocks. The new functions and the design of the future buildings do not take into account the history of the place and that it served as an alternative cultural centre with several clubs and rehearsal rooms, which were evicted and are now without any place to operate in. If creativity-led regeneration is successful, the same fate threatens the existing building stock and the present and future residents of the creative industry in any other locations in Budapest. Therefore, the municipalities must be determined to commit to maintaining the valuable building stock with guarantees to provide a space for creative activities.

⁴ Knowledge spillover is the exchange of ideas among individuals. ^C The high concentration of people and firms in cities creates an environment in which ideas move quickly from person to person and from firm to firm. That is, dense locations, such as cities, encourage knowledge spillovers, thus facilitating the exchange of ideas that underlies the creation of new goods and new ways of producing existing goods.^C (Carlino, 2001)





The buildings of the old slaughterhouse of Budapest (photo on the top) were almost all demolished to give place to new development (photo at the bottom). Earlier, the area was used by music venues and bands, but they were forced to leave and the developer did not consider to keep these creative functions in the area.

Figure 37: The old buildings of the former slaughterhouse (Gulyás, n.d.) Figure 38: The new development (Gulyás, n.d.)

The elements of soft infrastructure:

A creative environment is dense, because in low density 'ideas do not stick', while in a densely packed environment good ideas circulate naturally (Johnson, 2011).

Here density is understood in two ways because the **density of creative businesses** and the **density and diversity of people** in a certain area are both important factors for a creative milieu. In a dense environment, the frequency of ad-hoc encounters between people in public spaces rises and the proximity of the members of the creative industry increases the chance of innovation because of the effect of knowledge spillover (Knudsen, Florida, Gates, & Stolarick, 2007).

Knowledge spillovers and increased business collaboration have been noted as key reasons for the spatial clustering of innovative industries and therefore the density of the members of the creative industry is a key component in this. In the past, creative industries tend to cluster in the inner city of Budapest, but with the current gentrification processes of these areas, the creative companies, start-ups and emerging artist do not have a place in the city centre anymore, which significantly decreases their access to knowledge spillover.

However, not only the geographical proximity of such groups is important, but also the density of people (Knudsen, Florida, Gates, & Stolarick, 2007). There are opposing views in the academic literature regarding the question which one is more important. For example, Jane Jacobs stated that it is not the specialization of industries that stimulates economic growth, but it is the diversity, which produces innovation (Jacobs, 1972). Creative ideas are the outcome of expansive and diverse social networks, where one is confronted with different perceptions about how a problem is understood (Thomas et al., 2015).

'The best settings for this sidewalk dance are just a little uncomfortable, with an intimate feel and scale that invites belonging as well. They include a variety of activities, "mixed uses," with different kinds of people on the street for different reasons at different times of day. The spaces force us to interact, converse with strangers we would otherwise ignore, and explore ideas we would not explore on our own, creating "knowledge spillovers" and potential for change.' (Thomas et al., 2015).

The presence of a bit of discomfort is not only important on the human interaction level but also recommended for the physical environment. According to Johnson (2011), a creative environment should not be fully satisfying, so that it encourages exploration to figure out how to improve it further to completion. In such a physical urban environment, people feel encouraged to engage.

The importance of people's density is further reinforced by the finding of Roche (2019), who describes that on a neighbourhood scale the **density of streets** shows a correlation with an increase in innovation (a 10% increase in the porosity of the




The chart demonstrates that the amount of optional activities on the streets is a lot higher if the quality of the environment is high as well. The example of Keilewerf in Rotterdam shows the effort to increase the quality of the environment by creating a small outside coffee and colouring the walls of the creative hub building.

Figure 39: The connection between the quality of the environment and activities (Gehl, 2010) Figure 40: The area of Keilewerf in Rotterdam, which is a creative hub for makers

area is linked with a 0.05 to 1% increase in innovation). Therefore, neighbourhoods with denser street network literally help to better connect the members of the creative industry and facilitate a better knowledge spillover and more face to face encounters between people. Consequently, the morphological structure of a creative environment has great importance in achieving a creative milieu.

In Csepel the number of streets has grown rapidly since the era change. However, blocks are still often too large, and the area is still fenced off, with only a couple of entrances to the outside world. This characteristic needs to be changed in the future, to increase the porosity of the area.

Although often not described in detail in academic writings as a general principle to achieve a creative milieu, the **involvement of residents in the creation** of such an environment and their presence is also very important. It increases diversity because streets and public spaces are used not only by the employees of the creative cluster but also by the residents. Furthermore, by supporting and creating creative initiatives the members of the creative industries can help disadvantaged local groups. In the case of Hungarian society, it can also increase the willingness of people to participate, which is essential in post-socialist societies.

"It is so much more than just the arts. It is about a celebration of community and the diversity of peoples in a community expressed through the diverse talents of people in a community...I'm a very conservative political person, atypical of those normally interested in the arts. My passion for the arts has grown profoundly based on just being able to experience on a day-to-day basis the overwhelmingly positive impact of focusing on the arts does to a community as a whole. If there was ever a sceptic it was probably me. I had all the scepticism of, 'We're too small. We're too poor. This can't be a priority. We need to build buildings and we need to fix the roads and we need to fix the drug problem. We need to fix the schools.' The reality has been that focusing on the arts has helped us successfully address all those other areas." (Delconte et al., 2016)

Fundamentally, two types of engagement are possible from the members of the community. The first is **focusing on changing the physical environment** through the tools of placemaking and tactical urbanism. Placemaking is often based on the needs of the local community, therefore these are taken into account. Here the underused public areas are activated and turned into places designed by the local residents while increasing their engagement to the community. This further increases the vitality, safety and liveability of the activated area (Delconte et al., 2016).

Furthermore, when there is a community movement in the area, alternative uses of buildings are more frequent (Stern & Seifert, 2008; Romein et al., 2013), saving the deteriorating buildings stock from demolition and creating characteristic public spaces. For the community it means the creation of new meeting places and increasing their aesthetics, which in return can attract new facilities in the area,





Figure 41: The favela painting project (Koolhaas, n.d.) Figure 42: JC Walks Pedestrian Enhancement Plan

The images demonstrate two examples of civic engagement focusing on changing the physical environment. The first is a favela in Brasil, where the community created a place with the help of creative placemaking. The second is a form of tactical urbanism. By colouring the streets the problems with the car-oriented design were highlighted.

including new places of entertainment (restaurants, nightclubs). Consequently, there is a positive correlation between the physical and economical state of a neighbourhood and its social networks.

In the area of Csepel Works, there are several empty buildings which could be used temporarily by the community. These can serve as cultural nodes and can improve the financial and economic situation of the area.

The re-purposed buildings and public spaces also increase the attachment of residents to the history of these places by making them better discover the area, increasing their emotional connection to the place by new exposure to art and aesthetics (Delconte et al., 2016).

Another way to involve the local community is to develop their member's creative abilities. Such initiatives support local competition, the formation of creative ideas by the members of the community or by local start-ups and companies. **Improving the creative abilities of the people** can empower them, improve their skills and their networking ability, confidence, self-expression and further increase their civic engagement (Delconte et al., 2016; Kay, 2000). Here -although happens within the community- individuality is the key, where the differences between people are appreciated.

To achieve such initiatives in Csepel the companies need to take the responsibility to organize events where residents are in focus. How this can be achieved, will be discussed in the chapter discussing the organizational setup and the stakeholders later on.





Figure 43: Creative artisans district, Lima Figure 44: CreativeFactory, Rotterdam

The images demonstrate two examples of civic engagement focusing on the development of the skills of the member's of the community. The first is an artisans' district in Lima, where the members of the community are supported to learn the techniques of traditional crafts making. The second is a creative hub in Rotterdam. Here a series of competitions were organised, called 'So you wanna be your boss?!' for the residents, where the winner with the best creative business idea got a free workplace in the hub.

Future challenges

In the long-term, there are two major challenges when it comes to successful creativity-led regeneration. First, creativity-led regeneration can cause gentrification, which may lead to demographic and economic changes, most importantly the displacement of low-income residents or low-value businesses. Second, the economic growth generated by the creative businesses can cause an increase in inequality and exclusion (Stern & Seifert, 2008) because it results in new job possibilities for highly-skilled workers and their growth in income.

Gentrification

If the attempt to regenerate the area of Csepel Works and its surrounding is successful, **some degree of gentrification is inevitable** and even desired. Currently, it is one of the most affordable industrial and residential areas in the whole city. The fact that the people who moved to the district after the era change are from a lower economic status than the ones who have been living there longer shows that the area is deteriorating (Hegedüs et al., 2015). Therefore, the influx of higher educated workers from other parts of the city could potentially benefit the area both socially and financially.

In the long run, it is still very important to control gentrification, because the displacement of financially less stable local companies and low-income residents would **further decrease their right to the city**. As there are hardly any other parts of it where these people and businesses could move to. Therefore, it is necessary to introduce measures, which help to protect them.

Gentrification does not only affect the residents of a neighbourhood but can also affect the businesses. If an area becomes more desirable then new, more competitive companies would replace the low-value businesses or the industrial buildings would be turned into more profitable lofts, changing the original industrial function to residential. As Ferm (2016) puts it:

'The familiar story is that the gap left by declining manufacturing and industry is filled by pioneering creative entrepreneurs, who are perceived to turn the neighbourhood around and make it a desirable. Over time, these 'early arrivals' ... are displaced by higher-value commercial occupiers or loft dwellers and forced to move further afield to find more affordable premises. In this process, the neighbourhood becomes a victim of its own success as it loses the very ingredients that made it desirable in the first place'.

In academic literature, there is a narrative that this is a natural, evolutionary process of city development and controlling it might negatively influence the city (Ferm, 2016). However, these small-scale businesses are often locally dependent, and it is difficult for them to start over in another place because they lose their clientele and they need to build up a new one.

In the area of Csepel Works small-scale businesses often serve other local





Figure 45: The gentrified areas in the 8th district (Balkányi, n.d.)

Figure 46: The well-known community place in the middle was forced to move out (Budapest in Hungary is a DIVERCITIES Case Study, n.d.)

The gentrification in the 8th district of a whole neighbourhood is an example, which caused the displacement of low-income resident from the centre of the city of Budapest. The amount of financial compensation of these residents was not enough, therefore most of them were only able to move outside of the boundaries of the city and had no chance to stay in the district. This process also forced the well-known community place of the area to shut down.

businesses and if they move, the chain of producer-provider collaboration will break, which can negatively affect other businesses in the area as well. Therefore, looking at gentrification as an evolutionary process can potentially harm higher-value businesses as well.

How to tackle gentrification?

According to Heidsieck (2017), the tools to fight gentrification are reduced availability of the desirable accommodation, **political intervention and public resistance**.

Policy measures could provide a base to resist gentrification. However, a wellorganized and strong community can also have a large role in this process because community movements can not only help with the regeneration itself but can also have an important role in successfully resisting gentrification and protecting vulnerable societal groups and businesses as well (Heidsieck, 2017).

The area of Csepel Works is an official industrial area. Therefore, it is currently not allowed to fill industrial buildings with residential functions. On the other hand, if the level of industrialization continues to decline the classification of the area might change, giving space for new residential developments.

Therefore, it is important to be prepared for the gentrification of both the industrial and residential areas. To resist large-scale gentrification some **community-driven measures** can be taken. For example, social rental enterprises can support endangered groups of residents, protecting them from eviction and helping them not only with housing but labour and social services as well (HomeLab | Housing Europe, n.d.). These efforts can be combined with the community development projects organized by local businesses.

However, the most important is to introduce **adequate policy measures**. Such as the use of rental caps, where only a certain percentage of the housing is available for rent. Or the restriction that only after living in the apartment by the owner for a longer-period can it be rented out because the high share of owners protects against gentrification.

To overcome industrial gentrification a similar idea could be used, where rental caps and long-term contracts could provide stability to local companies and with new developments, developers should accommodate existing tenants instead of removing them. This could be combined with financial support and projects to help these businesses to improve collaboration between them. To overcome their relocation, the municipality can also allocate alternative locations for such companies inside or close to the original location. Or developers should be incentivised by tax incentives to include low-cost rental of industrial spaces into their development. This list of ideas is by no means complete; however, it shows well that most of them are policy measures. Therefore, it is clear that **the municipality needs to be committed** to protecting the most affected residents and companies and the effects of gentrification need to be handled consciously from the start of the whole regeneration process.

