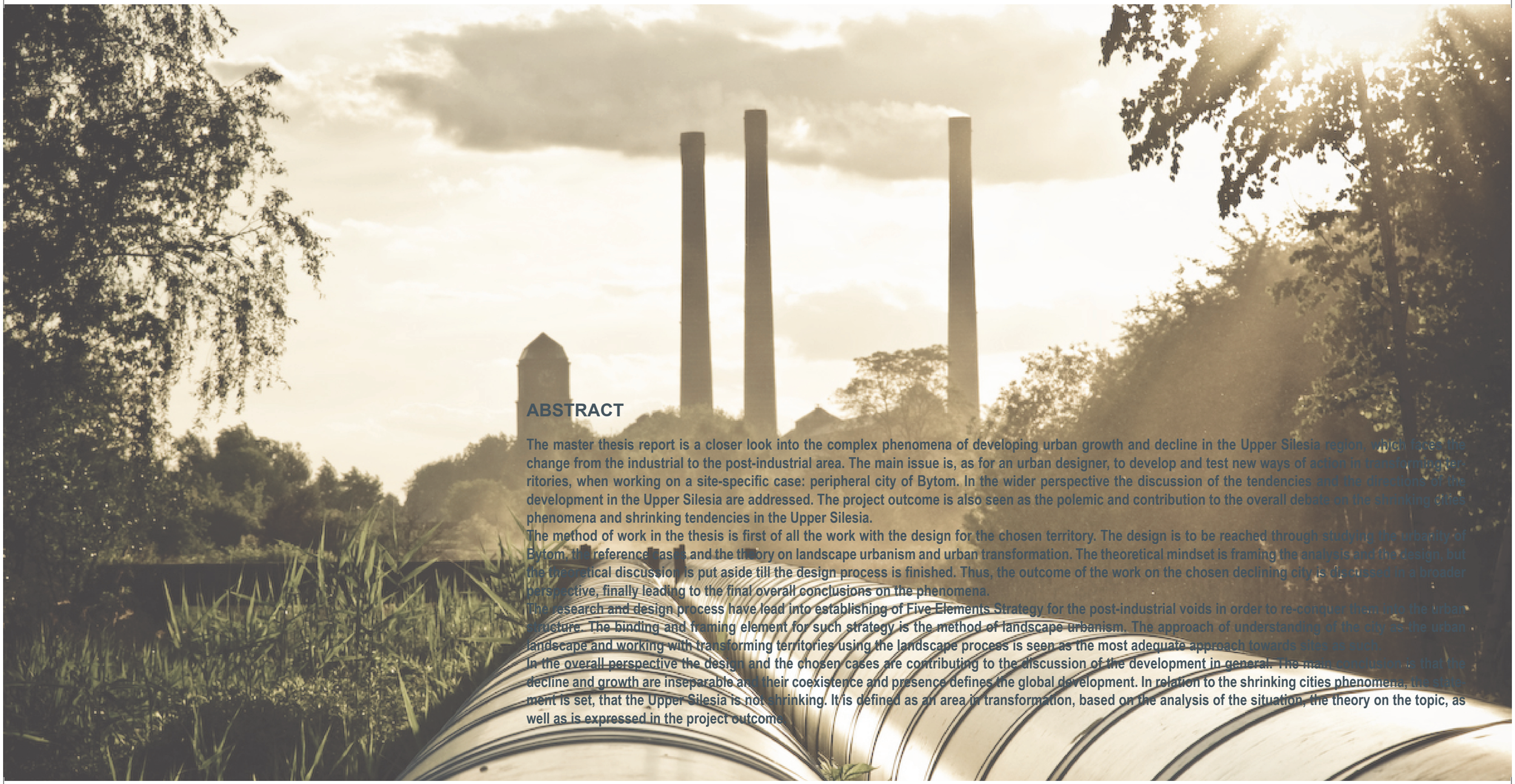
TRANSFORMING BYTOM

RECONQUERING THE POST-INDUSTRIAL CITY

AD10-URB8 JOANNA DANUTA PIERCHALA JUNE 2009



ABSTRACT

The master thesis report is a closer look into the complex phenomena of developing urban growth and decline in the Upper Silesia region, which faces the change from the industrial to the post-industrial area. The main issue is, as for an urban designer, to develop and test new ways of action in transforming territories, when working on a site-specific case: peripheral city of Bytom. In the wider perspective the discussion of the tendencies and the directions of the development in the Upper Silesia are addressed. The project outcome is also seen as the polemic and contribution to the overall debate on the shrinking cities phenomena and shrinking tendencies in the Upper Silesia.

The method of work in the thesis is first of all the work with the design for the chosen territory. The design is to be reached through studying the urbanity of Bytom, the reference cases and the theory on landscape urbanism and urban transformation. The theoretical mindset is framing the analysis and the design, but the theoretical discussion is put aside till the design process is finished. Thus, the outcome of the work on the chosen declining city is discussed in a broader perspective, finally leading to the final overall conclusions on the phenomena.

The research and design process have lead into establishing of Five Elements Strategy for the post-industrial voids in order to re-conquer them into the urban structure. The binding and framing element for such strategy is the method of landscape urbanism. The approach of understanding of the city as the urban landscape and working with transforming territories using the landscape process is seen as the most adequate approach towards sites as such.

In the overall perspective the design and the chosen cases are contributing to the discussion of the development in general. The main conclusion is that the decline and growth are inseparable and their coexistence and presence defines the global development. In relation to the shrinking cities phenomena, the statement is set, that the Upper Silesia is not shrinking. It is defined as an area in transformation, based on the analysis of the situation, the theory on the topic, as well as is expressed in the project outcome.

PROJECT INFORMATION
TITLE: TRANSFORMING BYTOM
RE-CONQUERING THE POST-INDUSTRIAL CITY
THEME: POST-INDUSTRIAL TRANSFORMATION IN THE UPPER SILESIA
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MASTER THESIS
SUPERVISOR: LEA LOUISE HOLST LAURSEN
NUMBER OF COPIES: 5
PERIOD OF TIME: 02ND FEBRUARY – 03RD JUNE

SIGNATURE:

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Joanna Danuta Pierchala

ACKNOWLEDGEMENTS

The report is an outcome of a short but very exciting and busy research journey. The process has been going on, both at the Aalborg University and at home, in Poland. The inputs reached form both places have framed my research and made me more aware of many issues, which without the study trips, meetings and extensive discussions have not been noticed and understood. Therefore, there are many people who I want to express my thankfulness.

Firstly I want to thank my supervisor, Lea Louise Holst Laursen for all the inspiration and supervision feedback, which have been great help in the project development. I want to thank specially for all the encouragement and support I have been addressed.

I would like to thank the representatives of the Municipality of Bytom for all assistance and providing me with all the suitable material for the project.
In the same line, I would like to thank the representatives of ZEC Bytom S.A. for providing me with the information concerning the Szombierki Power Plant and enabling me visit the building of the plant.

Special thanks I need to address to my wonderful colleagues form Urban Design line, which have been so kind and open towards me, the new-comer to the faculty. In the following, I want to thank the 10th semester team, Aslaug, Linn Terese and Gina. Thank you girls for open, relaxed and encouraging environment!

I want to thank my Mum and Dad for the possibilities they have opened for me and for the all the support I have got form them.

PREFACE

The master thesis report takes a closer look into the complex phenomena of developing urban
growth and decline in the Upper Silesia region, with emphasis on the case of Bytom. The project has two focuses;

1) TO DEVELOP A SITE SPECIFIC DESIGN FOR THE CASE AND;
2) TO DISCUSS THE TENDENCIES AND THE DIRECTIONS OF THE DEVELOPMENT IN THE UPPER SILESIA AREA.
THE STUDY CAN ALSO BE SEEN AS A CONTRIBUTION TO THE OVERALL DEBATE ON SHRINKING CITIES AND THE SHRINKING TENDENCIES IN THE UPPER SILESIA.

In the following, I will give a further introduction into the focus of the thesis and into the context that this thesis subscribes itself.

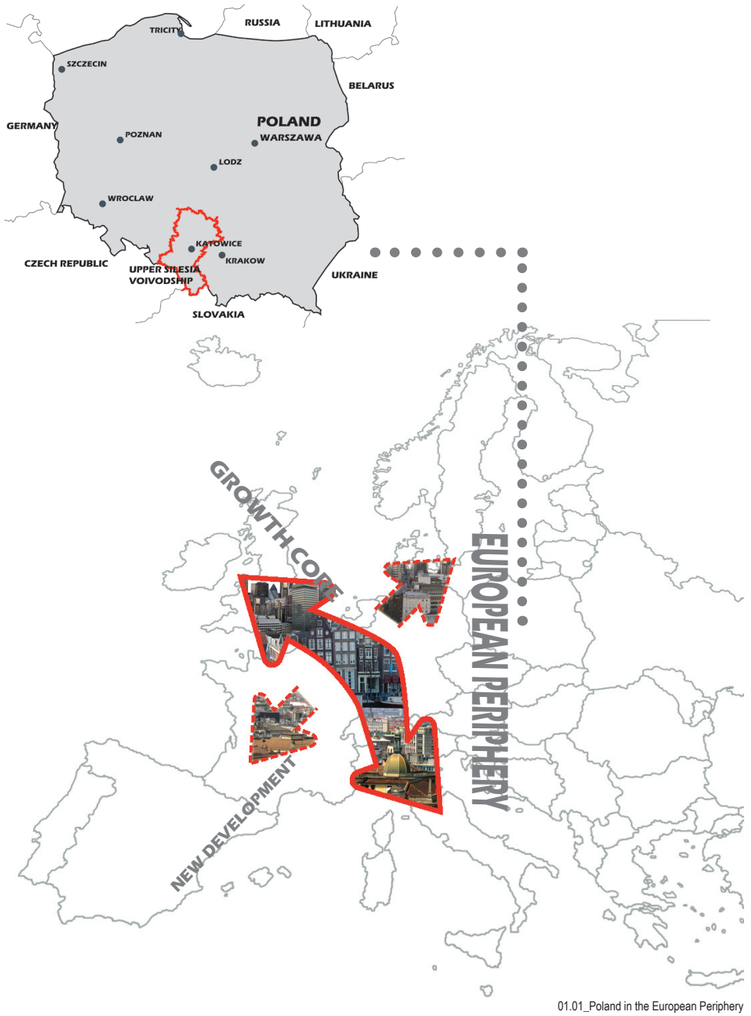
LIST OF CONTENTS:

INTRODUCTION: UPPER SILESIA IN THE EUROPEAN GROWTH POLICY

EUROPEAN DEVELOPMENT STRATEGY

I order to understand the situation of the Upper Silesia it is essential to outline the overall and the most important features of the European development, the main strategies, and focuses of planning in the European scale. The institution of European Union and the geo-economic location of the specific countries have a significant influence on overall dynamics of the development in the whole region. Many researchers, politicians and economists have discussed the structural, economic, and social development of Europe thus numerous assumptions and visions have been developed in the course of time. One of the most popular geographic and economic based models that have been frequently used to describe the growth centres of Europe is the 'Blue Banana' model. The idea stated by the group of French geographers managed by Roger Brunet sees the strongest and most promising part of Europe as the corridor of the most dense and highly urbanized strip of settlements located around the cities like London, Amsterdam, Brussels, Dortmund, Frankfurt, Basle, Zürich and Milan, where around 40% of European population lives [Hospers 2003,77]. The 'city belt' characterizes also by the higher income per capita, lower unemployment, strongly developed services, telecommunications and overall infrastructure, attractiveness for the investment and location of decision making centres.

However, there are many other development models at a European scale, which correspond with the economic and infrastructural changes, that in the course of time have happened in Europe. Recently the concept for European development has been extended with the visions of the 'Sunbelt' and the 'Yellow Banana'. The 'Sunbelt' is the development running along the Mediterranean coast form Valencia to Milan. The 'Yellow Banana' is to be located in the line stretching from Paris, through Cologne, Berlin to Warsaw. The two new development corridors are in a way the response to the gradual polarization of growth in Europe, where the area of the 'Blue Banana' still attracts the most of the investment and people [Hospers 2003, 77]. The new developments corridors differ form each other, which may have very important influence on the potential success of those regions. The 'Sunbelt' has strong potentials in the favourable geographic location for tourist, cultural and leisure services. The situation of the second conceptual corridor is more complex and by looking into the promising economic situation in the Scandinavian countries, the statement could be raised, that the 'Yellow Banana' has stronger attractor in the direction up north than towards east (see the map). The geographic location and the economic background of the East European countries state about their inferior attractiveness at the European development scene and therefore define them as the European periphery. The markets of East Europe are steadily growing, but with the strong help of the public and European support. The need of a change of the mono-industrial orientation and lack of the services sector before 1990's defines the areas as less favoured in the global competition [Hospers 2003, 84]. Therefore, the most common vision for the immediate future of Europe is the constant growth of the 'Blue Banana' with new spreading out lines towards the south region and north towards Scandinavia.



01.01_Poland in the European Periphery

THE UPPER SILESIA

In the outlined European context Poland, the biggest new-comer to the European Union form year 2004, is located in the mentioned European periphery. This location is therefore implicating the dynamics of the development in the region and Poland is facing hard odds. The region of the Upper Silesia is an old industrial area and is one of the biggest urban concentrations in Poland with 4.9 millions inhabitants [Lobatch 2004, 1]. This region faces transformation in very complex situation – transforming from industrial to a postindustrial site.

The recent history of the region has a significant influence, where the former presence of the socialist system has left the area, its administration and industries in the state of chaos, debts and outdated technologies. The changes in Poland and Eastern Europe after 1990's have influenced significantly the economic and social structure of the Upper Silesian cities. The major change in the economic relations, meaning the export clients, the need for the coal and steel products, as well as the new prices for such materials have drastically hit the economy of the industrial area of Silesia. The actions taken since 1990's are all focused onto updating the area into the new economic and political situation, which has dramatically changed the requirement of the industrial production as such.

The city of Bytom is one example of what happened in the region. The city of Bytom has had very narrow approach for the work places production and self-sustaining vision, where the economy was very much dependant on the other markets. The main growth flywheel in Bytom's history was the industrial production, where the focus was put on the coal mining, metallurgy, and steel fabrication, as well electricity production. The city thus was established around those industries. When the accelerated change of the economic situation for the whole Poland occurred, Bytom was one of many cities to face the rapid and harmful de-industrialization process [Domański 2001].

The core industries occurred to be not profitable enough, many interventions though have been undertaken in order to 'save' the heavy industry sector [Eckhart2003,165]. The future of the most of the coalmines in Bytom has been terminated; only two coalmines have been selected for the restructuring and have been incorporated into the regional organisation of mining, the Kampania Węglowa [kampania02_01]. The other coalmines have been closed over the years 1991-2005 [wiki_02_02]. The steel industry in 1990's has been already undergoing a planned and successful restructuring, which was following the ideas of lowering the costs, employment, investment into new technologies and specialization. However, the steelworks plant and supporting factories are in the closure process now [Eckhart 2003,185].

DEVELOPMENT CONCEPTS

Different scholars and economists with many different approaches and point of views discuss the characteristics of the situation of the Upper Silesia. The debate of the development in the Upper Silesia area can overall be divided into two groups; the optimistic approach of seeing the growth possibilities and the pessimistic shrinking vision. In both situations there are many indicators stating on the rightness of both of the concepts. However, it is important to underline the fact of the overlapping

of both of the approaches, since all the scholars see the multi-problem context of the area, where the possibilities and obstacles are creating the overall image of the place. Since the problem of the transformation of the area is very complex, the discussion of those visions is very interesting.