Growing inequality

Another drawback of creativity-led regeneration is **increasing inequality** because creative businesses often employ higher educated people. Therefore, such people will have more chance to be part of the creative economy. According to Stern & Seifert (2008), increasing inequality by creativity-led regeneration is much more harmful then gentrification. However, **gentrification and growing inequality stem** from the same root. If the evolutionary cycle of gentrification is allowed to take place then mostly smaller, producer-type companies disappear, and these are the companies who provide job opportunities for the lower educated people as well. Therefore, it is necessary to view creative and other companies in the area of the Csepel Works as a network, where their connections are essential in keeping the area vibrant and innovative.

This means that the same measures which help local-small scale businesses to stay in the area could help with decreasing inequality as well.

'If a successful creative economy is based on social organization—not individual endowment—then a strategy of social inclusion would identify opportunities for social mobility and wealth-creation across the sector, not just at its top.' (Stern & Seifert, 2008)

To summarize, creativity-led regeneration can cause gentrification and growing inequality. On the other hand, the type of **creativity-led regeneration** that can be successful in the context of the post-socialist city represents a more bottom-up approach. As this type of regeneration focuses on community building and forming a better collaboration between businesses, it will **result in stronger community ties** as well and that can help in resisting gentrification and growing inequalities.

Theoretical framework

Main Design objectives

small-scale transformation
increased civic engagement
equal access to jobs and possibilities
new and affordable housing, new lifestyle, which can be
desirable to several people
development of the least 'desirable' parts of the city
mixed use areas, which can create new sub-centers of
employment
reuse of space first in strategic locations to public transport
connecting the inner city and the suburbs in the transition zone
by regeneration of these areas
small-scale developments through co-creation to involve the
owners in decision-making
regeneration through local initiatives

Tools of creativity-led regeneration

Type of transition



Addressing the post-socialist consequences

In my thesis, the possibilities through creativity-led regeneration with the help of co-creation is explored to achieve higher civic engagement from the inhabitants and to reuse the spatial remnants of the socialist era, while creating opportunities for creativity and innovation to thrive. By doing so, the growing societal and spatial consequences of the post-socialist transition can be targeted and the residents can gain more control over spatial, societal transformations.

The theoretical framework summarizes how creativity-led regeneration can fulfil the design objectives which a design process should aim for to mitigate the post-socialist consequences. This type of regeneration is especially applicable in this context because it can induce social, spatial and economic transition at the same time.

More explicitly, small-scale transformations achieved through local initiatives, increased civic engagement and co-creation are among the main design objectives. Tools of creativity-led regeneration like placemaking and tactical urbanism can fulfil these objectives by utilizing the development power and ideas of the community through **small-scale interventions**. Such projects explore how people can influence their environment if they have the chance and increase civic engagement at the same time.

On the other hand, the term creativity-led regeneration is most often used as a part of a top-down development project or it forms the base for a new city brand. Nevertheless, this line of reasoning shows that in the context of the post-socialist city, creativity-led regeneration is understood differently, and it represents a more bottom-up approach. Therefore, **it is necessary to distinguish creativity-led regeneration** in **the post-socialist context** by focusing and highlighting its social aspects and possibilities. The need for distinguishing creativity-led regeneration and the possibilities of such development in the post-socialist context has been observed by Czirfusz (2015) as well, however, the academic literature is scarce about this topic.

As mentioned earlier, the development of the creative industries in Hungary is endangered by the societal consequences of the post-socialist transition. In this regard, involving the people in creative initiatives can form their thinking, making them more open-minded, thus more critical, involved in the community and more aware of their environment, which can help to **create a more democratic environment** where creativity can thrive.

Moreover, a design addressing the post-socialist transitional consequences should focus on improving people's right to the city to provide them with equal access to jobs and possibilities. Creative initiatives can help in this regard as well, by the **development of the creative abilities** of the members of the community. Creativity-led regeneration through the engagement of the people can empower them with new social and economic skills, which can increase their chances on the job market. Therefore, it can also help to reduce the growing inequalities (Delconte et al., 2016; Kay, 2000; Stern & Seifert, 2008). Besides, the improved economic stability through

the increased **clustering of businesses** can also help in creating and keeping new workplaces.

Another important factor in a design addressing the post-socialist transitional consequences that it focuses on the development of the least 'desirable' parts of the city. In this regards, creativity-led regeneration is especially applicable in cities with an industrial past or where big economic changes happened and as a consequence, the urban environment is less attractive (Landry, 2012). By focusing on the **development power of local initiatives** these areas can be regenerated in a way that the municipality does not need to oversee every detail of the regeneration. Which makes the process less resource-intensive and therefore much more suitable to the post-socialist context.

Furthermore, by creating **new in-between places** with the help of placemaking, tactical urbanism and the induced temporary use of buildings, the solely industrial area of Csepel Works can be transformed into a mixed-use and more diverse environment, which is a characteristic of a more creative environment as well.

Methodology - AR3U01

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Applied methods

The post-socialist city

The used method is synthesizing literature and statistical data about the topic to identify the spatial, social and institutional consequences of the era change. By doing so, the context of post-socialist, Eastern European countries is understood and the consequences of the transition from a Socialist to a Neoliberal economy are listed. To give adequate answers to any design challenge, it is necessary to have an understanding of the spatial, social and institutional context in which the design operates. In this thesis, the post-socialist context requires a deeper understanding, because it makes circumstances more complex. Therefore, during the design process, the context of the post-socialist city is taken into consideration with every step and the identified consequences work as regulators to evaluate the authenticity of the design.

Socio-spatial dynamics

By identifying the different zones of the urban fabric, the spatial distribution of the post-socialist consequences is observed. The spatial consequences are mapped by analysing where and what has changed in the urban fabric since 1989, while the social consequences are understood by transforming demographic changes into maps which demonstrate the effects. These maps confirm growing inequalities, gentrification and inefficient urban growth. By comparing spatial demographics of the city and the spatial distribution of the remnants of the socialist era, the test location for the design is identified. Here the spatial qualities and social demographics are mapped more in detail to understand the potentials of the location for creativity-led regeneration.

Creativity-led regeneration

By synthesizing literature about creativity-led regeneration it is understood why it is especially applicable in post-socialist cities. By doing so, the necessary qualities of creative spaces are collected, and the existing qualities are mapped on the test location. In this thesis, a process is designed which stimulates a post-socialist context-specific creativity-led regeneration. To achieve this, an organizational setup is created and the stakeholders are also identified. Furthermore, a set of design principles are collected, which help to achieve the described creative milieu. With the help of design principles, a short-term and long-term strategy are simulated along with long-term future scenarios in order to understand the need for flexibility in long-term planning.

Summary of the research framework

Problem field	Regeneration in the post-socialist context		
Key words	post-socialist transition, creativity-led regeneration, right to the city, civic engagement		
Location	Budapest, Hungary		
Problem statement	The negative spatial trends following the post-socialist transition have further strengthened since the era change. These consequences degrade people's right to the city and they need to be specifically addressed to reduce growing segregation and inefficient, polluting and inflexible urban growth. Furthermore, the weak civil societies of the post-socialist nations, can not fully play its part in the democratic system because low civic engagement undermines the legitimacy of civil groups. Consequently, it is necessary to increase public awareness and engagement.		
Research aim	Using creativity-led urban regeneration as a tool to achieve wider effects on the societal level and to reuse the spatial remnants of the socialist era, while creating possibilities where creativity and innovation can thrive		
Research question	How can the negative spatial and societal consequences of the post-socialist transition be mitigated through creativity-led urban regeneration?		
Theoretical framework	The concept of creativity-led regeneration is applied in the context of the post-socialist city, where the analyses of the socio-spatial dynamics are used to identify strategic locations for interventions.		
Used methods	literature review, GIS mapping, demographic analyses, statistical data collection, scenario studies, site visit, stakeholder analyses		
Final outcome	A designed process of creativity-led regeneration with the simulation of the specific steps in the process: the formation of design principles, a short term strategy and long-term scenarios about the sustainability of the design, finally a long-term strategy		

Research questions

Main research question	Sub-research questions		
Mainresearchquestion	Sub-research questions		
	Post-socialist city		
How can the negative spatial and societal consequences of the post-socialist transition be mitigated through creativity- led urban regeneration?	What are the long-term institutional, societal and spatial consequences of the post-socialist transition?		
	Why is it important to reduce these consequences?		
	Socio-spatial dynamics		
	What are the spatial consequences of the post-socialist transition on the typical zones of the urban fabric?		
	What are the social consequences of the post-socialist transition?		
	Where are the locations in Budapest to achieve the aim of the project?		
	Creativity-led regeneration		
	How can creativity-led regeneration help in post-socialist cities?		
	What type of environment can support creativity?		
	What qualities are present for creativity-led regeneration in the test location?		
	What kind of creativity-led design process can support the mitigation of the post-socialist transitional characteristics?		
	What design principles can help to achieve the ideal creative environment in the test location?		
	What measures are necessary to improve the long-term resiliency of the design?		

Methods	Desired outcomes
Synthesizing literature and statistical data about the post-socialist transition and the consequences of the era change	A set of identified spatial, societal and institutional consequences of the post-socialist transformation
Research in the literature about the post-socialist transitional consequences and their expected future growth or decline	A description of how the consequences of the era change will develop in the future and why it is important to reduce these
Using GIS mapping and spatial analyses of the municipality	Maps and description of the zones of the city and about the location of the spatial remnants of the socialist era
Collecting demographic data and visualizing them spatially	Comparable maps of the current demographics which were affected by the era change
By comparing spatial demographics of the city and the spatial distribution of the remnants of the socialist era, locations of future design interventions can be located	Identified test location, which can serve as a prototype to the regeneration.
Research in the literature about the regenerating power of creativity and comparing this to the post-socialist transitional consequences	A description of how creativity-led regeneration can help with the social and spatial regeneration and why it is especially applicable in post-socialist cities
Research in the literature to identify the necessary qualities of creative spaces	A set of identified qualities which can help to generate creativity
Analysing the spatial and social qualities of the test location by mapping and statistical data collection	Maps and description of the spatial and social qualities in the test location
Design of a process by identifying the stakeholders and designing an organisational setup	A designed process of the creativity-led regeneration in the test location
Design of a set of principles derived from literature and stimulation of design of a short- and a long-term strategy with them	A set of design principles and a designed short- and long- term strategy with the help of these design principles
Research through future scenarios about the possible negative effects of creativity-led regeneration	An adjusted, more resilient design framework

Methodological framework

Socio-spatial dynamics

Through observing the socio-spatial dynamics of the post-socialist transformational consequences the spatial redistribution of the society is mapped. It is used to study the transformation of the urban fabric and the societal changes to identify tactical locations for regeneration processes.

Methods: Spatial analyses through GIS mapping Demographic data collection and mapping Analysing the spatial and social qualities of the test location

Test location

Identifying test location with th socio-spatial analyses

Methods:

Comparing spatial demographics of and the spatial distribution of the rethe socialist era

Post-socialist city

The setting of the post-socialist city creates a highly complex structure of institutional, social and spatial characteristics which are special for Eastern Europe. In the thesis, these conditions are in-depth examined in the description of the problem field to fully understand their complexity as the base of the research.

Methods:

Synthesizing literature and statistical data about the post-socialist transition and the consequences of the era change

Problem analyses

The negative spatial trends following the postsocialist transition have further strengthened since the era change. These consequences degrade people's right to the city and they need to be specifically addressed to reduce growing segregation and inefficient, polluting and inflexible urban growth. Furthermore, the weak civil societies of the postsocialist nations, can not fully play its part in the democratic system because low civic engagement undermines the legitimacy of civil groups. Consequently, it is necessary to increase public awareness and engagement.

Research questic

How can the negative spatial ar societal consequences of the posocialist transition be mitigated creativity-led urban regeneration

Creativity-led regeneration

In the context of Hungary, creativityled regeneration is an ideal approach to overcome the growing societal and spatial consequences of the post-socialist transition at the same time and to empower the residents of Budapest to gain more control over spatial, social and institutional transformations.

Methods:

Research in literature about the regenerating power of creativity and its importance for postsocialist cities Research in literature to identify the necessary qualities of creative spaces



THE DESIGN PROCESS



Figure 48: The artist studio of Szőke Gábor Miklós in the area of Csepel Works (2019)

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The steps of the process

In the following chapter, a process is designed what the municipality can follow to kickstart creativity-led regeneration in the area of Csepel Works. There are three main phases in this process: initiation, testing and implementation.

As the existing level of civic engagement in post-socialist countries is low, this indicates that in case of an urban design project the initiator is most often a governmental agency. Similarly, in the case of Csepel Works, the municipality of Csepel is the initiator.

However, as this process progresses the community and the businesses gain more control and responsibilities over time through the steps where the different stakeholder groups interact. They are responsible for building up a stronger community and for improving collaboration between each other. Furthermore, they are expected to start to improve their environment by using the tools of placemaking and tactical urbanism.

In the **phase of initiation**, the municipality is responsible to set the main design objectives. The thesis advocates that these design objectives should address the post-socialist consequences. Next, the municipality needs to develop an up-to-date set of analyses over the area to form design principles, which can help generating a creative milieu. Meanwhile, the most important goal for the companies is to form a collective which can represent them during this process.

In the **phase of testing** the companies and the community in the area can gain more control over the process by determining which design principles are the most important and by setting an implementation timeline to them. Furthermore, they can also help to identify which buildings and plots should be used as prototypes in the test location. In a joint effort, the municipality, the companies and the local community start to implement the most important design objectives in the area.

During this time, the municipality can examine the expected future outcome of different long-term scenarios, which can help them form the idea of how the desired long-term future should look like.

In the **implementation phase**, the masterplan is created by incorporating the input from the short-term strategy and the scenario study. By now, the actual situation can be compared with the long-term scenario study, to find out which scenario has become a reality. By doing so, the implementation time of the different design principles can be changed accordingly. Finally, the successful practices and new measures are extended to the greater area of the Csepel Works.

These steps in the initiation, testing and implementation phase are simulated more in detail in the following chapters.

Participants in the process

private sector • public sector • civil society and the community •



The organisational setup

To support civil initiatives and improve civic engagement, I propose an organisational setup, where the role of creative industries and civic engagement is guaranteed and the flow of financing, information and people are also demonstrated.

The first steps

During the initiation phase, the businesses in the area form a collective or a project firm together with the representatives of the municipality to coordinate the development. As part of the short-term strategy, some buildings and public spaces are chosen for regeneration as prototypes in the area of the test location what artists and creative businesses can use. These kinds of companies are attracted because of financial incentives (affordable rent or grants) and the special milieu of the Csepel Works. These prototype buildings are either used temporarily by the community for various community purposes or rented out for a longer-term under favourable terms and in return, the condition of these buildings is maintained or improved by renovation.

The organisational setup

money information people



The stakeholders

In a successful process a wide variety of stakeholders need to be involved, some of which might be unofficial. (Stern & Seifert, 2008) There are three main groups of stakeholders:

- Local businesses, the municipality and other regional agents who financially support the initiatives. They are responsible for the coordination and the enabling of the process.
- Non-profit organizations, informal art groups, community development programs, artists who act as connector between residents and local businesses and educational institutions.
- Finally, the residents and workers, who are the recipient of the developments.

STEPS IN THE PROCESS	STAKEHOLDERS	STAKEHOLDER GROUP
COORDINATION AND ENABLING	Collective of businesses (Csepel Association of Employers and Industrialists or a new organization)	Private sector
	Individual owners and real estate management firms present in the area (for example Indotek Group, who own around 30% of the building stock)	Private sector
	Governmental bodies and agencies (Municipality of Csepel and Budapest, National Cultural Fund of Hungary)	Public sector
	EU founded creativity-led regeneration programs (Creative Europe programme, European social fund (ESF))	Public sector
ORGANIZING	Community development local- and city- scale (for example the community point of the Ecumenical Relief Organization in Csepel; BudapestScenes, Human Services Directorate of the municipality of Csepel)	Civil society, public sector
	Event organizers local and city-scale (for example the Hungarian Contemporary Architecture Centre - KÉK, PLACCC Fesztivál, Creative centres (Csepeli Városkép Kft.))	Civil society, public sector
	Existing local businesses with special importance to the project (Bicycle related businesses, for example, Csepel Zrt and other local creative businesses)	Private sector
PARTICIPATION	Local schools (for example BGéSZC Kossuth Lajos Bilingual Vocational Secondary School of Technology or Weiss Manfréd Vocational Secondary School and Student Hostel	Public sector
	Residents of Csepel with special attention to the residents of the critical areas	Community
	Residents of the city	Community

Power-interest matrix

The power-interest matrix shows that currently the greatest power is concentrated in the hands of the municipality and equally importantly in the hands of the individual owners and real estate management firms as almost all the land is privately owned.

To achieve a successful project, it is essential to give greater power to the collective of the businesses, who can unite and represent the groups of individual owners and real estate management firms. Furthermore, it is also important to give the opportunity to the members of the community through different community groups to influence the process.



Control over the project





Analyses of the location

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Socio-spatial dynamics



Land use

Residential - prefabricated Residential - peripheral Residential - suburban Sport facilities Public facilities (for example schools) Supermarkets Industry Port area Other commercial Grassland and forest Green urban areas Data source: Urban Atlas 2012—Copernicus Land Monitoring Service



Morphologically, there are 3 types of living areas in the district. The family house areas, which are typical to the suburban zone of Budapest, the prefabricated housing estates from the Socialist times and the small-scale, peripheral family house areas, which often contain very low-quality housing without basic amenities. These peripheral areas are situated between the prefabricated housing and the industrial areas or in enclosed garden areas, which are officially not residential, therefore permanent residency is not allowed there.



Figure 50: Photo of prefabricated housing of Csepel, Budapest, Hungary source: Google Earth Pro,2019




Figure 51: Photo of the peripheral zone of Csepel, Budapest, Hungary source: Google Earth Pro,2019



The main trends which characterise the residential areas:

- The most disadvantaged people live in the peripheral small-scale family house areas, often bordered by the industry or other large- scale infrastructure.
- The socio-economic situation and the social status of those moving to Csepel later than 2000 are worse than those who moved in before the 1990s. Therefore, the socio-economic status of the people living in the district is deteriorating. This tendency is particularly present in the small-scale, peripheral family house areas and to a lesser degree also present in the prefabricated housing areas (Hegedüs et al., 2015).
- Families with higher status tend to move to the typical suburban areas over the prefabricated housing estates, while those moving to peripheral housing areas come from disadvantaged groups (Hegedüs et al., 2015).

Critical residential areas of the districts

Critical areas are specified according to the following:

- at least 15% of people with at most elementary education
- at least 12.8% of people are unemployed from the active population
- the maximum amount of people with higher education is 14,8%
- the proportion of overpopulated houses are higher than 25,9%
- the proportion of substandard housing is minimum 7,7%
- the proportion of social housing is minimum 15,6%

If more than 4 of these indicators are present the area is considered critical. If only 2 or 3 are present it is at risk.

Areas at risk Critical areas Residential - prefabricated Residential - peripheral



Hegedüs et al. (2015) summarizes a survey conducted by the municipality among the residents of Csepel. This found that the most important problem identified by the majority of the residents is the lack of local workplaces. More than 2/3 of the responders said that they would prefer to work in the district but there are no possibilities.

Other important problems named by several of the residents are:

- the difficulty of getting out of the district
- the standard of outpatient care
- environmental pollution (including noise and air pollution)
- the bad condition of public spaces
- the lack of a real city centre and pedestrianised areas

However, most of the people were satisfied with the sports facilities, with the rate of green places and with the quality of local schools.

Csepel has always been considered a workers' district. From the demographical comparison of the education level with Budapest, it is clear that this has not changed much in the last decades. In Csepel, people tend to be lower educated and more men have jobs than women, while the tendency in Budapest is the opposite. Compared to the whole of the city, there are more families with children in Csepel as well.

Figure 52: Composition of households in Csepel and in Budapest (Hegedüs et al., 2015) Figure 53: Unemployment rate in Csepel and in Budapest (Hegedüs et al., 2015) Figure 54: Education rate in Csepel and in Budapest (Hegedüs et al., 2015)



Composition of households in 2011





Economic structure

The predecessor factory of the Csepel Works was formed in 1882, first to produce canned fruits and vegetables for the army. This factory grew to the biggest steel factory in Hungary by the 1940s. During that period almost 40 000 people worked there. It was also the home of the Csepel bicycle and motor production.

After the era change, the centrally controlled Csepel Works was shut down and the land and factories were privatized, many of the buildings were left abandoned. Today, only 30% of the infrastructural capacity is used and the land has a disjointed ownership pattern, with more than 400 owners where the scope of activities of the companies present in the area has been changing rapidly. Some steel manufacturing businesses and the assembling of bicycles are still present as a reminder of the past. After the era change, however, all of the former employees of the socialist factory were fired and most of these people lived in Csepel.

Currently, there are 5 main types of companies present in the area of Csepel Works:

- Businesses which are the successors of the large socialist metal production. These produce car parts, pipes and other construction metals and machines.
- Industrial activities established after the era change, for example, energy production.
- Family-run companies mostly focused on serving the needs of other companies in the area.
- Mainly logistical companies which were attracted there only because of the affordable and large empty capacity of buildings, which is used for storing product.
- Other service-oriented companies which sell their products inside and outside of the area of Csepel Works (for example lawyers office, architecture office, photo studio, furniture manufacturer or services like car tuning or laser cutting). These are often micro and small businesses and their presence are often invisible.

In the last decade, the logistical sector has been increasingly present in the area, which makes use of cheap rent and large available surfaces. However, the presence of such businesses is not favourable, because these businesses do not provide many jobs. Furthermore, the traffic of such businesses further burdens the infrastructure and use the low permeability of the roads of the Csepel Works. To increase the presence of the creative industries, it is necessary to differentiate between the companies in the regeneration process and provide space and possibilities mostly to creative businesses and businesses which serve their needs to maintain a healthy provider-producer collaboration and a variety of jobs. On the other hand, logistical companies should be encouraged to move to locations closer to highway access points.







Figure 59: (Csepel Car Production on a Matchbox Label, n.d.) Figure 60: (Szerint, 2017); (Fejes, n.d.)

The brand of Csepel has become well-known in Hungary through motorcycle, truck and bicycle production.





Figure 61: A current model of a Csepel bicycle in an advertisement (Csepel Bike, n.d.) Figure 62: Csepel is known brand which tries to reinvent itself (DRK x Csepel collaboration, 2019)

Csepel bicycles are still designed and assembled in the old factory, however, the production of the frames happen in China. The brand has also started a collaboration with a Hungarian fashion company.

In 2017, around 850 companies were registered in the area. However, most of them are very small or not even functioning. There are only around 400 companies which operate in reality. Their average net turnover is 321 million HUF (973.373 EUR) yet, their median turnover is only 40 million HUF (121.292 EUR) which demonstrates that most of the companies are small or have low income and there are only a few larger companies with higher turnovers (Horváth, 2020).

In the last couple of years, creative companies started to pop up in the area. These are mostly part of the service-oriented companies and form a diverse group representing different sectors of the creative industries. For example, the network of bunkers from World War II are used as rehearsal rooms for music bands. A large artist studio also settled in the area. There is a company which designs and creates high-quality tiles and furniture from concrete. There are also companies related to traditional bicycle production which focus on innovative design.

Creative industries

- **O** Traditional metal production
- Publishing
- Art
 Performing art
- Crafts
- Advertisement
- Design











Figure 65: An example of the new economy- the studio of an artist in the area (Szőke, n.d.) Figure 66: Cement tiles, designed locally (2017)

Municipal plans



Figure 67: In the zoning plan of the district, the area of Csepel Works is fully allocated to industries (Fővárosi Településszerkezeti Terv, 2015)

The municipality also discovered the possibilities of creativity led regeneration. The projects listed in Figure 68 represent the development plans of the municipality for the area between 2014-2020. So far none of the plans has been realised (Barnamezős Területek Fejlesztése Tematikus Fejlesztési Program, n.d.) most probably because of the lack of financing.

The first plan is about to develop an incubator place for small companies and to create better accessibility to the major road and public transport in the area.

The second development plan is about the creation of a project firm which is responsible for the regeneration.