The one of main theorist of the 'shrinking cites' concept and the curator of the Federal Cultural Foundation project 'Shrinking Cities', Philipp Oswald has credited the Upper Silesia to the regions of shrinkage in Europe. He focuses together with other researchers on the term 'shrinking cities', where he sees certain areas in contemporary urbanity as areas that are shrinking; meaning that they are suffering from decline of the economy and de-population [Shrinking01_01]. In the compendium "Shrinking cites" the Upper Silesia is being examined; the leftovers of the post-socialist system and the overall ageing of the society are seen as the causes of the shrinkage process of the area. The Upper Silesia situation is outlined over the discussion and presentation of the similarities to the shrinkage processes in the Eastern Germany, where the dramatic and exemplary decline occurs. The disadvantageous situation of the outflow of people, low birth rate, massive land use and the collapse of the main old industries of the area are thus seen as very difficult to overcome. However, some of the contemporary interventions of the Polish Government are presented and seen as the possible indicators of the positive policy. The approach of the 'special economic zones' is seen thus as the improvement chance, but not as the coherent and successful strategy for reversing the process of shrinkage [Oswald 2006,655].
Anther scholar, Agnieszka Cieśla, is recently working on the case "*Process of shrinkage of the Upper Silesian Conurbation*," however the outcome of the work is not published yet. In the outline of her research case, she defines the Upper Silesia as the example case for the shrinkage development in Europe. She sees the de-industrialization as the main cause of the depopulation and the high unemployment rate in the area. She defines also the problems of the de-industrialization and the suburbanization as the specific features of the area, where the out-migration and low birth rate are confronted with the growing land use and the lack of coherent planning strategy for the shrinking territory [Cieśla 2005]. However, the outcome of my contact with Mrs Cieśla is indicating a significant shift of the understanding of the Upper Silesia situation. After years of research, she concludes that the de-industrialising Upper Silesia region is indicating strong growth tendencies and the depopulation is not a defining factor of shrinkage.
The narrative supporting those findings is also emerging form the research of economists and geographers, architects, and the investors' experience. The area is credited into the group A (rank form A-D) in the comparative investment rank in the research paper of Lobatch, where he compares the competiveness and development possibilities of Polish regions [Lobatch 2004,6]. The complex case of Silesian 'looser' is presented, where the post-industrial transformation indicators are seen as the disadvantage, whereas the location, highly developed infrastructure and skilled population are seen as the advantages in the process of becoming the 'winner' in the development competition in Poland and Europe [ibid]. The positive trend of overcoming the decline period has thus been noticed, where after twenty years of the investment and re-development the Upper Silesia is finally ranked as the attractive region of Poland.

01.02_Upper Silesia and Bytom

The new orientation and contemporary trends in the development in Europe are heading into the direction of the service, culture and knowledge based societies [Carta 2007, 7]. In the society of such the need of the old industrial production is minimal, therefore the restructuration of the whole regions is happening and it is the question of 'be or not to be' in the contemporary and future world of creative economy, which focuses on the cultural identities and innovations [Carta 2007, 46].

Yet another scholar, Professor of Jagiellonian University Bolesław Domański is seeing the Upper Silesian over a thousand hectares of industrial land as the chance for the successful brown field re-development and economic prosperity in future. Domański suggests the long-term planning policy for reuse the land for the three main functions; the new-creative industries, the places for European warehouses and creation of the green areas with the industrial identities as the contribution to the cities of the former 'black Silesia'. He is discussing already applied transformations of many post-industrial sites as the background for his statement [Domański 2001,4-9]. In other paper, he expresses thus the understanding of the differences between the parts of region, where the growth dynamics are very different. He presents the cities where the reuse of the land is much progressed, like Katowice or Gliwice, what has contributed to the strong growth of the areas [Domański 2003, 11-14]. He discusses the cities like Bytom as well, where the history and the overall situation of the city have significantly slower down its development. They have negatively influenced the planning of the re-use of the vast areas of the former industry, which has once decided of the city's growth [Domański 2003, 15].

The discussion of the dualities of the Silesian development scenario is thus a very significant contribution of the overall understanding of the processes happening in the area, stating thus of the most realistic prognosis of the unequal, but steady development for the Silesia region. Such a conclusion is framing my own understanding of the region dynamics, where the new geo-politic situation, the peripheral location, advanced transformation processes and the social capital present in the area, are all adding up for the overall positive development of the area. However, there are many obstacles, which distributed unequally in the region, decide upon the uneven development, where the intermingling of the growth and decline is strongly present. The region has already developed strong centres, like Katowice and Gliwice, where the growth is the main characterising feature; but also there are the peripheral 'loosers', where the decline is strongly visible. The positive situation of specific areas of Uppers Silesia is undermining the other parts, as the growth and decline interrelation is unavoidable, since the exchange of the economic, cultural, and social capital states upon the development in general [Graham and Marvin, Sassen]. Such a conclusion sets a link towards the similar but much complex situation of the development in Europe, where the European core is growing, contributing in the same time to the polarization of the overall European development.

THE CASE & THE PROBLEM DEFINITION

The different development concepts of respectively growth and decline have dragged my attention and inspired me to look into how to transform an urban area which can be considered overall to be a declining city but which also have potentials or might even grow some places. Thus, being aware of the ideas on the Silesian development as well as the urban development in general, I have decided to go down in the scale and analyze one of the main cities of Upper Silesia. The choice was made on the peripheral city of the Upper Silesia Conurbation, Bytom. The city, which faces very typical transformation process for all the Silesia and is one of the oldest industrial cites in the surroundings, with the biggest amount of the old industries being closed recently.

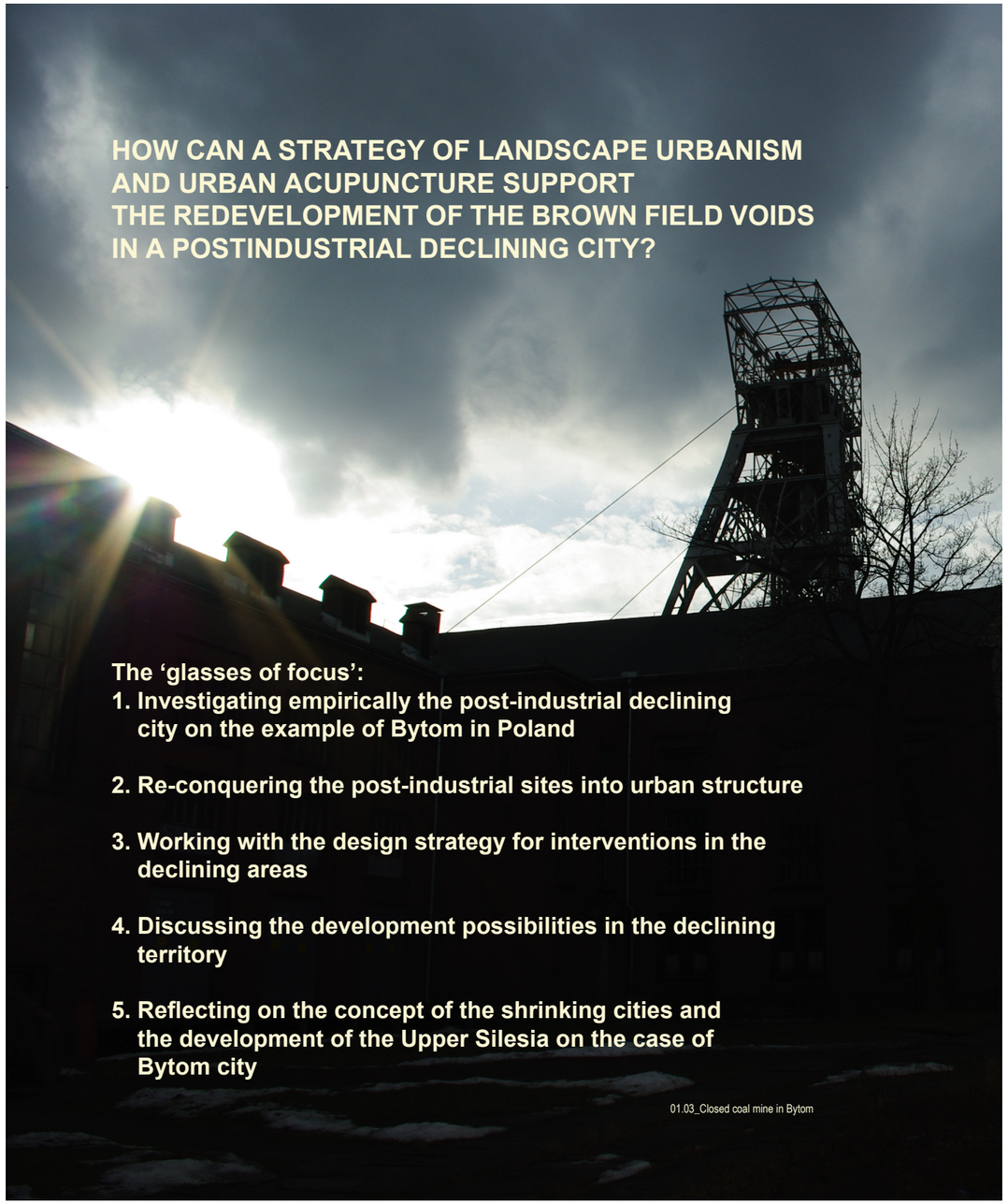
My starting point is the one of an urban designer and this influences my focus in the project. First and foremost my focus is to work with the design and design methods on the site-specific case, where the post-industrial site is to be re-defined and re-conquered to the urban structure of the city. The design approaches I want to work within the case of Bytom can be related to urban acupuncture and landscape urbanism.

In order to set the clear understanding of the terms the short explanation is presented as follows. The approach of working with landscape urbanism is first of all the understanding of the contemporary city as the urban landscape, where the boundary of what is build, meaning urban and what is unbuilt, meaning randscape, is not any more relevant [Shannon in Waldheim 2005,143]. Second, it is to approach the design of the urbanity as the flexible and unpredictable process, where the flexibility is enabled by the strategic process work with the urban landscape. An example can be a design of the Parc de la Villette, which "*...proposed landscape as the basic framework for an urban transformation of what has been a part of the working city, left derelict by shift in economies of production and consumption.*" [Waldheim 2005 ,40]

The approach of working with the urban acupuncture is "*...neither a discipline, nor a project technique, but a philosophy of approach to a few territorial and social problems.*" [Marzi & Ancona 2004,1] Is it a strategy of working with small, but effective urban interventions in order to gain an immediate improvement of the quality of an urban space. The method is applicable in the areas indicating a decline or an overall difficult situation, which disables a typical master planning for the re-developments [Marzi & Ancona 2004].

Second, the focus is the analytical and empirical investigation of the city's contemporary development status. My focus will be to find out about the actual decline, growth, or stagnation in the city, as well as the physical and social situation of the site of the intervention.

Moreover, I wan to examine and discuss the methods I apply, in order to see their relevance in the overall approach towards the declining territory. It is to lead me into finding the principle design strategy for the interventions at such sites. At last, I want to set an reflection upon the overall concept of shrinking cites and on the case of Bytom discuss the visions for the Upper Silesia future, which made me interested in the case from the very beginning.



01.03_Closed coal mine in Bytom

STRUCTURE & METHOD

STRUCTURE

The project is inspired by the worldwide problems of growth and decline, which have a significant influence onto the area being analysed in the report. The discussion of the contemporary world and more closely the European development is very complex and there have been made extensive research on the subject. I place my self in the middle of that discussion trying to develop new ways of action in transforming territories. My focus is, therefore, on the designing of such territories and these design proposals shall be seen as a bid on how to work determined in this field. Therefore I put aside the theoretical discussion and start by taking point of departure in the specific site and try to develop new designs for Bytom. This does not mean that I start without knowing anything about the theoretical investigations made; these will just appear in a more general theoretical discussion on behalf of what I have done design-wise. The approach of linking the discussion into the thesis is therefore done upon the site specific analysis and design. Thus, the outcome of the work on the chosen declining city, Bytom is discussed in the broad perspective, what finally leads into the unusual structure of the report.

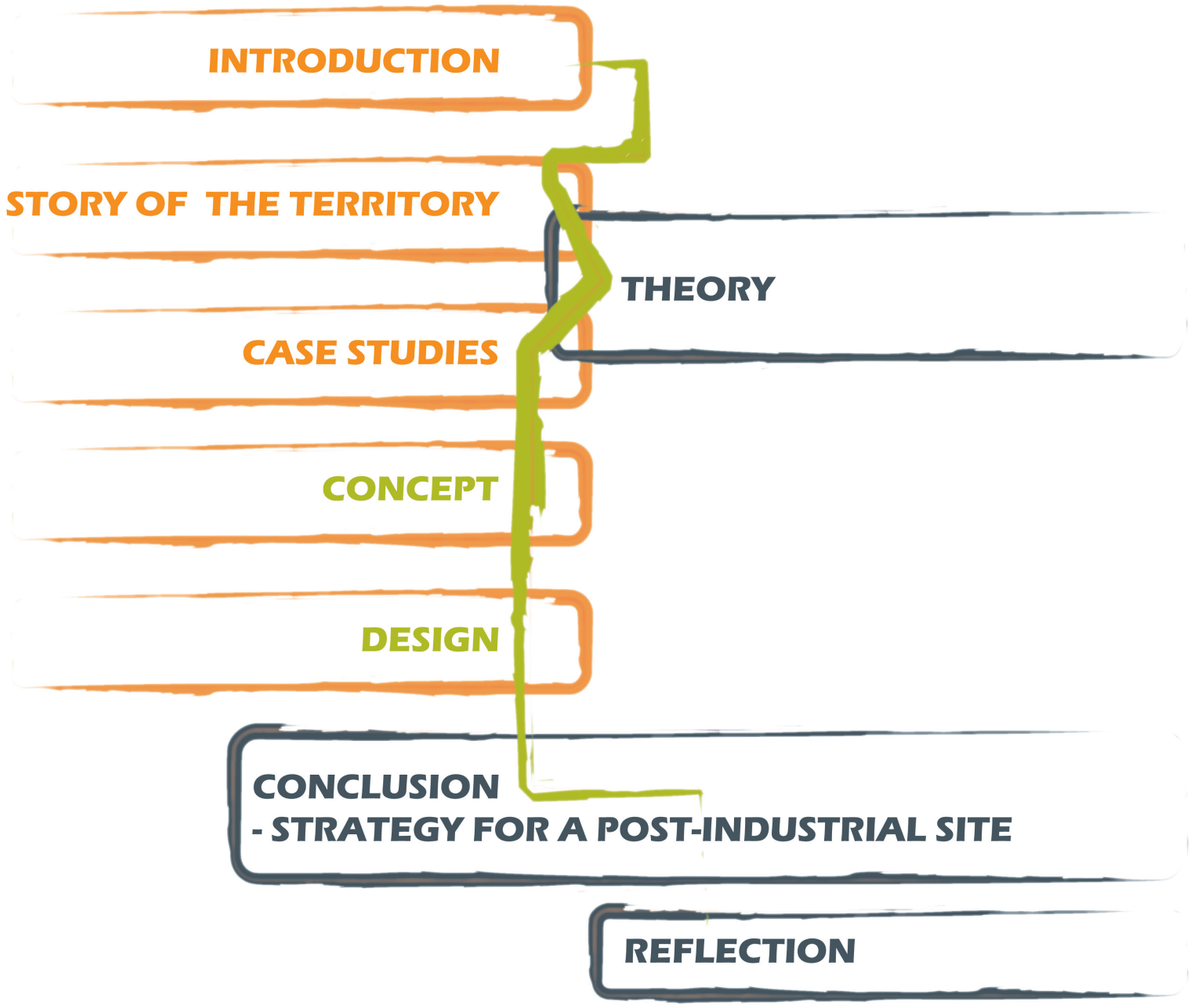
The report program consists of the overall introduction into the topic of the growth strategies in Europe, which are followed by the specific analysis and design for the intervention area in the declining city. The design strategies and the conclusions for the analysis are thus the background for the further discussion of the overall problems of the declining areas in the European context. The different approaches towards the territories in transformation stage are therefore discussed in the report's reflection part, where the conclusion upon the accuracy of the concepts and strategies is presented.

METHOD

The overall **INTRODUCTION** into the European development strategies and location of Poland and the Upper Silesia in the EU structure is outlining the overall background information for the understanding of the complexity of the case. The description of different approached towards defining the status of the Silesian development is framing the choice of the thesis topic and the first attempt for the choice of the site in Bytom. The presented shortly knowledge about the area has thus lead into the definition of the research question.

The **ANALYSIS** of the Bytom urbanity is performed in order to understand the problems and potentials of the city development directions, as well as to define the potential intervention site. The intervention site is to be chosen after the overall mapping of the area, supported by visits to the city; making on-site registrations. The application of the mapping methods, described as follows, is supposed to draw a picture of a post-industrial city.