The third development plan includes the regeneration and integration of the main entrance area into the rest of the urban fabric and creating places of entertainment.

However, these development plans represent detached attempts to stimulate the presence of creative businesses in the area and there is no comprehensive plan to achieve this in collaboration with the local companies.

XXI-01: Inkubátorház-fejlesztés és bekötőútépítés a Csepel Művek területén



Projekt benyújtó szervezet (projektgazda): Budapest XXI. Kerület Csepel Önkormányzata Projekt helyszíne: Inkubátorház-fejtesztés: Duna lejáró – Mansfeld Péter utca délnyugati kereszteződésében. Bekötőút-építés: a leendő Duna lejáró Mansfeld Péter utca – Teller Ede út (Gerincút) közötti szakasza Kapcsolódó középtávú céllok): KT.2.

Projekt indikatív összköltsége 2020-ig: 870 millió Ft

XXI-02: Barnamezős fejlesztéseket koordináló menedzsmentszervezet létrehozása, működtetése



Projekt benyújtó szervezet (projektgazda): Budapest Főváros XXI. Kerület Csepeli Polgármesteri Hivatal

Projekt helyszíne: C**sepel Művek területe** Kapcsolódó középtávú cél(ok): **KT.3.3**. Projekt indikatív összköltsége 2020-ig: **590 millió Ft**

XXI-03: Csepel Művek kapuja



Projekt benyújtó szervezet (projektgazda): Budapest Főváros XXI. Kerület Csepeli Polgármesteri Hivatal

Projekt helyszíne: **Budapest XXI.kerület, Szinesfém utca, Károli Gáspár u.** Kapcsolódó középtávú cél(ok): **KT.1.** Projekt indikatív összköltsége 2020-ig: **340 millió Ft**

Figure 68: Barnamezős Területek Fejlesztése Tematikus Fejlesztési Program

Occupancy



Figure 69: Advertisements of buildings for rent or to sell source: Google Earth Pro, 2019

Currently, only around 30% of the capacity of the existing infrastructure is used in the Csepel Works. By mapping the buildings to rent or to sell, it becomes obvious that many places are advertised. This symbolises well the need for regeneration and the need to find new functions to replace the currently empty infrastructure. It becomes even more clear if the tendency shown in Figure 18 about the number of employees in the industrial sector is considered. The importance of industry has been continuously decreasing in the city since the era change. Therefore, it is not realistic to expect that these areas will be filled with such functions once again.

However, this tendency is not recognized in the zoning plan of the municipality. Here the whole area is allocated for industrial functions.

Map of vacancy





Data source: Jeczkó et al., 2019; OpenStreetMap

Public facilities



Figure 70: One of the restaurants inside the area of the Csepel Works source: Google Earth Pro, 2019

The district centre is situated East of the area of Csepel Works. It is the place where most of the services, for example, shops, schools, other public functions and restaurants are located.

Although the area of Csepel Works is solely industrial, still some restaurants and small shops can be found inside, along the main artery roads. Furthermore, some low-cost and low-quality accommodations are also located here to house workers. These facilities are mostly used by workers in the area and are less frequented by residents except the two smaller restaurants along the main road.

Services

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Road structure



Figure 71: Main channels for car traffic from the agglomeration (2016)

The island of Csepel is the largest island on the Danube, which is partly in the city of Budapest. However, it is only accessible through two bridges from the Pest side of the Danube and currently, there are no bridges to the Buda side inside the city's boundary. This will change when the two bridges planned over the Danube will be built. The first planned bridge more to the north is currently being designed. Therefore, there is a higher chance that it will be built shortly. However, as is the case with many large developments in Budapest, its future is still uncertain.

Currently, the city of Budapest is served by two circular ring roads from the northern, eastern and southern side of the city. This structure is visible in Figure 71, where the main channels for car traffic are shown according to their importance. To relieve the inner ring road a third ring is planned in between these two existing roads. This follows mostly the lines of existing infrastructure. The second bridge (more to the south) connecting Csepel and the Buda side will be part of this ring road.

Map of road connections

Border of Budapest ----Border of the district The area of the Csepel Works Major roads Smaller important roads Planned future connections Bicycle roads



Public transport connections



Figure 72: The existing public transport options and future planned developments in the city

- Tram Suburban train
- Metro
- Future development plans
- Boat
- Csepel

The island is served by buses and a suburban train line, which allows the residents to reach the border of the inner city easily. Currently, it can be reached in 15 minutes with the suburban train, but it is necessary to change transportation to reach the heart of the city. According to development plans, this will change when the line of the suburban train will be extended until the city centre. This will further increase the accessibility of the island.

Map of public transport connections

- Border of Budapest - - - Border of the district
 - The area of the Csepel Works
 - Bus routes

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- Bus stops
- . Suburban train line Suburban train stops



Porosity



Figure 73: The plot structure in 1988, 1995 and in 2017 (Horváth, 2020)

During Socialist times the whole area of the Csepel Works was owned by the State. This has changed when the area was privatized after the era change. Since then the continuous fragmentation of the plot structure can be observed (Horváth, 2020). It also means that the porosity of the area is growing because new streets are formed to access confined plots. However, until today, there are several roads, which are although open to the public, privately owned. Some of them are even closed, not accessible to everyone. Ownership is an important question because most of the area is in private hands as an undivided common property, therefore the municipality needs to find other ways for development.

The area is fenced off from the rest of the urban fabric but this fence disappears in the southern end. Currently, there are 7 points, where one can enter.

The porosity of the area



Area of the Csepel Works Entrances to the Csepel Works Streets Walking pathways Main roads Privately owned streets open to the public Privately owned streets with the possibility to be closed down Privately owned closed streets



Architectural atmosphere



Figure 74: Photos of the area (source of nr 7: Illyés, 2015)

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Data source: OpenStreetMap



Figure 75: The interior of a building in bad condition

The northern part of the area is very densely built up, while it eases to the south. In the north, most of the buildings were built before the era change, many of them even before Second World War.

The state of the buildings is very different. Some of them have been renovated, while others are in the state of ruins, where only the façades are standing, and there is no roof or windows anymore. The proper regeneration of such buildings would require large investments.

The age and state of buildings

The area of the Csepel Works Renovated buildings Building in average state Buildings in bad condition Buildings in ruins Buildings built after 1990 Buildings built before 1945-1990 Buildings built before 1945









Data source: Jeczkó et al., 2019; OpenStreetMap



Figure 76: An abandoned industrial crane from Csepel

The building-stock of the northern part of the Csepel Works forms an architecturally uniform and very characteristic compound. Several from the oldest buildings are protected or considered valuable by the municipality of Csepel or by the city of Budapest.

There are other buildings or artefacts, which also represent the industrial past and are characteristic elements, such as bunkers from the Second World War, a water tower, chimneys and cranes, which contribute to the atmosphere of the place.

Protected and valuable buildings

The area of the Csepel Works Protected buildings Valuable buildings Other landmarks

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Data source: Jeczkó et al., 2019; OpenStreetMap

Green structure



Figure 77: The water tower in the Csepel Works (n.d.)

The area is very densely built-in; therefore, the amount of accessible green places or trees are minimal. The largest such area is around the water tower in the centre of the Csepel Works. This water tower also serves as a landmark, because it is easily visible from the surrounding.

Public green

The area of the Csepel Works Trees inside the are of Csepel Works Publicly accessible, grass Public squares

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Soil contamination



Figure 78: Hazardous waste next to the Danube in Csepel (2007)

Due to industrial use, large parts of the ground are contaminated. This further discourages the developers to invest in the area because the elimination of the contamination from the soil with traditional methods would be too expanse to earn a profit on their investment and the financially unstable municipality is not able to cover the costs.

Soil contamination



The area of the Csepel Works Chromium Nickel TPH Zinc Carbon tetrachloride



Summary of analyses

This summary of the analyses can be used in small-scale design to oversee what the current circumstances are in a specific location.

To sum up, the area of Csepel Works has several strengths when it comes to creativity-led regeneration. It has a valuable building stock and several characteristic industrial elements, which creates a unique and authentic atmosphere. Furthermore, it has a growing number of creative businesses. The area is situated in a great location with a good connection to the centre of the city which will further improve with the planned new developments. Furthermore, there are existing producer-provider collaborations between businesses inside the area, which can be relied upon during the process.

If creativity-led regeneration is successful opportunities will also emerge. The critical areas next to the area of Csepel Work can also benefit from the development of a more mixed-use area, and with new businesses, new job possibilities will also emerge. There are several empty places or plots which can be occupied temporarily by the community and there are characteristic places which can be exploited by placemaking initiatives. The brand of Csepel can also benefit from this development and it can form the base of collaboration between businesses.

However, there are weaknesses as well. The lack of in-between places, green areas, the polluted soil, the lack of diversity in functions, the poor condition of some of the valuable buildings, the difficult ownership structure, the low porosity of the area are all challenges which the future regeneration needs to overcome.

Summary of the analyses

The area of the Csepel Works Entrances to the Csepel Works Ο Building to rent or to sell Empty buildings Creative businesses Traditional metal production 0 Schools Other public facilities Supermarkets Restaurants Area of the city centre Low-cost accommodations Critical areas Areas at risk Bus routes and stop Suburban train line and stop Roads owned by the municipality Privately owned streets open to the public Privately owned streets with the possibility to be closed down Privately owned closed streets Protected buildings Valuable buildings Characteristic architectural elements Trees inside the are of Csepel Works Publicly accessible, grass Public squares Soil contamination: Chromium Soil contamination- Nickel Soil contamination- TPH Soil contamination- Zinc Soil contamination- Carbon tetrachloride Soil contamination- Mazut


Design principles



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These design principles are derived from the description of the creative milieu and are adjusted to the post-socialist design objectives to achieve a creative environment which addresses spatial and social goals at the same time. They can be categorised into three categories:

- density and diversity of people
- connectivity
- environmental quality

Density and diversity of people:

To create an environment where creativity can thrive, it is essential to form areas where the frequency of use is higher, where people can meet and interact with each other. In order, to achieve this, it is necessary to prioritize pedestrian traffic in such streets and mix the industrial zones with economical and residential functions to transform the currently monofunctional zone into a zone which serves several primary functions.

Proposed principles:



Industrial functions mixed with other economic, public and residential functions. With the vertical separation of the residential functions, which are placed along the high streets



Streets with a higher frequency of use are formed, where bordering blocks have a higher concentration of public functions on the ground floors, especially around in-between places



Heavy traffic is separated from car traffic and pedestrians



In-between places are formed along streets with a higher frequency of use to serve as meeting places



Connectivity on the production level:

To increase the presence of creative businesses in the area, it is necessary for the existing companies to form a collective and to collaborate with the local municipality. This collective should promote renting out still unused buildings to creative businesses. To attract such companies, it is essential to divide up the large industrial buildings into smaller and more flexible spaces which can be rented out to several smaller companies at the same time. This collective can also support the formation of producer and provider collaborations to ensure that different types of workplaces are present in the area.

To support new and existing businesses, they should be clustered according to their needs to be accessible and discoverable by people (Croxford et al., 2020). Companies which sell products and services to locals should be placed along transit streets and should have open façades towards these streets, so their products and production are visible to passers-by, while packaging, storage, logistics and heavy and disturbing processes should be placed in the inner side of blocks.

Furthermore, these companies collectively should organise tours, open days or other events as a common brand-building of Csepel. As another measure of brand-building, the existing visual signs and architectural elements of the old traditional production should be kept and reinforced by new creative forms of use.

Proposed principles:

Collective formed between local companies to collaborate with the municipality and to support the formation of producer and provider collaborations

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Unused buildings rented out to creative businesses and the large industrial spaces are divided into smaller and flexible places

- Businesses are clustered according to their need to be accessible and discoverable to people
- 0

Buildings along high- and transit streets have a unified graphic representation on visual signs and advertisements and collectively organize tours and events to promote the brand Csepel



The existing visual signs and architectural elements of the old traditional production should be kept and strengthened by new creative forms of use



Connectivity on the human level:

To tackle the post-socialist consequences of the city of Budapest and to achieve a social and spatial change, it is essential to involve the residents in the regeneration process. As Csepel is one of the most disadvantaged districts of the city, the collaboration between local companies and residents could potentially empower the local people, improve their skills and their networking ability, confidence and self-expression to achieve a better position in the job market. New and existing members and companies of the Csepel Works need to take the lead to increase public involvement through workshops, competitions and placemaking sessions. Furthermore, the municipality should stimulate entrepreneurial and creative activities and should focus on supporting several smaller-scale initiatives over one larger project.