The analyses have structure of three levels. The overall structural mapping is supporting the understanding the city as whole. The 'drifting' analysis is the medium level of mapping, which provides the exchange between the up-scale mappings with the very site-specific analysis. The 'drifting' mapping was performed for the whole city. However, the presented material is thus narrowed into the mapping of the area indicated as the intervention area. The last level of analysis is the typical structural mapping of the intervention site, with focus on the built environment and the functions it supports.



THE ANALYSIS: STORY OF THE THERITORY

- ANALYTIC – OVERALL STRUCTURAL MAPPING OF THE BUILT, INFRASTRUCTRE, AND THE 'NEGATIVE SPACE'

The method of overall mapping of Bytom is inspired by the approach described in the book of Xaveer De Greyter "After Sprawl" ("After Sprawl", 2002). The study is performed in order to gain the understanding of the proportions and the relations between the main elements of the urban structure. The urbanity is thus defined by a built environment, an infrastructure, and an open space. The open space is called here the 'negative space', as it is all kinds of spaces, which are, are neither built nor infrastructural. The separate maps are followed by the photographic registrations in order to express the qualities of the specific structures and their interrelations form the view of the user. The city is thus discussed and defined in the overall way, which sets the starting point for the first assumptions upon the development trajectories, potentials, and the obstacles. The study and the outcomes open up thus for the mappings of the potential intervention area.

- EMPIRIC MAPPING – 'DRIFTING'

The Situationists movement inspires the method chosen for second part of mapping. The main theorist of the group, Guy Debord has invented on the example of method of aimless walking on the street of Paris, the idea of 'psycho-geographic guides', which became known as the 'drifts'. The concept of 'drifting' is very much related to the practise of Richard Long, however a researcher from outside the movement. He uses the traditional maps for planning the thematic routes around the cities and then for the creative recording of the outcomes of those wanders.

The approach for 'drifting' is to experience the city while walking it. [Corner 1999,231-233]. The main result of such a mapping is the individual perception of the urbanity, new understanding of the relations between the built structures, the functions located in them and the users. Such a mapping leads into fruitful conclusions upon the spatial quality of the urban structure, because the analysis are more focused on the actual being in the city, experiencing its pulses and pauses, rather than of reading the two dimensional maps. The combination of 'drifting' and analytical mapping is thus a seen as a complex approach towards mapping of the city. The analytic and empiric data show the multi-focused result of the mapping and therefore are stronger stating point for the design process.

The 'drifting' mapping is extended by analysing the spaces according to the five main elements of the city organization defined by Kevin Lynch. The space is thus defined also form angle of nodes, landmarks, edges, districts and paths, what makes the image of the city more organized and easier to describe.

- SITE SPECIFIC STRUCTURAL MAPPING

The method of mapping of the urban structure is based on the common knowledge of the subject, followed by the instructions of the document "Structural analysis" published in Denmark for the urban planners and designers. The structural analysis gives the closer understanding of the spatial and functional quality of the mapped area. The mapped built structures in Bytom are defined by the typologies, heights, infrastructure, and open spaces related to them. The different functions are mapped in order to understand the potential liveability of the space, its relation towards the rest of the city functions and its potentials for new proposals. The analysis of the heritage and the industrial elements are to set the understanding of the identity of the area. The combination of different structural mappings outcomes gives the base point for a creation of the site-specific design parameters and potential design directions.

CONCEPT

The overall design concept is established as the result of an initial research and analysis of the city of Bytom, with the special focus its post-industrial character and the transformation it is undergoing. The specific situations of the declining city of Bytom lead into the particular angle of approach towards the work on the design. The concept is based on the work with the landscape method, which is tested as the design approach in the case of the declining urbanity. The approach is inspired by work of James Corner and Rem Koolhaas, as it was briefly described already in the case definition.

CASES

In order to get an insight in different design approaches and methods different design projects (cases) are analysed. The idea was to get a closer look into different projects dealing with; landscape urbanism, post-industrial transformation, and design for shrinking cities. The study of different cases was established in order to gain inspiration and the deeper understanding of the problems and potentials of such projects.

The choice of the different projects was made with the focus, which follows:

- the projects dealing with the landscape urbanism as the potential approach towards transformation processes in the cities
- the projects dealing with preserving of the industrial heritage
- the projects dealing with the shrinking cities and how to plan and design in areas without many financial means

DESIGN

The design is the unfolding process of the chosen method for the design, which is as mentioned above. The design is seen as the staging process, where different other methods and theories are going to be tested in order to prepare the overall design of the intervention area. The fist stages of the project are going to be strongly focused on work with acupuncture interventions (Marzi & Ancona), both permanent and temporary. The next stages of the project are going to examine the creation of the vision plan for the more holistic re-development of the area, with focus of creation new quality open spaces and built structures. The main leading method of work is the landscape urbanism. The method is to be supported by the design with 'human scale' and the special focus of the division and interrelation of the built structures, infrastructure and the open space. In following the inspiration and the methods are learned form James Corner, Charles Waldheim, Rem Koolhaas Bernard Tschumi and the others.

CONCLUSION

The conclusion part of the report presents the design strategy towards a post-industrial site, which is established according to the outcomes of the study of the theory, the cases, and the design proposal summing up reflection. The strategy and the discussion are based on the theories and methods presented in the following report and thus the conclusion is opening up for the further discussion of them in the reflection part.

REFLECTION

The reflection is the further discussion of the theory related to the design approach and the development strategy worked out thought out the project study. Further, the main topic of the discussion is raised, where the development possibilities for the Upper Silesia are outlined according to the studied conurbation (Eckhart, Domański) as well as the critical case, of Bytom city. As the contribution to the already defined planning for redevelopment of the area the idea of landscape urbanism is discussed as the supporting element for the successful redevelopment of the urban form of the post-industrial city.

On the background of the outlined possible development directions and development methods towards the deindustrialization of The Upper Silesia Conurbation the polemic to the 'shrinking cities' term and design approach is stated. As closing up, the discussion of the general growth and decline interrelation is presented and overall situation of the Upper Silesia Region in the geo-economic setting of the European Union is argued.

STORY OF TERRITORY

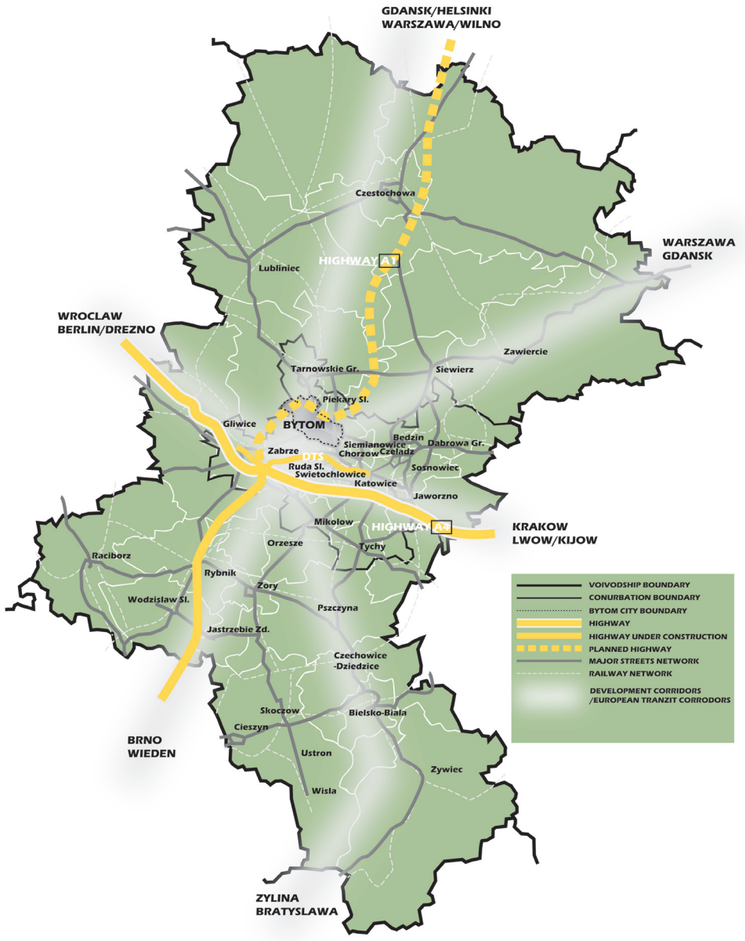
The analysis of the Bytom urbanity is performed in order to understand the problems and potentials of the city development directions. The city is in the process of de-industrialization, where the urban structure, the population ratio and the economic status of the city, have been strongly influenced by the transformation from industrial to post-industrial city.

The analytic and empiric method of mapping the city is supported by the overall description of Bytom city and its geographic and economic location in the Upper Silesia region. As follows, the overall information upon Polish work and leisure habits are described.

STORY OF BYTOM

LOCATION OF BYTOM IN UPPER SILESIA DEVELOP MET

Administratively, Bytom city is located in the heart of the Upper Silesia Region and in the periphery of the Upper Silesia Conurbation (see map 03.03). Such a location has both advantageous and disadvantageous implications, which are going to be presented in following. The location in the middle of the Upper Silesia Region is stating of the importance of the city in the region; it is where the most of the investment and transit thought the region occurs. The middle part of region is the core of the development where also all the main eastern Trans-European transit corridors are lead through. The corridors have existed there form the past, but today the connections are not updated or fully developed. Therefore, the development of the Upper Silesian infrastructure occurs recently, with a special focus set on the main corridors of west-east and north-south directions. However, more focus is put on the highway A4/E40 leading the main transport and growth in the areas of already strong cities like Gliwice, Zabrze, and Katowice. In such a setting of priorities, Bytom as the peripheral city, located on the planned north-south corridor, the highway A1/E75 is not benefiting from the advantages of new interventions in the overall structure of the Upper Silesia yet. The north-south corridor is almost established on the section form the border with the Czech Republic till its intersection with the A4/E40 highway [autostrada_01]. Therefore, Bytom has a chance for future development and gaining more importance since the highway A1/E75 is going to be established until year 2011 [wiki_01_03]. On the importance of the north-south corridor shows also its close location to the international airport in Pyrzowice, which will be thus easily accessible from the highway. Therefore, the overall peripheral location and the fewer importance of Bytom is thus a temporary situation since the future development of the infrastructure is seen as the possibility of more even distribution of the growth possibilities in the region. However, up until now Bytom has not gained as much investment and attention as the other cites of the Upper Silesia Conurbation.



03.03_development corridors in Upper Silesia

GEOGRAPHIC DETERMINATION & EARLY HISTORY

Geographically, Bytom is located on the south-west area of the Silesian Highlands, along the river Bytomka. The city is located just 15 kilometres from the core of the Upper Silesia Conurbation, Katowice. Bytom city is one of the oldest Silesian cities, which has almost 900-year long history. The Bytom's first settlement was established as the fortress and later on, the area has gained the character of the trade market. The most historic area of the city is the Saint Margaret's Hill, where the fortification and later the settlement church were established. From the oldest periods of Bytom's history the growth was entailed not only by trade, but also by the rich shooting of silver, lead and coal, therefore the city's character was always linked to the mining industries. [bytom02_00].

HISTORY AND DEVELOPMENT OF URBAN FORM

The history of the city has significant influence on its urban form. The city was founded in 1254 on the German location law, but its development was very slow since Bytom was already located on the periphery. The radical change in the urban development occurred in the 19th century. The city became the third most important industrial area of Germany at that time. The industrial growth of that time is still seen in the central part of the city, where the urban form and many of the heritage buildings were witnessing the rapid development of the city. The disadvantageous decision though has decelerated Bytom's growth, when the decision on introducing the railway infrastructure has been postponed until late 60's of the 19th century. Such a delay in Bytom's development has forever set the primacy of Katowice city in the region [bytom_].

The times of the World Wars have set slower growth dynamics in the city and the decisions over the borders location between Poland and Germany have negatively influenced the urban development of Bytom. The close location of the border was setting the boundaries of the city and the directions of its growth. The final territorial and socio-political decisions after of 1945 have destroyed the cultural and social continuality of Bytom's development. The forced resettlements significantly influenced the

BYTOM CITY

POPULATION: 190895
TOTAL AREA: 6930 KM²
DENSITY: 2655 PERSON/KM²

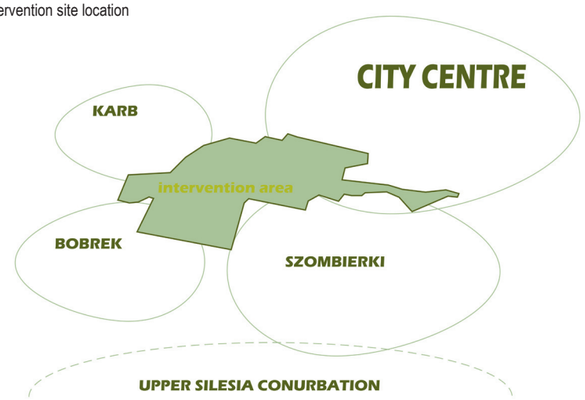
population setting during and after the war. The times of socialist regime have been characterised by the industrial rapid growth, without any spatial planning, what caused irreversible destructions to the city's structure. The development of new coal mines, steelworks, and the others strongly influenced the image of the city. The growing demand for coal has lead into the decision of the mining under the city, what has consequences up to now. The subsidence of the area is influencing the structure of the city, especially in the areas of Miechowie and Dębrowa Miejska (to be discussed in the following). The territorial growth of Bytom in 1950s, when to the city has gained the terrains west from the centre, has dismantled the harmonic urban structure into the historic city centre surrounded by disconnected districts of socialist housing and industries [bytom]. The last change in the structure of the city has occurred in 1998, when the district of Radzionków has sealed of and created a city on its own [wiki]. The contemporary structure is thus difficult to organize and plan for coherent development. Bytom has thus a very divided and complex urban structure, which specific features, which are to be presented in the following analysis part.

CONTEMPORARY SOCIAL AND DEMOGRAPHIC DIMENSION

The major closure of the workplaces has brought very high unemployment rate in the city. The major unemployment growth occurred in the years of 2000 -2004, when it has hit the top 25.6% [gus_02_01]. Beside the de-industrialization, the opening up of the European work market after Poland has joined the European Union is seen as a strong parameter in the development of the unemployment and population of the city. The unemployment rate has been since 2004 steadily reaching lower percentage, but also the population out migration has been growing [report 2007,6-9]. It is learnt, that the lack of workplaces is also been contributing to the out migration form the city.
On the other hand, it is important to have in mind the fact, the change in the population of the whole Silesia is also influenced by one stronger feature, the history of the area and its inhabitants. There is strong Silesian, Polish-Silesian and German identity. Therefore, many of people feeling German have immigrated to Germany during the communist times and after 1990, when the borders have been opened. There was also strong group of Polish people being under politic repressions or looking for better life in western world, who have reinforced the group of emigration before 1990s. It is essential to understand, the society has not only been loosing the young, willing to work people. The major emigration out-flows before the 2004 was thus mostly the people in their 40's and 50's. Those groups was characterised mostly by people who have received good severance pay and decided to immigrate to Western Europe or 'back home'.

Nevertheless, all the different outflows and the economic status of people in Byom have constituted the society of much diversified age groups and social backgrounds. According to the Statistic Office in Katowice Bytom's structure of population is facing the adverse situation of decline of the people in the pre-productive age and the growth of the group of people in the post-productive age [ibid]. The productive age group development is in the stagnation though. The city is facing negative population growth and negative out-migration ratio. The directions of such out-migrations are now mostly oriented into the other cites of Poland, where the work market is in better condition, for example the other cities of the Upper Silesia Conurbation; whereas there is also a strong European emigration factor [raport 2007,9]. Therefore, significantly lower unemployment ratio in 2007 can be seen not as much as the signal of the growth in the city, but as the result of combination of some interventions in Bytom, with strong influence of the out-migration and adverse birth rate.