It is also important to improve the connection between local education and businesses by creating workshop places, where students can earn experience in a work environment.

To increase the presence of locals in the area it is important to make them feel that they have ownership over it, that public spaces also serve their needs. Placemaking is ideal to make residents more familiar with the area. To further increase this effect, empty or unused buildings or land could be used temporarily by locals for community purposes.

Proposed principles:



Residents are involved in the regeneration process through workshops and placemaking initiatives



Entrepreneurial and creative activities regarding the development of the physical environment are stimulated through several smaller projects



Improved connection between local education and businesses by creating workshop places



Local community takes temporary ownership over unused buildings or land to be used for community purposes







Connectivity on the physical level:

It is essential to open up currently closed streets and to add new ones where possible to develop physical connectivity and to improve the permeability of the urban fabric. It also means that large buildings, where the interior functions allow, should be made crossable by pedestrians to establish shortcuts.

It is also crucial to better connect the area through a transit zone, with the current centre of the district to increase its accessibility. This connection with the rest of the urban fabric will be reinforced by new public transport facilities and the support of alternative transport modes such as bicycles and car-sharing.

To improve the currently difficult orientation in the area, the new and existing landmarks should be used as orientation points. For example, the currently very similar chimneys dotted throughout the site could be colour coded to improve orientation.

Proposed principles:

Closed streets are opened and new crossings are added through buildings



Improved connection with the rest of the urban fabric



Improved and diversified transport possibilities including public transport and other alternative forms of transport (for example car-sharing, bicycle use)



Improved orientation in the industrial area by highlighting landmarks visible from the distance and creating new height accents



Environmental quality:

The architectural atmosphere and the aesthetic of a creative milieu plays an important role in attracting companies. Consequently, preserving the architecturally valuable and characteristic industrial elements is important.

A creative environment includes surprising elements, which encourage experimentation. Art, which is presented in public spaces can be used to create such a surprise.

Furthermore, streets with a higher frequency of use are also necessary to bring creatives and residents inside the area of Csepel Works. Together with their functions, the façades along these streets need to be exciting enough to attract people. Therefore, they should form a continuous line to confine these streets and should have open plinths. Furthermore, the regulation of parking is important in these streets.

To improve the overall quality of the environment, cleaning the contaminated soil, increasing the number of green places and outdoor furniture is essential to attract residents and new developments. Although a creative environment should not be fully satisfying so that it encourages exploration to figure out how to improve it, therefore low-cost and DIY solutions via recycling of materials should be encouraged.

In the case of new developments, buildings should harmonically fit the valuable building stock. To control this, the municipality has already developed guidance and regulations which should be kept.

Proposed principles:



Preserving and enhancing the architectural atmosphere by protecting and renovating valuable and monumental buildings and other characteristic architectural elements. This also includes the demolition of building parts which are not valuable



The architecture of new buildings is of high-quality, and it harmonically fits the existing valuable buildings stock in form and materials



To encourage experimentation interactive art installations or other playful elements are presented on public spaces



Façades form a continuous row and have open plinths along high streets and transit streets



Outdoor furniture is placed on public spaces along high streets and inbetween places to lengthen people's stay in the area







Regulated parking to increase walkability



Existing FSI of plots can not be increased when new development is planned after the demolition of an old building



An increased amount of green along streets with a higher frequency of use through green façades and roofs, rows of trees and planting zones



With new developments, plots should have at least 35% openly accessible green areas towards the interior of the blocks, in return, the municipality maintains privately-owned interior streets which are open to the public



After the demolition of a building, cleaning of the soil by Phytoremediation and alternative use of the land during this time is supported by the municipality



Short-term strategy



Prioritisation of the design principles



By visualizing the most important relations between the design principles, it becomes understandable that which ones are the most influential. These principles are the ones which should be focused on from the start to increase the successfulness of the design. This circle can be a tool to improve the collaboration between the municipality, the businesses and the community because the importance of relations can be altered and identified together. Therefore, the prioritization of design principles can happen through collaboration.

Legend

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The most important design principles, essential part of the short-term strategy Important design principles which are also part of the short-term strategy Essential connections between design principles



Phasing

DESIGN PRINCIPLES		Coordination	Collaborators	MEANS OF IMPLEMENTATION BY THE LOCAL MUNICIPALITY Stimulating through financial support and adjusting regulations, first
\bigcirc	Streets with a higher frequency of use are formed, where bordering blocks have a higher concentration of public functions on the ground floors, especially around in-between places		•	sumulating unlocgrimmatical support and adjusting regulations, in st around the main streets, which are owned by the municipality
\bigcirc	Industrial functions are mixed with other economic, public and residential functions		•	Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality
	A collective is formed between local companies to collaborate with the municipality	•		Stimulating through support from the municipality
\odot	In-between places are formed along streets with a higher frequency of use to serve as meeting places	•	•	 Stimulating through supporting local placemaking initiatives around the main streets, which are owned by the municipality
\bigcirc	The existing visual signs and architectural elements of the old traditional production should be kept and strengthened by new creative forms of use	•	•	Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality
	Heavy traffic is separated from car traffic and pedestrians		•	Adjusting the accessibility of streets, which are owned by the municipality. After the masterplan, privately owned streets are also adjusted
	Local community takes temporary ownership over unused buildings or land to be used for community purposes	•		• Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality
	An increased amount of green along streets with a higher frequency of use through green façades and roofs, rows of trees and planting zones	•	•	Stimulating by supporting local placemaking initiatives to increase the green around the main streets, which are owned by the municipality
	Entrepreneurial and creative activities regarding the development of the physical environment are stimulated through several smaller projects	•	•	Stimulating through support from the municipality
\bigcirc	Buildings along high- and transit streets have a unified graphic representation on visual signs and advertisements and collectively organize tours and events to promote the brand Csepel	•		Stimulating through support from the municipality
	Improved connection with the rest of the urban fabric	•	•	By compensating land owners to open streets up
P	Regulated parking to increase walkability	•	•	Adjusting the parking options of streets, which are owned by the municipality. After the masterplan new regulations are formed
	Existing FSI of plots can not be increased when new development is planned after the demolition of an old building			Adjusted regulations
Ş	After the demolition of a building, cleaning of the soil by Phytoremediation and alternative use of the land during this time is supported by the municipality	•		 Stimulating by financial support and by familiarizing land owners about the possibilities
	Outdoor furniture is placed on public spaces along high streets and in-between places to lengthen people stay in the area	•	•	• Stimulating through supporting local placemaking initiatives around the main streets, which are owned by the municipality
	Façades form a continuous row and have open plinths along high streets and secondary streets	•	•	Adjusted regulations
	To encourage experimentation interactive art installations or other playful elements are presented on public spaces	•		 Stimulating through supporting local artists and creative businesses by providing exhibition possibilities in public spaces, first around the streets owned by the municipality
	The architecture of new buildings is of high-quality, and they harmonically fit the existing valuable buildings stock in form and materials			Adjusted regulations and improved control by the municipality
	Preserving and enhancing the architectural atmosphere by protecting and renovating valuable and monumental buildings and other characteristic architectural elements. This also includes the demolition of building parts which are not valuable		•	Including valuable buildings and characteristic elements in the list of protected buildings and stimulating regeneration by financial support
$\mathbf{\Sigma}$	Improved orientation in the industrial area by highlighting landmarks visible from the distance and creating new height accents	•	•	Stimulating by supporting local placemaking initiatives and adjusted regulations
	Improved and diversified transport possibilities including public transport and other alternative forms of transport (for example car-sharing, bicycle use)	•	•	Adjusted transport options by the city's transport authorities, initiated by the municipality, and financial support for the implementation of bike sharing options
	Closed streets are opened and new crossings are added through buildings	•	•	Stimulating through support by compensating and agreement with the land owners
	Improved connection between local education and businesses by creating workshop places	•		Stimulating by connecting local school and businesses
Ċ.	Residents are involved in the regeneration process through workshops and placemaking initiatives		•	• Stimulating by supporting local placemaking initiatives and adjusted regulations
0	Businesses are clustered according to their need to be accessible and discoverable to people	•	•	Stimulating by creating high-streets, first on streets owned by the municipality and allocating space for different kinds of businesses in the block
0	Unused buildings rented out to creative businesses and these large industrial spaces are divided into smaller and flexible places	•	٠	Stimulating by familiarizing building owners about the possibilities regarding flexible workplaces and by supporting the process
	With new developments, plots should have at least 35% openly accessible green areas towards the interior of the blocks, in return, the municipality maintains privately-owned interior streets which are open to the public	•		Adjusted regulations by the municipality
	Low-cost and DIY solutions via recycling of materials are encouraged and supported by the municipality	•	•	Stimulating through supporting local initiatives

The phasing relies on the prioritisation of the design principles. In the short-term strategy, the most important design principles should be started the earliest, while the less important ones can be implemented later in the process. At the end of the short-term strategy, the evaluation of what has been achieved takes place and the long-term strategy is adjusted.

Legend

- Intensity of the implementation over time
 - Private stakeholders 🥚
 - Public stakeholders
- Civil society and the community as stakeholders

NIMON CULLING CARRECTRIMISTORM MATERIAN SACHARD CULLING CARRECTRIMISTORM Image: State of the state of t	SHORT-TERM	M STRATEGY	POINT OF EVALUATION	LONG-TERM STRATEGY
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Test location





In order to improve the chances of a successful implementation of the short-term strategy, the test location is identified by locating the areas which are already the most used and most connected to the rest of the urban fabric.

Different kind of people use the area of Csepel Works differently, however, it can be concluded that the eastern part of the Csepel Works is more frequently used by all kind of people because this is the direction where people arrive from. Therefore, developing this part first is the most straightforward.

Legend

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Entrances to the Csepel Works Frequently used roads Test location New entrances





Short-term strategy map



Figure 81: The short-term strategy visualised on the test location

The short-term strategy shows the implementation of the identified most important design principles in the test location. As these principles are identified with the help of the businesses and the community, this short-term strategy is simulation of what could happen. As a first step, the accessibility and connectivity of the test area should be increased by opening up new streets and supporting the formation of new high streets. These streets were already more used by the people of the district and even by people further from the city due to the presence of some restaurant and other public functions (such as a small



bunker museum, an escape room and low-quality, low-price accommodation) along these lines.

In this area, new and old businesses start to transform their immediate environment by redecorating their buildings and finding creative and affordable solutions to induce the local atmosphere around them. Through the new whirlwind of the local initiative, the first placemaking events take place along the frequently used high streets. These are financially supported by the local businesses and the municipality to achieve a higher impact.





The importance of long-term scenarios

There are two major factors which can influence the successfulness of a long-term strategy in the case of creativity-led regeneration in the post-socialist context. It is the achieved level of civic engagement and the achieved level of economic prosperity.

By looking at the future scenarios it can be understood why increasing civic engagement in a creative milieu is essential, especially in a disadvantaged community, such as in Csepel. The connection and correlation between economic prosperity and civic engagement can be understood and the positive correlation between the community, and the quality of the environment becomes apparent.

It also helps in finding out what kind of long-term environment the design should aim for, and this can help to form the backbone of a long-term strategy.



Figure 83: The uncertainty of long-term visions Figure 84: Long-term scenarios



Long-term scenario-STEAM

In case civic engagement is low, there are two extremes which could happen depending on the state of the economy. In this scenario the economy is growing rapidly, hence there is a large need for available workplaces. The first steps of creativity-led regeneration successfully transformed the streets and new in-between places were formed. The area became popular between younger people and therefore larger companies who want to enjoy the buzz of the neighbourhood also became interested in moving there.

However, successful economically, the attempts to form a collaboration between local companies failed and new and existing companies and the municipality did not encourage community building. As a consequence, with the interest of bigger companies, smaller ones were pushed out of the area. With the disappearance of the smaller companies, the original atmosphere of the place has also changed and the alternative, self-made solutions of the in-between places were replaced by manicured public spaces financed by the new companies.

The area has become well connected to other parts of the city, which contributed to the gentrification processes. In the residential areas, low-income residents from the critical areas were pushed out and their houses were torn down to give place for newer and higher density developments.