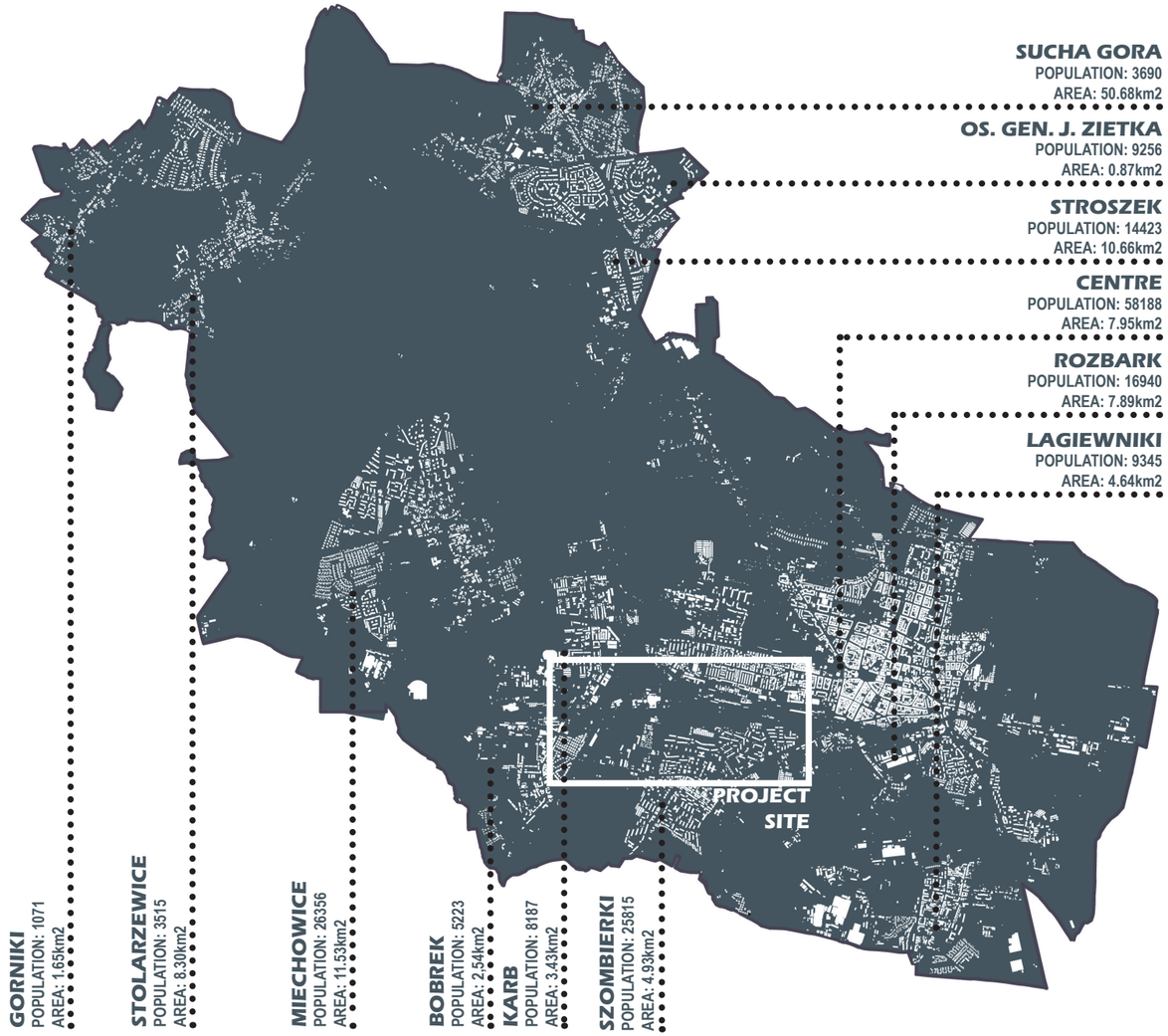
03.02_intervention site location



INTERVENTION SITE

The intervention site has been chosen upon the overall city analysis and supported by the visits I have conducted in the city. However, in the project the indication of the site is performed before the presentation of the analysis outcome in order to make the reader more aware of the site location if different scales of the analysis.
The intervention site (see map) is the area in close proximity to the city centre and to the second densest district south form the centre, Szombierki. It is thus framed by the settlements of the districts of Centre, Szombierki, Bobrek and Karb. The area is part of the 'negative space' (see page 23), where the old industrial site, the used and unused railway tracks as well as some of the defined greenery meet the urban form, and strongly divide the city's structure. The choice is thus taken in order to experiment on the void, with approach of re-conquering it into the urban fabric, as it is stated in the research question. The area is seen as the model site, where all the qualities of the negative space coexist, as well as the space of the potentials of becoming a new part of the city, which could support the future development of Bytom in the direction of the unification of the urban structure of the area.

The main choice parameters:
- **area is part of the void**
- **divides the city**
- **the close location to the city centre**
- **the close location to the dense suburban arrangements**
- **post-industrial qualities.**



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SPATIAL DIMENSION

In following, the three main spatial elements are to be examined the built structures, the infrastructure, and the 'negative space'.

BUILT ENVIRONMENT

The city of Bytom consists of 12 districts of different size and population, which cores are mostly located in the southern part of the city. It is strongly noticeable that beside the overall fragmentation of the city and very strong disproportions of the settlements intensity, the evident division of the north and south city is present. Such a setting is significantly influencing the city's disintegration and the overall organisation.

The contemporary arrangement of Bytom is a result of the former city's development. The city of Bytom, as it has been mentioned in the introduction is one of the oldest coal mining and heavy industry cites in the Upper Silesia. The city's suburbs have grown up form the small settlements around the coal mines or steelworks. The significant influence on the contemporary structure of the city had the decisions made in 1950s, when the settlements of Bobrek, Karb, Miechowice, Szombierki and Łagiewniki have been incorporated into Bytom's former structure. Such an intervention has destroyed the local identity of the city, which form the harmonically developing city in frames of the contemporary inner city, has become an undefined structure of segregated districts. The development of the city in the communist times had the characteristics of the rapid growth of the industries connected with total lack of any urban planning for the area. The result of such a policy is thus a structure of the contemporary inner city surrounded by the ring of typical socialistic multi-storey housing settlements, with very low social identification to Bytom [bytom02_01].

There is noticeable very strong differentiation of the housing typologies across the city. The centre is mostly characterised by the Carree structure, city villas, the multi-story housing. The very first and defined as heritage old mining districts of Bytom are mostly build up with multifamily brickwork villas. Whereas the districts established in the socialistic times consist of the modernistic blocks of flats, surrounded by some organized areas of older single-family housing. Such a strong division of typologies defines very significantly the quality of spaces of the separate parts of the city, where in the centre the typologies are designed for the mix of uses and in the newest suburbs the monofunctionality is the standard. The typologies thus produce the specific activity possibilities and obstacles. The closest insight into the division of the functions as attraction is to be found in the further part of the report.

The map thus shows the relation of the urban and undefined space of Bytom. The remark has to be set, as for 190895 inhabitants city, almost half of its structure is a superfluous land, which causes significant fragmentation of the urban form.


03.04_main square


03.05_multistory buildings

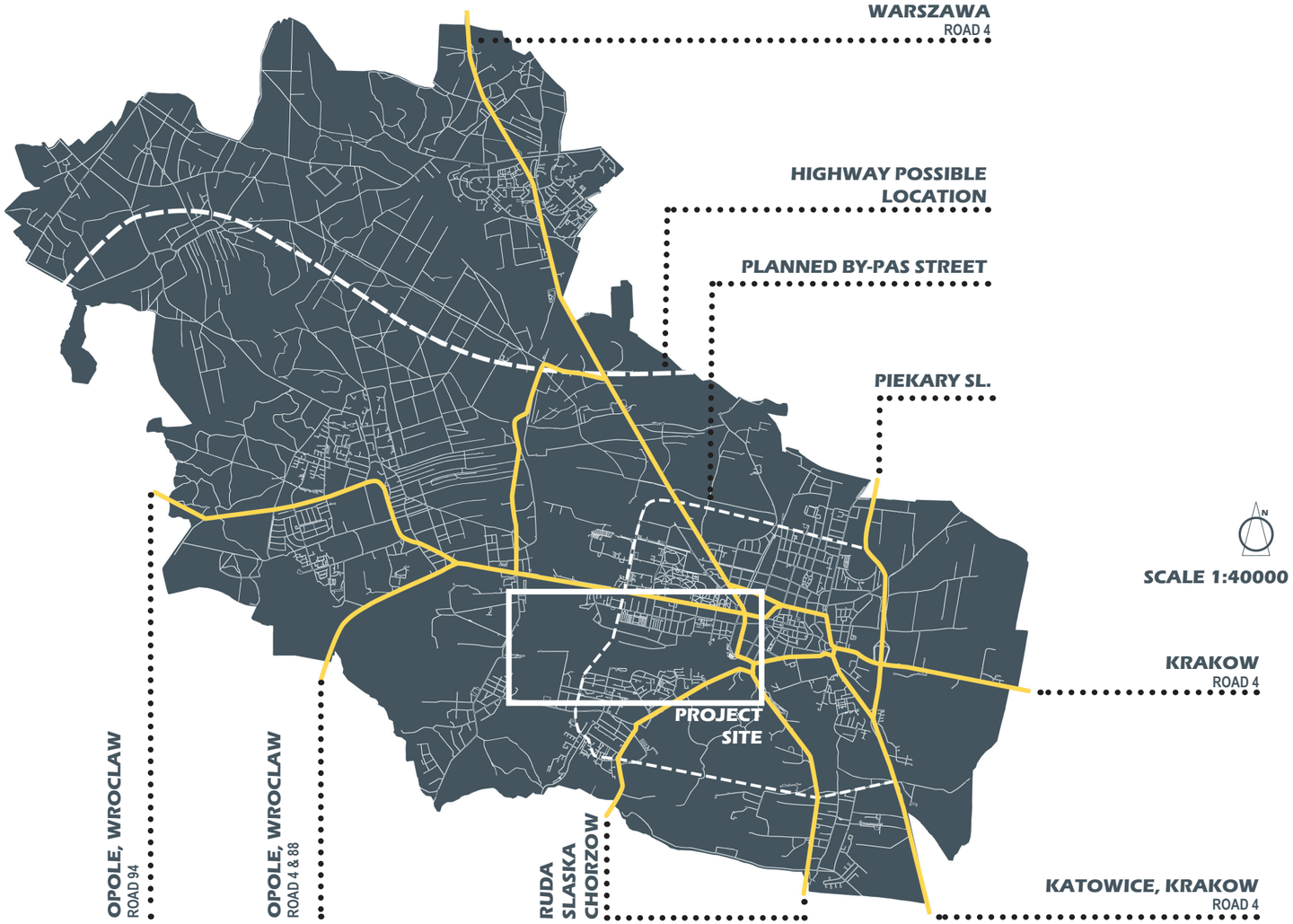

03.06_strucutres typical for centre


03.07_strucutres north from the intervention site


03.08_view on the Dworcowa Street


03.09_multistory buildings


03.10_carree structures



INFRASTRUCTURE

MAIN ROADS NETWORK

The city of Bytom, as one of the gates to the Upper Silesia Conurbation, is accessed from the north and distributes the main traffic corridors in all directions towards the core of the region; it is thus a major transit node in the area. The main streets in the city are regional streets leading into direction of Warszawa, Kraków, Katowice, Chorzów, Gliwice, Opole and Wrocław. The main and dense infrastructure thus leads through the city centre. The city's structure discussed on the previous page gives the image of the urban structure, which need to be connected by strong transit corridors. Therefore, the main connections are lead by the main regional streets. The city's streets network is characterised by two or four line main streets, with tram lines following in most of the places. The structure is connecting and intersecting in the close proximity to the city centre creating very complex and difficult to organize 'bottle neck'. The traffic congestion is a serious problem in the city. The recently planned bypass streets are seen as the release of some of the city's problems. The location of the north bypass is the result of the thorough study of the city's structure and the main transit corridors congestion. The by-pass suggestion thus is to be considered when designing the solution for the voids relating to the city centre [report 2007,25-28].

The other minor streets are leading the cars and the trams to the other parts of the city. The city is characterised by major vehicle traffic. It is not designed for bike commuting. The pedestrian infrastructure is following the road infrastructure but the focus is led for the engine vehicle. The pedestrian intersections with the main streets, as it will be also shown in the empiric part, are mostly organized by setting of bridges over the car traffic. There is serious lack of the friendly light traffic solutions in the city of Bytom.

RAILWAY NETWORK

The very strong network connection for industrial sites in the Upper Silesia use to be the railway. The importance of railway can be seen in all Silesian cites' structures, where the open spaces around the tracks are significantly standing out as the edges in the central areas of cities, dividing cities into not-coherent parts. Nowadays, the track areas add on to the other unused spaces, since the railway does not play such a significant role. In Bytom, the railway consists of normal track the narrow gauge line. Only the main city's connections tracks are used full time, meaning the tracks leading into the closed industries are out of use. However, out of the post-industrial tracks, the narrow gauge tracks network is used; it is the tourist attraction during the summer period.


03.12_intersetion in the centre

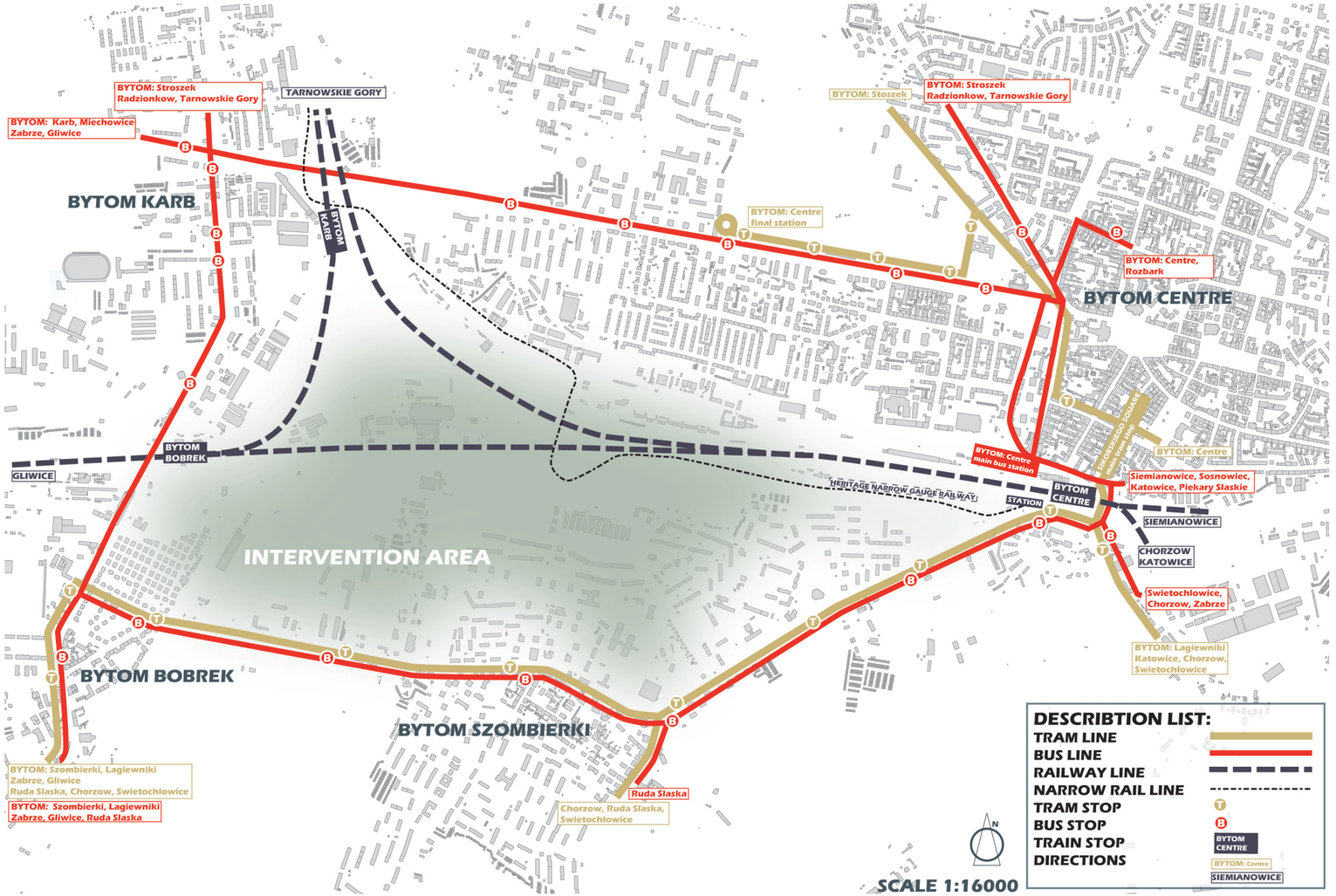
03.13_access road form north part of the city to Karb and centre

03.14_pedestrian street Dworcowa


03.15_east access to the railway station

03.16_layers of infrastructure


03.17_pedestrian wiadukt



COMMUTING NETWORK FOR AREA SURROUNDING INTERVENTION SITE

The infrastructure surrounding the intervention site is mostly of the minor streets leading into the housing districts. The north and south-east parts are strongly defined by 'edge' created by the regional streets of heavy traffic and the tram lines. The main street leading to Ruda Śląska and Chorzow is one of the only two access points to the intervention site. The other one is the minor street leading south thought the district of Karb and then over the viaduct to the district of Bobrek. Both of that connections are very strongly vehicle oriented and congested.

CITY CENTRE

The city centre is the core of exchange for the different modes of transport. The main railway station and the bus station are located beside each other. The access to and out from the city is provided in all possible directions. The railway system leads to Katowice and Gliwice and from them to whole Poland. The busses are also facilitating the distant and city's transport. The other mode of transit in Bytom and whole Upper Silesia Conurbation is the system of tram lines. The trams are providing the commuting system for inhabitants from the whole conurbation. The most of the tramlines follow the main regional streets without interrupting the car traffic, though there are places also in Bytom when the intersections occur. The main tram exchange node is located in 5 minutes distance walk form the train and bus change centre.

Beside the network of the public transport, the main commuting mode is a car. The city is in constant traffic jam and all free, paved areas of the city, are parked by cars. Recently the area of organized and charged parking was implemented in the city centre.

SZOMBIERKI

The district is served by the bus and tram connections. It is easy to switch the transport mode. In addition, during the summer period it is possible to take the recreational trip by the narrow gauge rail towards north part of the city and further one Miasteczko Śląskie.

BOBREK

The district is also facilitated by both tram and bus system. The train station for Bobrek is located on the periphery of the district.

KARB

The district of Karb is supported just by the system of busses connections and by car commuting.

SUMMARY

The area is supported by various modes of transport, leading the users to the city centre of Bytom as well as serving the public transport connections the other cities of the Upper Silesia conurbation. The popularity of the car commuting though is signalisation of the possible lacks in the coverage or the attractiveness of the public transit. The unregulated parking in the city is also contributing to the

overuse of the car mode of transport. The complete nonexistence of biking paths as well as biking commuting culture in the city's structure has to be mentioned.

ANALYSIS OF SITE WITH FOCUS ON WAKABILITY AND BIKING DISTANCES

TWO KILOMETRE RING

According to the literature, people are willing to bike to the destinations in proximity of 2 kilometres. They are more likely to use the bike than the car if they have facilities supporting biking in the mentioned distance [walking02_01There have been chosen two spots for biking possible coverage; the city centre and Szombierki Power Plant. Since it has been leaned that, there is no biking commuting network in Bytom, it seen as the possibility of testing the implementation of such. For the city centre, the ring shows the possible coverage for whole city centre as the district and the access to Szombierki and Rozbark areas. The other ring shows possible coverage for biking from and to the Szombierki Power Plant to whole surrounding districts

THE ACCESS POINT FORM THE TUNNEL UNDER THE RAILWAY IN SZOMBIERKI

The smaller coverage rings are expressing 5 and 10 minutes time walk form the centre of the spot. In the case of the tunnel, it is located so that it does not serve much of the access to the specific urban structures. The place is the node of transit modes exchange and leads into the walking links along the main streets. The node also has been mentioned as the dangerous one in the empiric mapping.

THE CENTRAL AREAS OF THE SZOMBIERKI, KARB AND BOBREK DISTRICT

The rings of 5 and 10 minutes walk show close location of the main functions of the district, like the convenience centre, the church and most of the education facilities as well as the transit modes exchange spots.

THE AREA OF SZOMBIERKI POWER PLANT

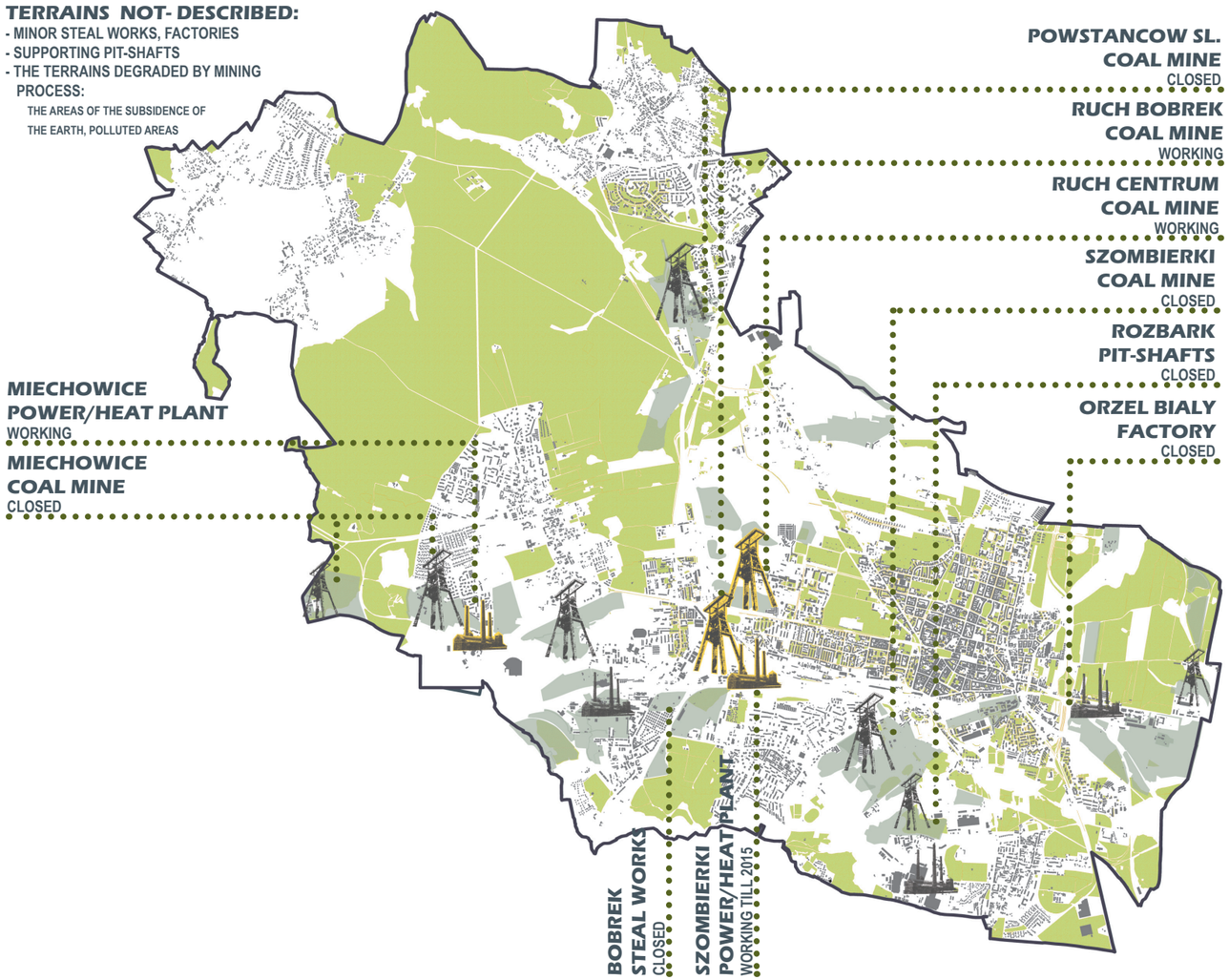
The test of 5 and 10 walking distances was also applied to the main build structure in the relation the intervention area itself. The power plant is already accessible for some people living in the area. The walking rings are the indication of the relatively close location of the building to the most structures of the city. The application of such a test also opens up for the understanding of the possible interventions, which could lead into the successful linkage of the power plant into the urban structure.

SUMMARY

The biking rings applied in at the map show the possibility of applying a successful additional mode of the transport in the area. The biking could be an alternative for overused car mode as well as the support for more active life style.

The 5 to 10 minutes walking distances in the districts are showing the following up of the ideas for the self-sufficient districts and open up for the possibilities of improvement of the whole area with linkage of new nodes in the same way, meaning using the proximities of the 5 to 10 minutes as well as the biking distances.

SPATIAL DIMENSION: 'NEGATIVE SPACES'



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'NEGATIVE SPACES'

The 'negative space' is defined by De Geyter as the "space that is not normally consciously designed or planned" [De Geyter 2002,25]. In the term, he includes the open green and blue spaces, as well as all kinds of the superfluous landscape, which is defined by Nielsen as "*[t]he in-between spaces beyond the urban /…/ that cannot be defined positively and therefore is in excess.*" (Nielsen 2002,53).
The contemporary structure of Bytom is very much influenced by the presence of different kinds the 'negative spaces'. In following the term 'negative spaces' is going to be distinguished into the green voids and post-industrial voids, in order to describe the city structure more precise, focusing on the character and use of the of the listed spaces.
The term 'void' or 'terrain vauge' needs explanation in order to follow up the discussion of 'negative spaces'. Both words are describing the leftover areas with no or almost no use. The 'terrain vauge' described by Ignasi de Sola Morales "*…has the sense of vacant, void, devoid of activity, unproductive, in many cases obsolete; on the other hand, vauge has the sense of imprecise, undefined /…/, without fixed limits, with no clear future in sight"* [Morales 1997,23]. According to Adriaan Geuze and Hans van Dijk *"the 'void' points to the absence of interventions. /…/ [t]he void is the domain of unfulfilled promise and unlimited opportunity*." [gust 1999,242]. The definitions for the open, superfluous spaces are very much overlapping and giving the idea of the promising condition in their emptiness and lack of function. Such an angle is therefore kept as the starting point when analysing the spaces, which in the contemporary condition might have a pessimistic image. These 'voids' divided as follows into green and post-industrial are the fulfilling element of the city structure, where the main build and infrastructural urban elements are already discussed.

GREEN VOIDS

The green voids consist of the defined and undefined greenery. The undefined greenery consists of the wild meadows and generally green leftover open spaces. The defined greenery constitutes firstly of the forests and meadows located mostly in the north-west part of the city area and to some extend in the south part. One of the very specific defined greenery uses in the city is the allotment structure. The private gardens are located in the edges of most of the districts. The allotments are places for spending time close to the nature, relaxing and growing flowers, and ecologic food. The amount of the area defined as the allotments stated on its popularity among the inhabitants of the city.

POST-INDUSTRIAL VOIDS

The overall de-industrialization process has left many add-on voids of post-industrial and railway network to the city structure. The railway tracks, mostly unused, are located all over the city's central part, dividing the city into three main areas. The post-industrial areas are adding up to the voids of the railway tracks since the arrangements have been always located together, due to their functional relations
Some of those voids have gained new owners and new uses, where the most popular is the re-industrialization into small warehouse or smaller production lines [Domański 2001]. One of the creative examples for the reuse and re-industrialization of the void was creation of The Technology Park


03.21_north part of the void


03.22_railway tracks in the void


03.23_power plant supporting elements


03.24_north west part of the void


03.25_view on Szombierki district form the beginning of the void north


03.26_mioddle part of the void

at the area of closed Orzeł-Bialy Mining-Metallurgical Plant. The park serves the new investors with the possibility of office and storage spaces [bytom02_02]. Beside mentioned reused space, the other bigger voids of former coal mines and steelworks are mostly 'waiting' for any intervention. The passing time and lack of use are leading into a lot of damage in the very precious elements of the history and identity of the region.

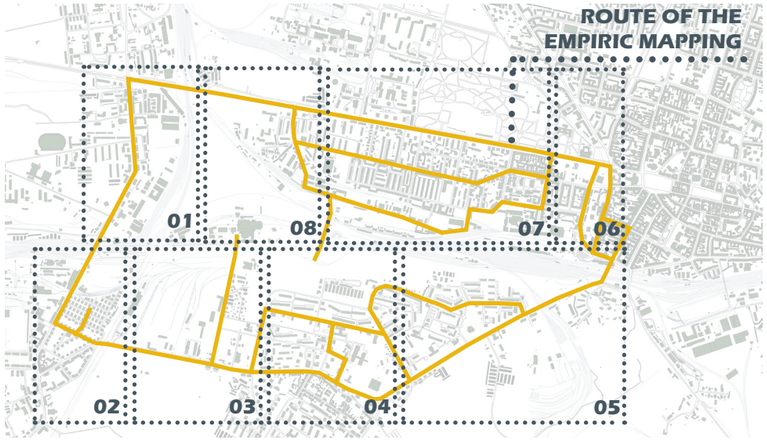
The other issue related to the industrial history of Bytom is the overall degradation. The city has been very strongly influenced by the industrial exploitation of the environment. There are two main and very visible signs of the past, which are almost irreversible; the coal mine waste dumps, some of them still burning, and the subsidental erosion. Both are adding-up to the post-industrial void area. Bytom has the dumps located very close to the city centre, only some of them are in the process of revitalization. The problem of the subsidence is even more dramatic. The subsidence is caused by the wrong exploitation planning policy the form the beginning of 1970s, when the increasing demand for coal and steel production has lead into a decision of starting the mining under the city centre. The major parts of the city are facing the ground movements form couple of millimetres up to couple of meters in the course of time [report 2007, 65-66]. Such a situation causes the degradation of the natural environment in the middle part of the city, where the great forest is located, as well as the degradation of the urban structure. Those movements are constantly destroying many houses and blocks of flats. The interventions in the built structure are thus very expensive and time consuming. The destructive influence of the ground movement and lack of efficient investment has lead many buildings of the city centre into a stage, when they are dangerous to live in. The city centre has thus many empty buildings, which are abandoned mostly because of their technical stage. Recently established plan for the 'Revitalization of the City Centre' is one of the interventions undertaken in order to stop the further degradation of the urban structure, as well as to enhance the city centre image in Bytom and in the region [bytom02_03]. The abounded buildings are discouraging the potential inhabitants and investors, what is also contributing into the population decrease in the city and mostly in the centre.

03.27. view on Szombierki Power Plant

'DRIFTING' INTERVENTION SITE

The section is presenting the outcome of the visits in the city of Bytom in February and April of 2009. The method of an empirical analysis of the site was chosen to gain more understanding of the urbanity of Bytom. Such a mapping is thus important to learn about the way the existing structures make people percept the space. What kind of impressions the spaces leave in the users' consciousness, what kind of memories such spaces produce. The means used for registration were photography and random notes describing the spaces, as well as some supporting factual data.

The presented actual mapping was performed on the area of the potential intervention site, defined by the first overall analysis of the city and its structure. The site of one of the closest post-industrial voids to the city centre, which is significantly dividing the central Bytom and its most dense district in the proximity, Szombierki. The area is very much sealed off from use and access because of the variety of infrastructural connections and its post-industrial character. The route of the visit to the chosen site was established along the visit progress. The route was developing as the user was trying to access the site from different directions. The access was though very difficult and unpleasant, that is why the route characterises with the 'around' shape, since the crossing through was not possible in the legal or safe way. The mapped area is shown on the illustration below, where the specific eight mapping parts have been pointed out. Following, the mapping is presented in sections, provided with the map of numbered and located on the map illustrations. The presented area is described by illustrations and comments to the illustrations, as well as to the overall description of the impression the area has left in the user's memory.



‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_01


01_main street: Konstytucji Street


02_main street: Konstytucji Street


03_view on the church

The main street is supporting the main north-south transit corridor for the western part of the city. The street has two lines and wide and comfortable pavement with the line of threes. There are no bike lines in the area. The zebra crossings are located very rarely, what makes the street not welcoming and unsafe for crossing. The street is relatively loud and it is not common for people to wander around just for pleasure. It is the car realm.


04_housing type


05_empty building

District Karb - located in the west-south part of the city. The district was established in the close proximity of the coal mine and steelworks. The coal mine located along the district is still the main work place. The urban structure is linear with the domination of the multifamily housing. The urban form seems to be sealed off form the city centre, by the coal mine and visible void in the perspective, elements which create a strong edge towards east.

The district landmarks are the church and the coal mine pits. In the close proximity of the church, the convenience facilities are located. Along the road, it is possible to find most of the functions.