Figure 86: The level of densification in the scenario of STEAM





Long-term scenarios-RUST

The other extreme is when civic engagement and economic growth are both low. In this scenario there were attempts to increase the presence of creative businesses in the area, however, due to the lack of collaboration between one another, the newly settled businesses were unsuccessful to entice potential customers, the members of the community. In times of a financial crisis, this meant that these newly established companies could not sustain themselves and left. Therefore, more and more buildings became abandoned.

Because of the lack of financing, the area's connection to the rest of the city did not improve, which further increased its decay. It also meant that the inequalities had continued to grow, and more and more low-income residents moved to these parts of the city as the only affordable option, while more well-off residents moved out causing the further segregation of the critical areas and the whole district.










Long-term scenarios-REST

If civic engagement grew in the area even a financial crisis would be more tolerable. In this scenario, companies manage to form a collective which effectively helps in the development of the area by promoting it to a wider audience and potential new companies who would move there.

Although the global economy is declining, by the collective support of the community, which includes residents and companies alike, new businesses manage to sustain themselves. Small companies and start-ups are not in the danger of being pushed out from the area because the demand for available buildings is low. There is no real danger of gentrification present in this scenario. Therefore, creative businesses can stay along streets with a higher frequency of use, while buildings inside the blocks stayed empty or are used for alternative purposes. The regeneration of buildings and public spaces is slower. However, because community placemaking projects are successful, the high streets still have characteristic and inviting public spaces.

The economic struggle also means that the financing of large-scale infrastructural projects is scarce. Therefore, the car-related connections to the rest of the urban fabric did not improve. On the other hand, low-cost transport options, such as bicycles are used more, therefore the transformation of the streets in the area to slower traffic-oriented streets were successful.











Long-term strategy - BUSY

In this scenario civic engagement is high and the economy is growing. Companies and the municipality successfully involved residents in the regeneration, which also means that they manage to successfully protect the right of their vulnerable members. Therefore, the critical residential areas are regenerated through community initiatives and their residents could improve their chances on the labour market.

Inside the block, the low-value companies, which are still important to the community and to other businesses could stay within the confines of the area of Csepel Works. However, it sometimes meant that they needed to switch to less-frequented locations. On the other hand, protected and valuable building-stock is renovated and new developments are also present in the area. However, due to the resistance of the community gentrification is still under control.







Figure 95: The level of densification in the scenario of BUSY





Sustainable creativity-led regeneration in the post-socialist context

As demonstrated through the extreme future scenarios, in times of economic downturn, the retaining force of the community can be crucial. It can affect several different aspects of a neighbourhood on a physical, economic and social level. For example, when there is a community movement in the area, alternative uses of buildings are more frequent (Stern & Seifert, 2008; Romein et al., 2013), saving the deteriorating buildings stock from demolition and creating characteristic public spaces. From an economic perspective, the community can also provide stability to the businesses (Elsey, 2018). Because community programs can generate new market and income for local companies, differentiating them from competitors as well. In times of crisis, the community can keep these businesses alive. Socially, workshops organized by the businesses can improve people's competitiveness by empowering them, improving their skills and networking ability (Delconte et al., 2016; Kay, 2000; Stern & Seifert, 2008). Consequently, there is a positive correlation between the physical and economical state of a neighbourhood and its social networks.

The scenarios of total deterioration (RUST) and high-level of gentrification (STEAM) show development directions where the growing inequalities place the area to the side of 'losers' or 'winners'. These scenarios highlight why uncontrolled capitalist principles can cause long-term problems. The scenarios demonstrate that if the goal is to overcome the growing inequalities of a post-socialist society an **integrated approach to urban design is necessary with combined social and economic measures** and this is **key for a sustainable creativity-led regeneration process**. Therefore, if the short-term strategy in the area of Csepel Work implemented successfully, the long-term strategy should focus on such an integrated approach.



Long-term phasing

	DESIGN PRINCIPLES	Coordination	Collaborators	MEANS OF IMPLEMENTATION BY THE LOCAL MUNICIPALITY		
	with a higher frequency of use are formed, where bordering blocks have a higher concentration of public		Collabo	Stimulating through financial support and adjusting regulations, first		
\odot	functions on the ground floors, especially around in-between places	•	•	around the main streets, which are owned by the municipality		
\bigcirc	Industrial functions are mixed with other economic, public and residential functions		•	Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality		
	A collective is formed between local companies to collaborate with the municipality	•		Stimulating through support from the municipality		
\odot	In-between places are formed along streets with a higher frequency of use to serve as meeting places	•	•	Stimulating through supporting local placemaking initiatives around the main streets, which are owned by the municipality		
$\textcircled{\begin{tabular}{ c c c c c } \hline \hline$	The existing visual signs and architectural elements of the old traditional production should be kept and strengthened by new creative forms of use	•		Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality		
	Heavy traffic is separated from car traffic and pedestrians		•	Adjusting the accessibility of streets, which are owned by the municipality. After the masterplan, privately owned streets are also adjusted		
	Local community takes temporary ownership over unused buildings or land to be used for community purposes	•		Stimulating through financial support and adjusting regulations, first around the main streets, which are owned by the municipality		
	An increased amount of green along streets with a higher frequency of use through green façades and roofs, rows of trees and planting zones	•	•	Stimulating by supporting local placemaking initiatives to increase the green around the main streets, which are owned by the municipality		
	Entrepreneurial and creative activities regarding the development of the physical environment are stimulated through several smaller projects	•	•	Stimulating through support from the municipality		
\bigcirc	Buildings along high- and transit streets have a unified graphic representation on visual signs and advertisements and collectively organize tours and events to promote the brand Csepel	•		Stimulating through support from the municipality		
	Improved connection with the rest of the urban fabric	•	•	By compensating land owners to open streets up		
P	Regulated parking to increase walkability	•	•	Adjusting the parking options of streets, which are owned by the municipality. After the masterplan new regulations are formed		
	Existing FSI of plots can not be increased when new development is planned after the demolition of an old building	٠		Adjusted regulations		
8	After the demolition of a building, cleaning of the soil by Phytoremediation and alternative use of the land during this time is supported by the municipality	•		Stimulating by financial support and by familiarizing land owners about the possibilities		
	Outdoor furniture is placed on public spaces along high streets and in-between places to lengthen people stay in the area	•	•	Stimulating through supporting local placemaking initiatives around the main streets, which are owned by the municipality		
	Façades form a continuous row and have open plinths along high streets and secondary streets		•	Adjusted regulations		
	To encourage experimentation interactive art installations or other playful elements are presented on public spaces	•	•	 Stimulating through supporting local artists and creative businesses by providing exhibition possibilities in public spaces, first around the streets owned by the municipality 		
	The architecture of new buildings is of high-quality, and they harmonically fit the existing valuable buildings stock in form and materials			Adjusted regulations and improved control by the municipality		
	Preserving and enhancing the architectural atmosphere by protecting and renovating valuable and monumental buildings and other characteristic architectural elements. This also includes the demolition of building parts which are not valuable	•	•	Including valuable buildings and characteristic elements in the list of protected buildings and stimulating regeneration by financial support		
$\mathbf{\Sigma}$	Improved orientation in the industrial area by highlighting landmarks visible from the distance and creating new height accents	•	•	Stimulating by supporting local placemaking initiatives and adjusted regulations		
	Improved and diversified transport possibilities including public transport and other alternative forms of transport (for example car-sharing, bicycle use)	٠	•	Adjusted transport options by the city's transport authorities, initiated by the municipality, and financial support for the implementation of bike sharing options		
	Closed streets are opened and new crossings are added through buildings	•		Stimulating through support by compensating and agreement with the land owners		
9	Improved connection between local education and businesses by creating workshop places	•		 Stimulating by connecting local school and businesses 		
C A	Residents are involved in the regeneration process through workshops and placemaking initiatives		•	Stimulating by supporting local placemaking initiatives and adjusted regulations		
0	Businesses are clustered according to their need to be accessible and discoverable to people	•	٠	Stimulating by creating high-streets, first on streets owned by the municipality and allocating space for different kinds of businesses in the block		
0	Unused buildings rented out to creative businesses and these large industrial spaces are divided into smaller and flexible places	•		Stimulating by familiarizing building owners about the possibilities regarding flexible workplaces and by supporting the process		
	With new developments, plots should have at least 35% openly accessible green areas towards the interior of the blocks, in return, the municipality maintains privately-owned interior streets which are open to the public	•		Adjusted regulations by the municipality		
	Low-cost and DIY solutions via recycling of materials are encouraged and supported by the municipality	•	•	Stimulating through supporting local initiatives		

The long-term phasing depends on the achieved level of civic engagement and economic prosperity, consequently, it depends on which scenario in the future is accomplished. Therefore, the columns of scenarios next to each other represent different options and the scenario corresponding to the situation is chosen.

Legend

- Intensity of the implementation over time
 - Private stakeholders 🥚
- Civil society and the community as stakeholders

	BUSY	REST	STEAM	RUST





The description of the desired future



From the scenarios it became apparent that achieving increased civic engagement is key to achieve an economically, socially and spatially more just future. Therefore, the longterm vision is based on the scenario which anticipates high public participation and economic growth (BUSY).

How will this future look like?

The area of the Csepel Works remains fundamentally a zone for working. Compared to the current situation, the diversity of companies is wider, primarily, but not exclusively with the focus on creative businesses, which can generate higher social and economic value for the district.

New services are capable to attract residents of the district and even people from the centre of the city. These new functions are situated along the streets, where the frequency of use is higher and the distribution of use over time is varied. Besides, along these streets, new public and private inbetween places are formed, which serve as meeting places for visitors and workers alike and concentrate functions which support the strong community of the residents.

Due to the collaboration between the traditional and new businesses, they have been capable of reviving the brand Csepel as a symbol of high-quality local manufacturing. To achieve such collaboration and to work together with the municipality effectively a collective is formed, which represents the interests of these businesses.

There are several new possibilities for residents to get to know the area and to involve in its development as well and to develop their skills through creative initiatives. New and old companies jointly work together to provide creative workshops, to collaborate with local schools or to simply provide space for projects of the local community. As a



Figure 99: Visualisation of the desired future

consequence, residents are proud of the revival of the area and they are keen to spend time there. These residents together with the district successfully control gentrification, because they have managed to build up a strong community and they can fight new developments, which are not accessible to everyone. Furthermore, the municipality also reduces the effects of gentrification through policy measures, which results in a resilient design framework.

The area is well-connected to the rest of the fabric of the city through diverse options of public transport. With the arrival of the tram line through the new bridge and the lengthened ferry line, new high streets are formed which connect the new public transport options to the heart of the district. By this time, the firstly formed high streets through the Csepel Works are well connected to the city centre and have become an essential part of people's everyday life. This had a positive effect on the area between the Csepel Works and the centre of the district because it has become more mixed and serves as a transit zone between the two.

The quality of the environment has improved because of the transforming presence of the new creative businesses and the successfulness of local placemaking initiatives. There are several initiatives on how to reuse the characteristic architectural elements, while protected and valuable buildings have been renovated and their original character is maintained and reinforced. In the place of the old and unattractive buildings, new buildings are being built. These buildings are built on clean land because for a temporary time Phytoremediation took place after the demolition of the current buildings. During this period temporary functions were allowed to take place on the land, which supported community building or served as a source of income for the landowner.

The layers of the long-term spatial strategy





The separation of traffic

In Csepel, I propose to extend the current boundaries of the centre of the district and to connect it with the area of Csepel Works through streets with a higher frequency of use. To reach this goal, the separation of the different modes of traffic is necessary, because currently heavy traffic is allowed on all the roads. Therefore, I propose that heavy traffic should be allowed in the north-south direction towards the centre of the city or towards the highway ring, while streets with a higher frequency of use and transit streets are formed in the east-west direction connecting the centre of the district with Csepel Works.

8

The functions which border streets with a higher frequency of use could include public services (schools, public service bureaus, sports facilities), community gathering places (community gardens and halls, entertainment venues, in between-places, where people can meet), creative businesses which attract an audience (art galleries, museums, but also activities like laser tag or, escape rooms, which can attract residents from the whole city), and other service-oriented functions which serve the whole community with their presence. Temporary events should also be focused on these public spaces.

living

TRE S

CENT

DISTRICT

FRANSIT ZONE





In-between places should be formed along streets with a higher frequency of use as well. These places -especially coffees, bars and other entertainment venues- will most probably emerge organically, but their development can be reinforced by placemaking events, where residents and workers of the area can meet and work towards a common goal.

Transit zone

working

CSEPEL WORKS

The proportion of workplaces and living should gradually change in the East-West direction. This would also transform the transit zone into a more mixed zone, which is currently a critical residential area between the centre of the district and Csepel Works. In the area of the Works, I propose to improve the diversity of functions by creating living labs, which serve as living places for local workers and artists (Hungarian law allows the presence of housing for workers in industrial areas). These are places for experimentation and places for alternative living and should be placed over public functions along high and transit streets.







Clustering

I propose to cluster public-oriented functions along the high streets, while cluster businesses which provide services and sell products outside the area of Csepel Works along transit streets, with façades open enough to showcase their products and production. Companies which focus on serving other companies' needs inside the area of Csepel Works, or are the successors of the old metal production, or functions such as packaging, storage, logistics and other heavy and disturbing processes should be placed in the inner side of the blocks.





Visual signs and orientation

To physically showcase the brand of Csepel, the several characteristic visual signs of the old industrial era could be used to build the brand of the area. These characteristic elements are often situated along the proposed high streets; therefore their presence can be used to increase the originality of the new in-between places. Furthermore, these elements are often higher, therefore they can also serve as orientation points. In case there is no such element present in the junction of a high street and a transit street, I propose to create a new height accent with newly built buildings to improve orientation.







Connecting the area through the transit zone with the current centre of the district to increase its accessibility and porosity is essential. Although the disjointed ownership patterns make it a difficult task. Therefore, establishing good collaboration between the municipality and the local companies is important.



Multimodal public transport

When the planned bridge is built and the new tram line will pass the area along its northern border, I propose a new tram stop and the extension of the high street until this stop. Furthermore, as an alternative way to commute between the centre of the city and Csepel, I propose the extension of the public ferry line, which currently ends north of Csepel. These two will automatically create new streets with a higher frequency of use.





Architectural quality

The municipality of Csepel has already produced a document which describes the desired environmental quality in detail. However, it is essential to emphasize that the architectural atmosphere and the aesthetic of a creative milieu plays an important role in attracting creative companies. Consequently, I propose to extend the number of protected buildings and include the architecturally valuable and characteristic industrial elements as well.

Parking

Parking on high streets is only allowed to load businesses while parking on transit streets is only allowed for a maximum period. General parking is organized inside the blocks along with heavy traffic.





Green structure

The amount of green is increased by planting new trees along transit- and high-streets. Furthermore, it is also increased by supporting the installation of green façades and roofs. With new developments, plots should have at least 35% openly accessible green area towards the Interieur of the block, which will further increase the amount of green inside them. The accessible green areas along the Danube should be extended to the whole length of the Csepel Works.

Bicycle structure

The north-south bicycle connection through the island is already developed, therefore I propose to improve the east-west connection through the area of Csepel Works. Consequently, high streets and transit streets should be predominantly oriented towards foot and bicycle traffic. By developing bike-sharing between the central points of high streets and public transport, the bike-friendly character of the area improves and the brand of Csepel bicycle develops.

existing bicycle routes new bike connections

bicycle sharing points





Long-term strategy map



Figure 100: The long-term strategy visualised in axonometry



East-West section



The sections show the existing and the new situation what creativity-led regeneration can achieve. It illustrates the increased mix of functions between the different zones because the proportion of workplaces and living should gradually change in the East-West direction. This can have a positive effect on the transit area (current critical area) between the area of the Csepel Works and the district centre.

Mix of functions

Residential Creative businesses Educational facilities Other public facilities Shopping and services Industry



The desired future situation with an increased mix of functions

Block structure

In order to understand how the design can be more resilient spatially, economically and socially, I looked at the spatial manifestation of an economically and socially resilient block. This can be described by principles such as redundancy, modularity and diversity. Therefore, the base of the long-term strategy is the modular structure of the blocks.

The block structure



publicly accessible land in the block streets with heavy traffic continuous row of façades with pubic functions continuous row of façades with creative businesses ••••• • hew streets inside the block protected and valuable buildings
Regeneration through creativity 1 217



As a first step, the diversity of functions is increased because according to Feliciotti et al. (2016) the most important factor in achieving spatial resiliency in the design, is incorporating diversity. The diversity is also reinforced by creating flexibility in the available workplace sizes and plots inside the block.

Redundancy is also important to increase spatial resilience (Feliciotti et al., 2016). The idea that businesses are separated and placed according to their functions in the block also supports its redundancy and by creating open space inside the block, it can serve as backup to improve long-term redundancy as well.

Connectivity also improves spatial resilience (Feliciotti et al., 2016). In this project, it manifests by creating new streets inside the block





Street and public space structure

The public space structure between the blocks is also designed around modularity because at the junctions of high- and transit streets in between-places are developed.

Street and public space structure

streets with higher frequency of use transit streets streets with heavy traffic in-between places characteristic elements along high streets height accents
tram line and bridge entrances (new and old)
bicycle sharing points
bus stops tram stops boat stop suburban train stops

9



Diversity is achieved by creating streets with a higher frequency of use to create a higher concentration of people which can support the mix of functions. New inbetween places along these high streets also support the diversity of forms.

Modularity in this project is achieved by creating blocks along high streets, where façades form closed rows and the traffic is separated around the blocks.

Connectivity is increased by introducing new entrances, which better connects the area to the rest of the urban fabric. Furthermore, the more diversified set of transport possibilities also improves connectivity.





Design details

Y



The high streets



Streets with a higher frequency of use are shared streets, where car traffic is only allowed to load businesses along these streets. In order to further improve the flexibility of design, there is a 7-meter wide flexible zone in the middle, where the local businesses can propose what to put there.











examples of use for the flexible zone

Transit streets



Transit streets are accessible by cars, but they are primarily oriented towards bicycles. This is reinforced by a middle strip in the road, which signs that bicycles are more welcome. In these streets, there is a 2,5-meter flexible zone, where local businesses can determine what to put there.







Figure 112: The existing situation of the future transit streets source: Google Earth Pro, 2019





examples of use for the flexible zone

Streets with heavy traffic



The streets of heavy traffic are crossing the blocks; therefore the façades here do not form a continuous row. To improve the quality of these streets a 0,5-meter strip is left along at the edges of the streets to plant bushes and flowers by the local companies, making the streets greener. Furthermore, in the long-term, these roads will cross the newly formed publicly accessible green areas in the interior of the blocks, which will greatly improve how these streets are experienced.





Figure 114 and 115: The existing situation of the future streets with heavy traffic source: Google Earth Pro, 2019





The first steps of street transformation



public seating

238

The first steps in transforming the streets are in the hands of the community and businesses. Therefore, these measures concentrate on affordable and scalable solutions achieved by placemaking activities.



pop-up green



public art



ul pavement



reet decoration

In-between places - The main entrance





The main entrance

The entrance is currently separated from the outside and the centre of the district. Therefore, I propose to confine the street leading to the entrance of the area by new developments and public-oriented functions. To achieve this, the current event space of the district needs to be built in. However, this function can be relocated within the confine of the Csepel Works. With this step, residents can rediscover the area of the Csepel Works as well.

Currently, the immediate space behind the entrance is mostly empty with small buildings scattered around randomly. In the longer term, this area can be better defined by the new developments. First, however, the soil needs to cleaned. Until the process of Phytoremediation, the temporary use of the empty space should be encouraged.



Figure 119: The summary of analyses around the location of the main entrance (full map on page 144)







Figure 120, 121 and 122: The existing situation of the entrance area source: Google Earth Pro, 2019

The main entrance - existing situation





The main entrance - short-term vision





The main entrance -long-term vision









In-between places - The new height accent




The new height accent

Most of the times there is a characteristic industrial element situated at the junctions of the high- and transit streets. However, there is no such element present in this area. Therefore, I propose a new height accent in the form of a new development.

In the short-term, however, the transformation focuses on the creation of a new inbetween place along the street which is owned by the municipality. Currently, there are two smaller restaurants here, which can help in the generation of this new inbetween place. These restaurants should maintain their position in the longer-term and a place should be allocated to them in the new development as well.

There are several bicycle-related businesses around this junction as well, hence this idea should be accentually incorporated in the design and during the formation of the public space. Therefore, the currently suspended construction of a bicycle park near the location should be finalised and opened to the public. According to the long-term strategy, one of the new bicycle sharing points is also located in this junction.



Figure 128: The summary of analyses around the location of the new height accent (full map on page 144)





Figure 129, 130 and 131: The existing situation of the area around the new height accent source: Google Earth Pro, 2019

The new height accent - existing situation





The new height accent - short-term vision





Figure 133: Possible short-term changes around the new height accent

The new height accent - long-term vision





Figure 134: Possible long-term changes around the new height accent





Temporary use



pop-up shop



art exhibition



community



community t

Examples for the temporary use of empty buildings to improve the use of the area and to prevent the deterioration of the building stock. These spaces can be used for different cultural and social functions of the community and manifest the needs of a community which would otherwise be left undiscovered.



workshop place



heatre/movie

In-between places - The water tower





The water tower

The area around the water tower is one of the most memorable parts of the Csepel Works, situated in the centre of the area. Although the exact locations of certain functions need to be chosen by the companies, I propose a new workshop place in this iconic part, where companies and residents can meet.

First, the main street is regenerated because it is owned by the municipality and therefore its regeneration can be started in a short notice.

In the long-term, the area can also become a green oasis if the fences around the water tower are removed and it becomes accessible to the public. This is the area where different events can also be held.



Figure 138: The summary of analyses around the water tower (full map on page 144)





Figure 139, 140 and 141: The existing situation of the area around the water tower source: Google Earth Pro, 2019

The water tower - existing situation





The water tower - short-term vision





The water tower - long-term vision









The water tower - examples of the use of public space





markets / f



exhibitions



ice

Organising events is a great way to increase the mix of people in the area of Csepel Works. By this way, people get to know the area better and revenue is also generated for the local businesses.



open-air workshops



rink



sport events

Conclusions and reflection

Conclusions

In the thesis, the consequences of the post-socialist transition on the urban fabric and society were highlighted in the city of Budapest. It became clear that since the era change some of these negative consequences have further strengthened which degrade people's right to the city. This is reinforced by a weak civil society which is not able to protect vulnerable groups and can not fully play its part in the democratic system. Therefore, these **post-socialist consequences were listed and were specifically addressed through the design process**. To achieve such a design, a list of the characteristics of the ideal future development was formulated.

Creating a design, which can hold most of these characteristics led me to an alternative design method. In this process, creativity-led regeneration formed the starting point to answer the complex questions generated by the post-socialist consequences. Creativity-led regeneration is proved to be capable of producing development proposals which address both the spatial and social issues of the post-socialist transition at the same time.

Although creativity led-regeneration is often a top-down method, in the thesis, I advocate concentrating on a more bottom-up approach where the community is largely involved in the development of the area. Through this process, small-scale, community-led transformations can be achieved.

The location is in one of the least desirable parts of the city. A large industrial area, which is situated in the transition zone. If regeneration is successful the goal to invite creatives from other parts of the city and to locally generate new creative initiatives can be fulfilled, causing a financially more mixed group in residents and workers. Furthermore, it also means that a currently underutilized area is reused by creating new workplaces for both higher and lower educated people.

In the design, I promote increasing the mix of functions inside the area of the Csepel Works. Nevertheless, it is currently categorized as an industrial zone and most probably it will never be a dominantly residential area. On the other hand, the current zoning protects the area from residential gentrification, so historical industrial buildings can not be turned into expensive lofts. However, regulations allow workers to live inside the confines of the area, therefore I advocate that experimental housing of workers can be part of the mixed uses. Later-on if the zoning is changing even more mixed environment can be created through new residential developments. As a first step, I support creating more public service functions, community gathering places, other public-oriented services and new creative workplaces in the area, which could further diversify the mix of functions. Through this design, the area can become a new centre of employment, an alternative to the inner city concentration of workplaces.

Providing equal access to possibilities and job opportunities was also an important point in the design to address the post-socialist consequences. This resonates well

with the fact that in Csepel the most important problem according to residents is the lack of local workplaces. In this regard, the social and economic aspects of creativity-led regeneration can help to address these issues by creating new job possibilities and improving people's skills and networking abilities.