06_housing type


07_housing type and industrial areas in the background

On the main corridor there was found only one empty building that might be used as the office building previously. The main green area is the park located in front of the coal mine entrance. It is very simple green spot in the proximity. It seems like recently the playground has been upgraded.


08_district park and playground

The main work place and the landmark is the coal mine. The space is every disorganised, there is no hierarchy at the access streets and intersections with the pedestrian path. The space is dark and taken over by car.


09_entrance to the coal mine

The multifamily housing of the district is characterised by the two main styles, the typical mining housing ‘familoki’ form the turn of 19th and 20th century and the 60’s and 70’s blocks of flats. The areas in between the buildings are used mostly for parking, sometimes are taken over by children playing in front of their homes.


10_spaces in between the buildings


11_coal mine towers

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_02


01_heritage workers houses

The workers houses ‘familoki’ are typical for the industrial Silesia. The layout of the organization of the buildings is very organized and simple.


02_heritage workers houses along the Konstytucji Street

The structure of the workers housing ‘familoki’ in Bobrek is under architectural protection as it is seen as the heritage of the place. However, the area is much degraded and any revitalization works have been started. There are at least three very empty buildings in the structure. The outdoors are not defined and taken care as well. People living in the area seem to be mostly forming the lower parts of the society.


03_view on the Konstytucji Street

The main street is wide and busy. It hosts the main public transport stops and fine pavement. There is no bike line in the area. The spaces in between the buildings as well the main street is full of parked cars.
The intersection of the street and the tram rails is very dangerous and badly labelled; it is possible to collide with the tram.


04_the access viaduct


05_view from the viaduct at Szombierki power plant

District Bobrek - located in the west-south part of the city. The district was established in the close proximity of the coal mine, the steelworks, and the power plant. The urban structure is very interesting, with typical multifamily housing for industrial city form the turn of 19th and 20th century. The north-south transit corridors as well as the west-east one also facilitate the district.

The district hosts the only one car bridge linking the north with the south of the city in the west part of Bytom. The access to the district is framed by industrial structures, which are partly in use. The main building on the left side of the viaduct is under the architectural protection, it is out of use though. The edge of the district is framed by the railway tracks, used both for public and industrial transit.


06_heritage building on the left side form the viaduct


07_polluted area


08_empty building and the disused areas

The areas on the both sides of the bridge are strongly contaminated after industrial use.
The spaces in between the heritage buildings areas not developed. There is no paving, the area is an undefined playground, a wild meadow, or a muddy parking space. The degradation of the urban form is very visible.


09_heritage district and its not developed outdoors

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_03


01_view on the Szombierki power plant

The strongest element of the district is the power plant Szombierki. It is built in 1920s and contemporary is the reserve element of the contemporary power and heat plant in Miechowice. The building is to be taken out of use in 2015. The special architectural quality of the plant is obvious and is it seen as one of the most important industrial heritage structures in the city. The power plant is now hosting many cultural and recreation events. The building’s strong identity is seen as a great quality. Nowadays the biggest problem of the promotion of old power plant is its location in between the rail tracks with the only one, old and devastated viaduct, as the main and only access. The only access street it located in the south of the Szombierki district. It provides a vista view on the area and especially the building with its chimneys, but the street is destroyed and not prepared for current car traffic.

The empty spaces along the Kosynierów Street are mostly facilitating the wild meadow and young forest arrangement. In some places, there are big volume, but low buildings without any special architectural quality. The buildings are used mostly for storage, small businesses, and garages.

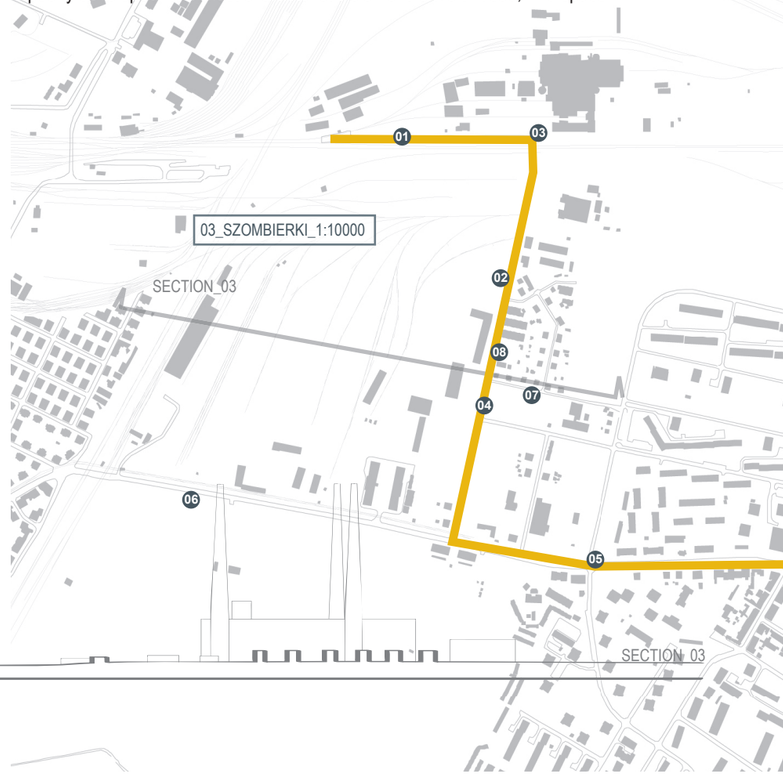

02_view on the empty area with ‘wild’ nature


03_view on the sealing off rail tracks


04_vista on the Kosynierow Street


05_school field and housing in the background

District Szombierki - located in the west-south part of the city. The district was established in the close proximity of the coalmine and power plant. The coal mine was located south from the main street and the power plant is located in the north, close to the railway tracks. The west part of Szombierki district is poorly developed. The most characteristic element is the unused, wild space.



The main transit street hosts the two car lines, the tram rail along the street and the pavement on both sides. The tram crosses the street in one place in a dangerous way.


06_Zabrzanska Street

All the intersections towards north are also crossing the tram rails, there is not much space for waiting when the tram is passing and the visibility is very poor.
The district has no bike likes, both the recreation and transit ones.


07_view on the old single family houses

The architectural expression of the area is very mixed. The area hosts not only the storage and garage buildings, but also housing estates. The housing is represented by the single-family houses with the typical pitched roofs for the region but also by the multi-storey linear and point buildings form 60’s and 70’s.


08_view on the renovated single family house

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_04


01_view on the Power Plant and the private gardens typical for the area


02_Zabrzanska Street with the segregated traffic, view till west


03_Zabrzanska Street with the segregated traffic, view till east

The Szombierki district main housing area is located north from the Zabrzanska Street. The area is characterised by modernistic multi-storey blocks of flats. The popular name for such arrangement is the ‘sleeping area’. The spaces in between the blocks are mostly taken over by the streets and car parking. The public spaces are located mostly in connection with some common buildings, such a church, school, or shopping centre. The area has the convenience facilities spread around it, without any special rationale. The access to the city centre is provided only by the connection with the Zabrzanska street and its facilities. The popular way for pedestrian crossing the rails sealing off the district form the city centre is a small narrow rail viaduct. The use of such structure is unsafe and used to be prohibited. However, the works towards upgrading of the viaduct so that it can fit pedestrian and rail transit as taken, what is noticeable during the visits. The popularity of such a place shows an urgent need for a new links over the rail tracks for the southern parts of the city.

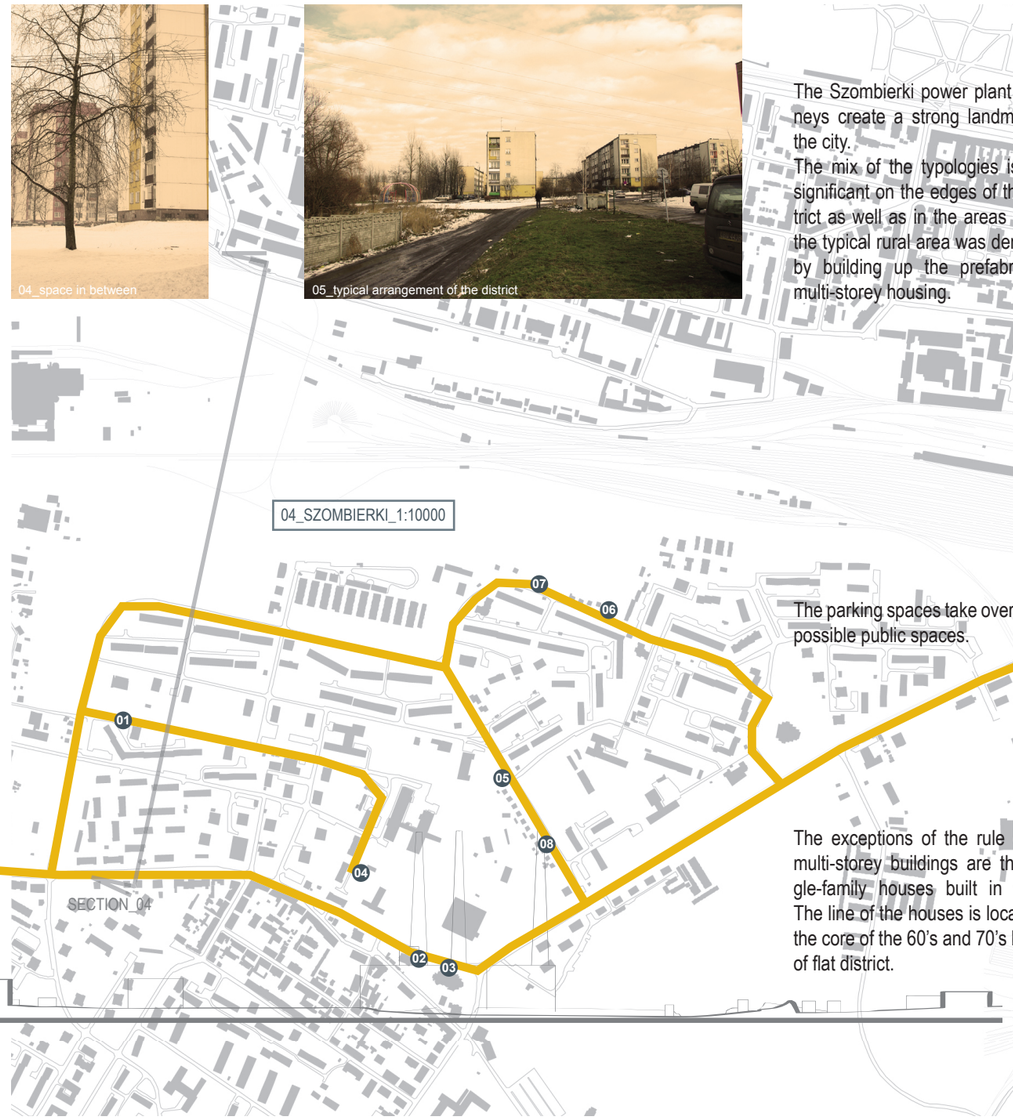
SECTION_04

04_space in between

05_typical arrangement of the district

The Szombierki power plant chimneys create a strong landmark in the city.
The mix of the typologies is very significant on the edges of the district as well as in the areas where the typical rural area was densified by building up the prefabricated multi-storey housing.


06_view on the different typologies and the landmark




07_parking spaces round the blocks

The parking spaces take over many possible public spaces.

The exceptions of the rule of the multi-storey buildings are the single-family houses built in wood. The line of the houses is located in the core of the 60’s and 70’s blocks of flat district.


08_wooden single family houses

‘DRIFTING’ : TOUR AROUND BYTOM DISTRICTS_05

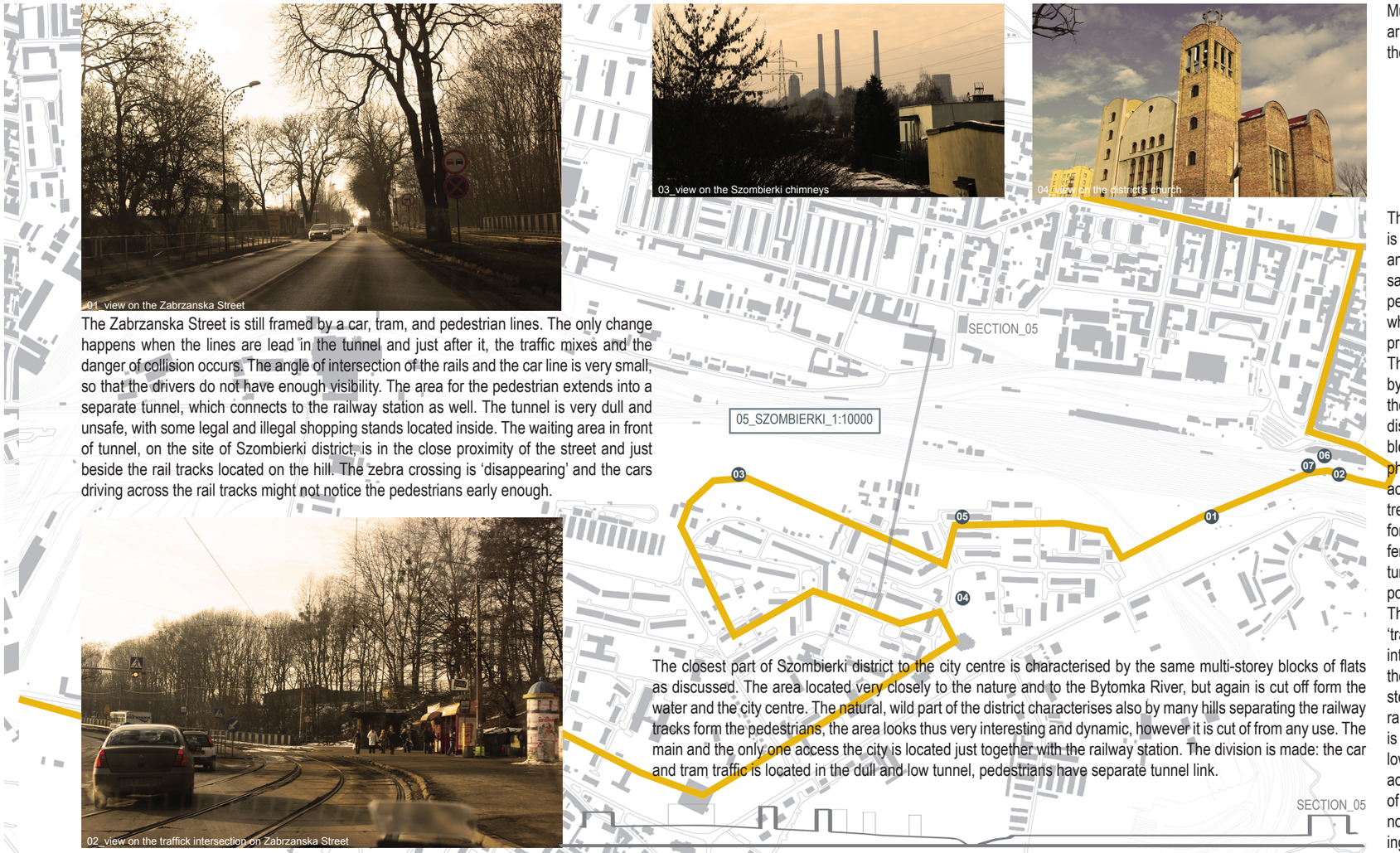
01_view on the Zabrzanska Street

The Zabrzanska Street is still framed by a car, tram, and pedestrian lines. The only change happens when the lines are lead in the tunnel and just after it, the traffic mixes and the danger of collision occurs. The angle of intersection of the rails and the car line is very small, so that the drivers do not have enough visibility. The area for the pedestrian extends into a separate tunnel, which connects to the railway station as well. The tunnel is very dull and unsafe, with some legal and illegal shopping stands located inside. The waiting area in front of tunnel, on the site of Szombierki district, is in the close proximity of the street and just beside the rail tracks located on the hill. The zebra crossing is ‘disappearing’ and the cars driving across the rail tracks might not notice the pedestrians early enough.

02_view on the traffick intersection on Zabrzanska Street

03_view on the Szombierki chimneys

04_view on the district’s church



The closest part of Szombierki district to the city centre is characterised by the same multi-storey blocks of flats as discussed. The area located very closely to the nature and to the Bytomka River, but again is cut off form the water and the city centre. The natural, wild part of the district characterises also by many hills separating the railway tracks form the pedestrians, the area looks thus very interesting and dynamic, however it is cut of from any use. The main and the only one access the city is located just together with the railway station. The division is made: the car and tram traffic is located in the dull and low tunnel, pedestrians have separate tunnel link.

Multi-storey buildings are arrangements typical in the district.


05_typical housing

The pedestrian tunnel is dull, dangerous, dark, and dirty. The feeling of safety is very low, especially in the evenings when the traders are not present in the corridor. The connection is framed by many stairs, which on the side of Szombierki district are not accessible for anybody with any physical disability. The access form the city centre is providing the rails for wheel hair; but the differences in levels in the tunnel itself make it impossible to get through. The person leaving the ‘trap’ of the tunnel is led into the waiting zone and the barriers of the wall, steel construction, tram rails and the street. There is no obvious way to follow. The safe pedestrian access to the main part of Szombierki district is not visible before reaching the waiting zone.


06_pederstian tunnel access to Szombierki district


07_the waiting zone in front of the pedestrian tunnel

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_06


01_city indoor recreation facility

The main indoor recreation facility is located at the very entrance to the city centre. The beautiful modernistic building houses the swimming pool, the saunas, and the gym.


02_main intersection in the inner city with the characteristic building

The central quarters start forms the very characteristic brickwork building. It is an orientation point for the area. The building is only partly in use. The structures on the other side of the street show great need of revitalization or at least simple repairs in order not to cause any danger to the pedestrians. The special safety constructions are built up around those buildings.


03_one of the pedestrian viaducts over the main intersection

The main entrance street is characterised by the viaducts for pedestrians over the busy streets. The focus is put thus on the separation of the traffic and on the car flow. The viaducts are old, the stairs are not safe and comfortable, and the whole construction is yielding under the pressure of two people crossing it.

The Bytom city west entrance is characterised by the frames of the main traffic corridors, the city park arrangement, and building quarters. The city can be approached by the Wroclawska Street and then the distribution of traffic leads towards the train and bus stop. The main new development of the area is the shopping-centre Arcady, which is to be located on the plaza close to the Main City Square and the main shopping street Dworcowa Street.


04_the Municipality of Bytom


05_access street to the railway station

On the end of Dworcowa Street the railway station is located. The access to the building and further on to the district of Szombierki is provided by the elevated pavement. The quality of such viaduct is again representing an unsafe and old structure. The pedestrians can use two such constructions in order to cross the busy street.

06_the railway station and the viaducts

The Dworcowa Street and the streets around it are very well renovated and create the life on the street. The shopping and gastronomic functions are attracting people to stay there. The streets deeper in the city centre are mostly not renovated and it is possible to find some empty buildings or buildings, which need an urgent engineering intervention. The area is hosting many cultural and retail functions, including the Opera House and different galleries. The city centre host many schools and little amount of offices. The Main City Square is renovated but is lacks of the functions being able to attract the user from the Dworcowa Street; only one winter attraction is the ice skating rink located there.


07_the railway station, the bus stop and the viaducts

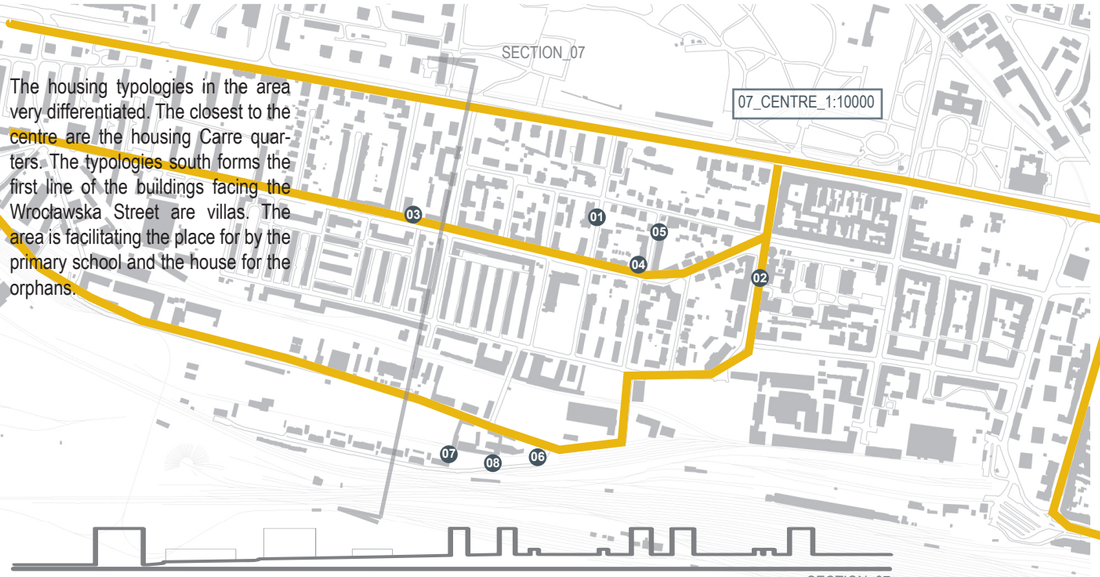

08_the renovated street with the tram line


09_the lively Dworcowa Street

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_07


01_different typologies

The housing typologies in the area very differentiated. The closest to the centre are the housing Carre quarters. The typologies south forms the first line of the buildings facing the Wrocławska Street are villas. The area is facilitating the place for by the primary school and the house for the orphans.




02_caree and villas in the district

The western part of city centre is characterised by estates and offices buildings as well as by the park. The south frame is the railway line serving the city and the in the past also the industry.


03_linear multistory housing

The main typology when moving to the west is the multifamily blocks arranged in the Carre and in the linear buildings.


04_urban villa


05_primary school buildings

The very south areas are mostly for the storage and small industry uses. The streets are vide and leading to different big volume but low buildings.


06_the landscape with the rail tracks and loose buildings

The area beside the Składowa and Towarowa streets is the wild landscape housing only the rail tracks and some ruins. The view is not disturbed and it is possible to see the district of Szombierki and Bobrek, with the landmark of the chimneys of the Szombierki power plant.


07_view on Szombierki power plant

The rail tracks are present all over the landscape; there are track for the public transport, old industry and the special heritage narrow rails, which used to be the industrial lines as well. The narrow rail has its elevated bridge over the normal rails, which is used by pedestrians as mentioned before, semi legal access to the city.


08_view on the Szombierki district

‘DRIFTING’: TOUR AROUND BYTOM DISTRICTS_08


01_view on the Szombierki district

The same wild landscape, combined with the railway provides the view towards south, to Szombierki district.


02_view on the rail tracks form the narrow rail viaduct

The view is from the bridge on the narrow rail viaduct. The rail tracks below lead towards Gliwice and Katowice. The semi legal crossing is very popular even though it leads till the industrial area of the city centre. The shopping centre is 10-15 minutes walk form the bridge.


03_view on the storage buildings

The wood storage facilities are located in the landscape, just beside the narrow rail track. The landscape is higher in the area because of the narrow rail viaduct.

The main street and the minor ‘dead ends’ streets are typical in the area, what is caused by the location in the close proximity to the rail tracks.


08_the most west intersection - main street and ‘dead ends’

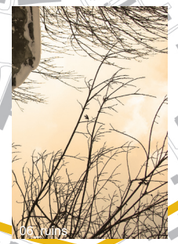
The three till four story blocks of flats are the most common buildings in the area. The houses need renovation but the overall impression of the area is positive.


09_the main typology on the main street

The part of city centre on the border with the Karb district is characterised by the typologies of Carree and linear buildings, which organised arrangement is loosen up towards the west south direction. The south part of the area is dedicated mostly for the small industries, storage areas, and the free wild landscape.


04_Szombierki plant


05_narrow rail viaduct


06_ruins


07_ruins used for graffiti

The area is furnished with good quality street and pavements. There is a lot of parking facilities and some playgrounds. The area strongly lacks bike lines that would make the connection to the city centre easier. There are many bikers using the space as the transit zone towards the city.


10_the buildings versus a lot of empty discusses spaces

PROGRAMMATIC STRUCTURES OF INTERVENTION SITE

INSTITUTIONAL FUNCTIONS

The map of the area illustrates the division of the main institutional functions present in the area.

CITY CENTRE

The city centre is the core of shopping, educating, and leisure. The central part is having the very lively retail street, which leads towards the railway and bus station. The city main square though has less attractive facilities, and therefore is less liveable. The contemporary development of the north end of the retail street, Dworcowa Street, is the new type of the retail centre, with shops, restaurants and cinema. The Arkady Centre is seen as one of the strong developments of the city centre.

The central area is providing as well the education in different levels, located around the area. There is strong representation of schools and kinder gardens as well as the day care. The university level of education is not very developed, only the IT University has here its headquarters, only one department represents the University of Technology here.

The very important element of the structure of the city is the location of churches, still very strong attractors, and landmarks. Every community has it own church, located very centrally, at the sub-districts nodes.

SZOMBIERKI

The district is very well facilitated with the convenience centres in every enclave of the area. The more sophisticated needs are to be addressed in the central Bytom. The location of kinder gardens and schools meets the needs of the area, except for the lack of the day care place. The university level of education is also present; the School of Economics is located in the southern part of Szombierki. The medical support is also present as well as the worship places are typically distributed.

BOBREK

Bobrek district is facilitated in the simplest way among the discussed districts. There is only located the convenience centre and two schools, the technical and the special one.

KARB

The district of Karb has the medical and convenience centre. From schooling typologies, only one is present, the kinder garden. The church is located in the central part of the district and it is an important landmark.

SUMMARY

The main institutions are present in all districts, the most current needs, as grocery shopping is satisfied as well the worship needs are facilitated. The education and retail are mostly located in the centre of the city and in the dense areas of Szombierki, showing a strong extension of the city centre facilities towards south east.

PROGRAMMATIC STRUCTURES OF INTERVENTION SITE

CULTURAL & RECREATION FUNCTIONS

The map of the area presents cultural and recreational functions present in the area. The note has to me made; the most of the functions visible on the map are serving the whole of the city, when the rest of the city's parts are very poorly facilitated.

CITY CENTRE

The main cultural functions of the major importance for the region are the Opera House and the Upper Silesia Museum. The other functions are mostly serving the city itself. The main library is located in the centre as well as the several galleries of different artists as well as the contemporary art gallery. The centre hosts also the Youth Culture House, the place where kids and youngsters can work in groups with music, arts and performance.

The recreational facilities are divided into outdoor and indoor ones. The central area has the City Park, which beside the overall park function hosts also the soccer and tennis fields. There are also smaller soccer fields in the proximity of schools and the Ice Rink. The small and simple playgrounds for the younger inhabitants of the city are located in the different housing units as well as in the City Park.

SZOMBIERKI

The Szombierki district has two soccer fields in the close proximity to the intervention area. The playgrounds are distributed around the housing arrangements. The district is not supported with any cultural institutions, whereas the building of Szombierki Power Plant is housing some temporary cultural events of art exhibitions and concerts. Such a cultural function is seen as the possible future for the heritage building.

BOBREK

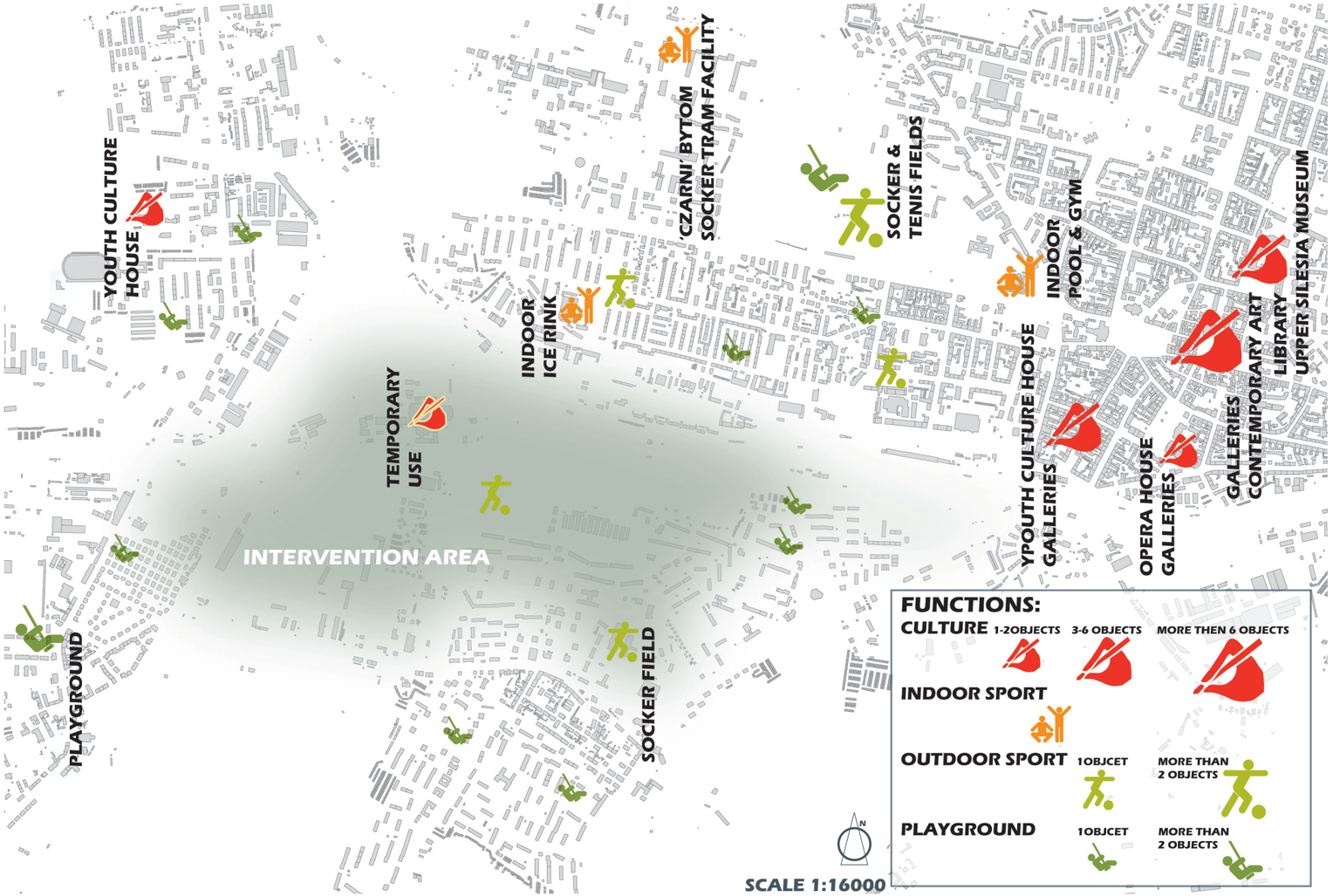
Bobrek district has no specific functions, which could be counted into any of the discussed categories. There are only playgrounds, which as the empirical registration has shown do not represent high quality. The observation has indicated children's and youngster's preference of using the outdoor spaces in the close proximity to their housing units, than the typical playground, addressed mainly to the very small pupils.

KARB

The district of Karb has is own cultural institution of Youth Culture House, which attracts the kids and youngsters form the surrounding area and other districts. There are no other functions of the category, beside the playgrounds. One of the playgrounds is located in the district park, which can be considered as the recreational area as well.

SUMMARY

The presented area is mostly supported with functions of cultural and recreational nature by the central district. There is a strong lack of the interesting functions addressed for youngsters in the other areas. The profile of the centre though, is also very narrow, with mostly very high culture of galleries and opera house, addressed to the wealthy and educated part of the society. The recreation facilities are represented mostly be soccer fields and simple playgrounds. The area needs some more accessible facilities, where the economic background would not be an issue, as well as the distance to it.



PROGRAMMATIC STRUCTURES OF INTERVENTION SITE

TYPOLOGY OF LAND USE

The map of the area presents the distribution and types of land uses except of the build structures, which have been already discussed. It also indicates the pollution areas, which are or will be in need of re-cultivation before they could gain new functions.