To sum up, **creativity-led regeneration proved to be a fitting concept to create a design in the context of the post-socialist city** because it was versatile enough to form the backbone of a social, spatial and economic change. However, **not all the design objectives were fulfilled equally**, because in this case the design puts little focus on creating new and affordable housing, new lifestyle, which can be desirable to several people.

The effects of the design on other parts of the city

From the analyses of the consequences of the post-socialist transition on the inner city, it became clear that this is the area where most of the workplaces, culture and entertainment are also located. By developing the transition zone, these functions can be more spread out towards outer parts of the city.

It also means that if new areas of employment are formed in the transition zone, people living in the suburban areas can access them easier, because of the physical proximity. Besides, fewer people need to travel to the inner city for work, which releases the pressure of car traffic towards the centre of the city.

Inequalities can also be reduced through the development of the transition zone by attracting different, higher-income people in the area, inducing a greater mix of people and improving the situation of local businesses which can also affect the surrounding suburban areas and their residents positively.

Reflection

The thesis collects the spatial and social consequences of the post-socialist transition in the city of Budapest and Hungarian society to understand if a different kind of approach to urban design is required in this context. These include typical social and spatial characteristics of post-socialist societies, such as low-civic engagement, growing inequalities through the gentrification of certain parts of the city, fast suburbanization and a large amount of unused and underused industrial inclusions in the urban fabric.

These inherited characteristics of a post-socialist society often pull it back in social and urban development. According to my hypothesis, these negative characteristics can be reduced with the help of urban design. Therefore, in the thesis, the spatial and social consequences of the era change are specifically addressed through creativity-led regeneration, which can be a catalyst to achieve an integrated design process to positively affect local communities and to reach a larger social impact.

Societal relevance

By supporting the development and regeneration of the spatial remnants of the post-socialist transition through creativity, urban design can form people's thinking, making them more open-minded, thus more critical, involved in the community and more aware of their environment. This way, urban design is capable to tackle the spatial and the social consequences of the post-socialist transition at the same time.

Furthermore, the thesis also describes why increasing civic engagement has great importance in post-socialist countries. It explains that weak civil society can not fully play its part in the democratic system, because low civic engagement undermines the legitimacy of civil groups. Therefore, they are less able to influence policy-making processes, to protect just spatial development and people's right to the city or to raise their voices in decisions which further increases the vulnerability of democratic institutions. Although the outcome of an urban design which is implemented together with social measures is hard to scale, municipalities of post-socialist countries should encourage such integrated developments to achieve a positive social impact. This project could serve as an inspiration by showing them a way how to do it.

The thesis also focuses on the spatial development of the least desirable parts of the city in the transition zone. By doing so, my goal is to reduce the growing inequalities between the south-eastern, degrading and north-western, gentrifying parts of the city. Since the era change, the rehabilitation of the most affected parts of the city by the post-socialist transition has only been considered in the context of the improvement of the prefabricated apartment blocks and in the forms of small, first aid-like measures. There is a lack of larger-scale and more conceptual ideas to rehabilitate and integrate these zones into the urban fabric, therefore the design framework and the process described in the thesis can be used to promote such development concepts in the municipalities.

Ethical dilemmas during research and in the potential applications of the results in practice

The era change in Hungary had influenced the lives of every people in the country. The elapsed time since then has made it possible to evaluate some of its consequences, however as older generations still remember the experiences from their own lives, the theme of the era change is still a sensitive topic. Every person who lived under the socialist era had different experiences depending on their social status at the time. Some might think about these times nostalgically, while others describe it as the darkest times of Hungarian history. As a consequence, for the questions regarding this topic, different answers can be found depending on the source and its experiences and opinion of the past. Therefore, it was important to search for unbiased and objective sources which can be used in the argumentation of the research. Besides, this also means that in my thesis, I might come to conclusions, which are not agreeable to everyone.

The thesis also describes that the consequences of the era change have grown larger since 1989. Most importantly, in spite of the fact that inequalities have grown significantly, the civil society has not improved much. Therefore, the process of degrading the rights of the poor and bypassing the opinions of the civil groups and other opposing parties have become increasingly common in the last couple of years.

In my opinion, the changes happened in Hungary in March 2020 could be the continuation of this pattern. By hijacking the situation around the pandemic, the prime minister of Hungary received the indefinite power to rule by decree. Although his power has been reduced since then, several decrees were issued during this period which are not related to public health measures. For example, through these new regulations municipalities have lost a significant part of their budget, which effect opposition-led municipalities the most. Therefore, this new situation has further raised the already existing concerns about the state of democracy in Hungary.

Under the current circumstances, the answers promoted by this thesis to improve civic engagement and people's right to the city are more important than ever. However, their actual implementation seems to be less and less achievable in reality.

On the other hand, the pandemic has not only brought along negative tendencies, but new possibilities have emerged as well. For example, the use of bicycles has increased in the city and the municipality of Budapest reacted fast to the growing demand and created new, temporary bicycle lanes with the intention to make them definite if they are successful. The prioritising of bicycles as a mode of transport resonates well with the design ideas described in my thesis.

Another ethical consideration is the gentrifying effect of creativity-led urban regeneration. As segregation is growing in Hungary, the poorest of society have

no chance to escape from this situation. This is proven by the fact that poverty has been inherited through generations. Therefore, during the design process, social inclusion and accessibility must be granted. However, some degree of gentrification is inevitable and the level of it largely depends on the measures and efforts taken by the municipality and the resistance of the community.

Still, considering the current political climate in the country, I am certain that not every municipality would welcome initiatives to increase civic engagement and to fight gentrification. It is more convenient for them to quietly coordinate developments and only inform the public about final decisions. New initiatives organized by the public would mean that municipalities need to take extra effort in dealing with their needs and expectations regarding urban developments. In my opinion, only dedicated governmental leaders would favour this option and the potential application of the results in practice will largely depend on them.

Furthermore, my thesis is based on collaboration and participation and the will to improve these in Hungarian society. However, the culture of collaboration and negotiation is not particularly well developed in Hungarian society either. Therefore, creating a representing organisation of hundreds of companies present in the area of Csepel Works could potentially be very difficult. As it is an essential element of my project to create such an organisation, it is necessary to find the right people who are willing to achieve such collaboration and promote this idea to all the companies and the municipality.

The advantages and limitations of the methodology

My thesis is focused on collecting and answering the post-socialist consequences to understand if a different kind of approach to urban design is required in post-socialist countries. Therefore, the thesis is an experiment to find answers to how to accelerate urban and social development in these countries. These post-socialist consequences were collected from academic literature and journalistic reports but were all observed and underpinned with my personal experiences.

Using creativity as a catalyst for development, I intend to provide an alternative to traditional development methods in post-socialist countries, where the importance of civic engagement is highlighted. To collect the requirements of a creative milieu I again relied on literature and on reference projects.

The location was chosen to potentially serve as an example to other projects in the future. As the biggest brownfield area in Budapest, the Csepel Works could serve as an example to other similar projects. Here large-scale design is used to determine which are the fixed points of the future development. To design with flexibility in mind and without the input of the local community and companies, first these fixed points were determined. These most importantly focus on ensuring the density and

The structure of the thesis



Elaboration of the possible future development directions

diversity of people, connectivity and environmental quality. However, the project is based on civic engagement, therefore small-scale design interventions are presented only to illustrate possible spatial outcomes if creativity-led regeneration is successful.

According to my hypothesis, urban design can be a tool to advocate change in society, however, the actual effect on it is difficult to measure. Therefore, the evaluation of the successfulness of the final goal is also challenging. Although, the spatial requirements of a creative milieu: the growth in the number of new creative companies, the density and diversity of functions and other quantifiable characteristics can be measured and evaluated and even the involvement of locals can be quantified, the actual effect on the personal level of an individual is immeasurable. Have these people become more active in public life? If so, is it because of the presence of the new possibilities to participate or is it the general development of the society?

A discussion of possibilities to generalise the results of the research

The addressed post-socialist consequences are highly complex and effected all the layers of the institutions, the society and the economy. To achieve successful proposals in any design project, it is important to know the context the design operates in. In the post-socialist context, however, it is indispensable, because of the complexity and interdependence of characteristics. Therefore, urban designers who operate in post-socialist countries need to be aware of these circumstances and the possible answers to them.

One of these could be creativity-led regeneration and public involvement. However, it is always necessary to adjust the measures to the local context, post-socialist cities are often very similar in spatial and social characteristics. Therefore, the process described in the thesis could be generalized and replicated in other cities with similar societal and spatial issues.

Moreover, the thesis highlights that the ideal regeneration process in the postsocialist context has distinct characteristics. In general, creativity-led regeneration is often described as a top-down process. In my thesis, however, I argue that the postsocialist context requires a different method. By doing so, the typical post-socialist characteristics inherited from the past can be considered in the regeneration process, because these characteristics can heavily influence the successfulness of such attempts. Therefore, my thesis can contribute to understanding the similarities and differences in ideal regeneration processes between post-socialist and other countries.

Data collection

General statistical data is freely available in Hungary; therefore, it was relatively straightforward to find information regarding large-scale processes. However, it
proved to be more difficult to find location-specific and more detailed information.

Municipality-scale data was only available in the form of graphs and charts, therefore transforming them to spatial information was almost always my task. Most of the data on the municipality-scale, however, were collected by using Google Maps. Other data was extracted from city-scale maps. However, often these large-scale maps were not up-to-date and were only available in non-editable formats.

Local data collection was also hindered by the pandemic because I planned a second trip back to the location, which was not possible in the end..

To summarize, the process defined by creativity-led regeneration is capable to provide adequate answers to the post-socialist consequences. However, it relies on the engagement of the community and businesses and the will to collaborate. Whether it is possible to achieve these on a level which is enough to implement the project, only real-life implementation can tell.

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Appendix

Appendix A - Summary of the interview about the Csepel Works

This is a summary of an interview with the Samu Szemerey, a founding member of the Contemporary Architecture Centre (KEK) who took part in the research about the area of Csepel Works.

As a start of the research, the team of KEK had to realise that no up-to-date data was available about the companies in the location. During the 3,5 years of the research, they also organised events. For example, one where residents of the city could visit the interior of several factories in the area. This event was a big success. They managed to work out a successful methodology to collaborate with local companies present in the area. In the future, their research will continue in the direction of:

- Industrial heritage
- Brands (Csepel brand)
- The built environment

According to Samu Szemery, for today they have the most comprehensive understanding of the area.

The most problematic points of a future development according to him:

- The ownership structure of certain plots is not clear (there are 240-250 property numbers until today). One property sometimes has 5-50 owners (after the era change it was many more, usually 70-100 owners per plot).
- Often there is a mortgage on the properties.
- Most of the land is privately owned, therefore, the municipality does not care much about the area.
- As most of the roads are also privately owned, the municipality does not improve them. On the other hand, the municipality collects property tax for the land and according to the companies, these should be used for the development of the roads. This causes a long-standing conflict between the municipality and the businesses.
- Often the decisions are politically driven.
- There are around 800 companies registered here, but around 450 of them are active, many of which are not registered but still operates in the area. Therefore, it is difficult to have an up-to-date inventory.
- The municipality in the past did not involve the local businesses in the development, therefore when a heritage management plan was introduced, the companies refused it.

- The logistic capacity of the area is limited, there is no dedicated traffic connection for heavy traffic.
- There is no real unified representation of the companies. The organization called Csepel Association of Employers and Industrialists collects many of the companies, however, the biggest companies are not part of this organization. Therefore, in the development process, there is no one to talk to.

Currently, there are 5 main types of companies present in the area of Csepel Works:

- Businesses which are the successors of the large socialist metal production.
 These produce car parts, pipes and other construction metals and machines.
- Industrial activities established after the era change, for example, energy production.
- Family-run companies mostly focus on serving the needs of other companies in the area.
- Mainly logistical companies which were attracted there only because of the affordable and large empty capacity of buildings, which is used for storing product.
- Other service-oriented companies which sell their products inside and outside of the area of Csepel Works (for example lawyers office, architecture office, photo studio, furniture manufacturer or services like car tuning or laser cutting). These are often micro and small businesses, which are present in the area, but their presence is often invisible.

Appendix B - Thesis timeline