INTERVENTION AREA

On the intervention site the landscape use is not defined. The area consists mostly of the wild nature of grasses and straws taking over the post-industrial areas, as well as the not used rail tracks. The defined uses are spread out in the open, wild and hilly space. First of all, in the edges of the build structures there are located the allotments, taken care and owned by the people living in the surroundings. Second, there is located the recreational area, a soccer filed, just in the middle of the wild nature. The other structure, which needs to be mentioned, is the group of young trees, which has the potential of growing into a small 'forest'. The 'forest' structures are located in the close proximity to the rail tracks as well as on the post-industrial area, which was abandoned long time ago. The north-west part of the area of the intervention is the polluted land, which is partly in use. The areas most to the north belong to the existing coal mine Ruch Bobrek and they are polluted with the leftovers of the coal. The area close to the street in Bobrek is an abandoned part of the supporting structure for the steelworks. The earth pollution is also the coal and coal related substances, spread out on the land around the rail tracks.

CITY CENTRE

City centre has defined areas of uses, including the City Park and recreation areas in it, as well as very popular private gardens for people living in city. There are spread out some smaller recreational and green areas all over the centre. The city centre hosts also the industrial area of the coal mine Ruch Centrum, where the land is mostly polluted and taken over by coal dumps.

AREA SOUTH-WEST FROM THE INTERVENTION SITE

The main characteristics of the land there is the lack of the definition and the presence of the post-industrial sites in the type following the wildness of the intervention area. The earth pollution is present at every former industrial site, and it is mostly coal-related substances, heavy metals, and the coal dumps. In the south part of Szombierki district, the private gardens play a great role in the land use definition, as well as the park and the vast meadows. In close proximity to the former coalmine the terrains are reused into a recreational area, with the soccer field and defined greenery.

SUMMARY

The image of post-industrial Bytom is very not defined; the wild nature and post-industrial voids are present all over the city. There is a strong need for new identities for the vast areas of the city, which by now have any clear function and look, which could make them interesting and attractive to stay at or go to. The areas are 'forgotten' in the social consciousness of the inhabitants; they are no-man land.

HERITAGE

The map of the area presents the heritage present in the close proximity to the intervention site as well as on the site itself. The city is one of oldest urban structures of the area therefore, it is important to be aware of the historic and cultural elements, which are spread out in the area.

The city centre is a heritage monument on itself, with its medieval urban structure and the single buildings being the witnesses of the history and being examples of different architectural styles. The contemporary image of the city's square is very different from the medieval one, thus after the World War II it was strongly rebuilt. The important element of the urban development of the city's centre is the network of squares and the walking street, which are the developments of the industrial century [bytom02_03].

The other arrangement located in the city centre is the City Park, which is a listed heritage. The structure of the arrangement as well as the precious planting are stating of its importance for the city. The park was founded in 1870 as the main recreational area of the city. It had the urban batch, which has been redesigned into a functionalistic arrangement of the swimming pool, working up to now [bytom02_04].

The arrangement of the Chapel on the hill is the oldest area of Bytom, where the first settlements and the fortress buildings have been found as well the first church was built [bytom02_05].

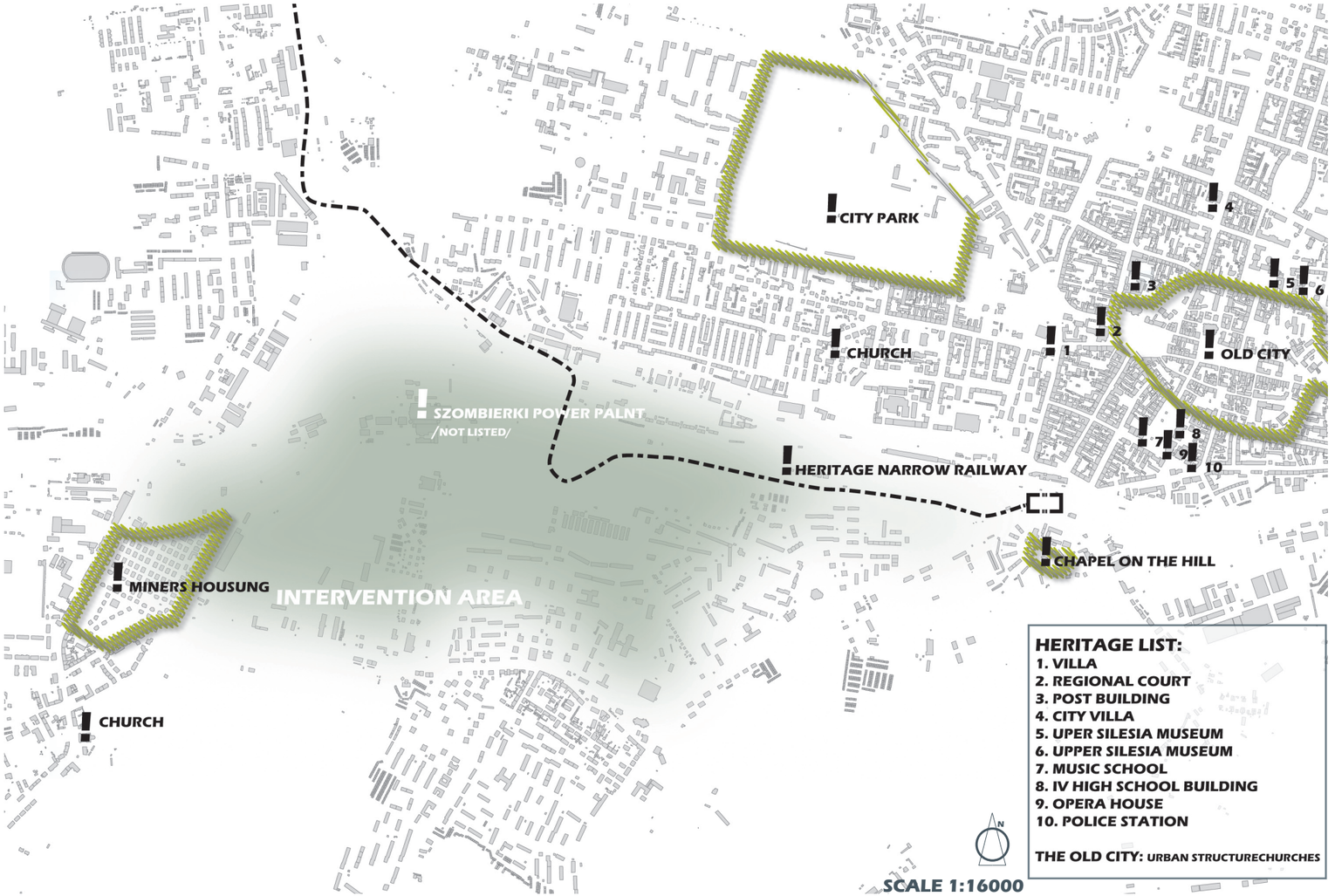
The urban form and the architectural qualities of the miners' settlement in Bobrek district made the structure a listed heritage. The settlement is a typical from for the turn of 19th and 20th century and is to found in every city of mining Silesia.

The narrow railway is also a heritage of the area. The typology of narrow rails is the sign of the history as well as the oldest rail car, which is still in use. The contemporary line goes form Bytom to Miastecczko Śląskie, what sums up into 23 kilometres, which are a small leftover of the 160-kilometre network of the Upper Silesia narrow rail supporting the mining region. The narrow railway has its group of fans who have established a fan club, which started the reuse of the narrow rail as the summer attraction of Bytom [bytom02_06].

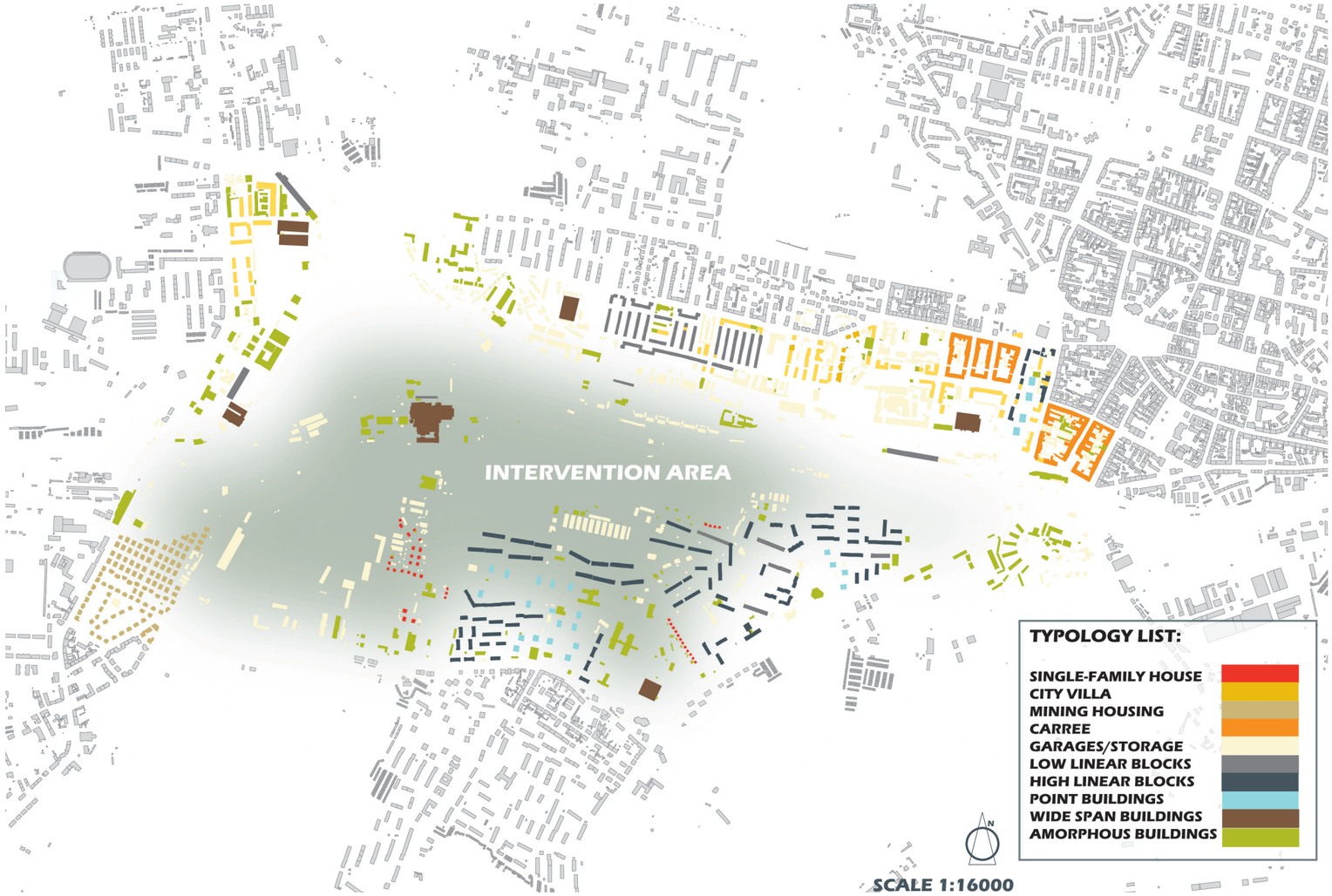
The Szombierki Power Plant is on the heritage structures of the city due to its architectural quality and its contribution to the industrial heritage overall. The building is form 1920 and it was designed by Zillmann brothers. The style of early modernism is very strongly visible. The three very tall chimneys and the clock tower, with the biggest clock in Poland, are the landmarks for Bytom [bytom02_07].

SUMMARY

The mapped and listed buildings are the important element of Bytom's identity and further design and redevelopment of the city is to consider them. The strong heritage structures can be an inspiration or the starting point for the re-understanding of the place and the needs of the area. The structures of all coalmines and steelworks in Bytom have a strong historic and iconic value and it is an issue to understand them as the heritage as well.



PROGRAMMATIC STRUCTURES OF INTERVENTION SITE



TYPOLOGIES

The area characterizes of different types of buildings as heights, but it is possible to draw some simplifications concerning different districts' characters. The mapping though is only focusing on the immediate surroundings of the interventions site.

CITY CENTRE

City centre with its heritage core part is mostly characterised by the Carree structures and city villas. The more young structures located in the city centre are represented by mostly medium size block of flats, in the linear and point shape.

SZOMBIERKI

The area of Szombierki district has been mostly build in the industrial development time when many the typical housing structure was multi-story building, in many variations. Therefore the main characterising typology for such area are linear and point blocks. However, very interesting exception are the single-family houses spread out in the area.

BOBREK

Bobrek district is mostly described by the old, heritage mining housing, built in brick, and called "familoki". The structures are very characteristics for all mining cities in Silesia and therefore they are setting very strong image of the spaces.

KARB

The district typologies are mixed with the strongest image of low linear multi-story buildings.

SUMMARY

The existing typologies are defining the space and its functions. In the case of mulit-story housing the spaces are vast, but not used, except for parking and sometimes by youngsters for play. The spaces between high and long buildings are often dark and unattractive, even though in many cases the areas are finished with good materials and fixtures. The spaces in between city villas and mining housing are also not used in the intended way. A lot of spaces are degraded and their function is mostly parking facility. However, the areas attract more youngsters to play around in these neighbourhoods.

HEIGHTS OF BUILT STRUCTURES

CITY CENTRE
The city centre with its density of 73 dwellings per hectare is mostly characterised by 4 to 5 stories height buildings. However, in the direction south the area looses the intensity and becomes much lower, up to one story. The buildings in the area of Railway Station are on the other hand little bit higher, due to the location of the point buildings of height around 11 stories.

SZOMBIERKI
Szombierki district, which is also relatively dense is characterised by 5 story and 11 story blocks of flats. The area is dispersing in direction of the void and the heights are around 1-2 stories, where garages and some storage rooms are placed. The special arrangements of the single family housing is also contributing to the variation of the heights in the area.

BOBREK
District of Bobrek is characterised by low dense development with height of 2-4 stories, where the most popular building is the mining housing of 3 stories.

KARB
In the Karb area the heights are defined by the relatively new blocks of flats of 4-5 stories. The density of the area gradually becomes less in direction of Bobrek district.

SUMMARY
The project site is defined by different typologies and heights. The area is framed by higher structures in the direction east to the city centre and by smaller in direction of west and partly north. Such a setting is seen as possible inspiration for the project solution, where the new development strategy could follow already existing rule.

POLISH HABITS OF WORKING AND SPENDING FREE TIME

In order to outline the overall image of the possible user of the space, meaning the inhabitant of the city, it is essential to have a closer insight into the habits of Poles in terms of the work and spending free time. The recent research by CBOS (Public Opinion Research Centre) upon the every day life has shown the main trajectories of the interest and priorities. The typical image of a Pole is a working person, who spends a lot of time with family and treats the family and the work as the most important figures framing ones life. According to the research of CBOS the other features, framing the prioritising in life is health and making money, the culture and sport activity are unfortunately still the marginal sphere [cebos 2008].
However, the typical working person does have free time and tried to use that time most effectively, since it has been calculated to be around 3 hours a day. The free time activity differs in the different age and education groups, however the main type of free time is the passive relax, like watching TV, reading books; the next most popular form of spending of the free time is strolling and exercising. The main conclusions of the research upon the free time in life of Poles is that there is gradually less people, who lack the free time and thus the general satisfaction with life is raising in the country. Such an outcome of the research is a promising feature for the future, when it can be expected that the Poles will prioritise their health, recreation activity and cultural life more than nowadays [cebos 2006].
Recently the percentage of people spending free time in an active or in the cultural way is moderate. Mostly, it is the feature describing the high educated and high-income part of the society. However, the most popular sport activity for a typical Pole is biking and strolling; 82% of the asked people have stated the biking, strolling and exercising outdoors as the main recreation activity in their daily life. The youngsters are showing more interest in the active spending free time, both outdoor and indoor, being in the same time very creative in finding new options of the games and activity in general. The middle-aged part of the society is exercising much less than the young people, what is related to the change of the life style, when the people start to work professionally and have families. The image of an exercising middle-aged person is strongly related to the highly educated, having passive work and living in a big city; whereas the people who work physically do not show much of the interest in more activity than that related to the profession. There is one special free time activity popular in every social group, which is gardening and spending time close to the nature. Especially elderly people are found of the allotment or private garden activity, since their relation to exercising and biking is gradually lower with age progression. In the case of the cultural and social life, the same relations as concerning sports are noticeable, where the strongest group of the culture and city life creators are the middle aged and youngster coming from the middle class and highly educated part of the society [cebos 2003, cebos 2008].


03.34_biking and recreation area in Bytom

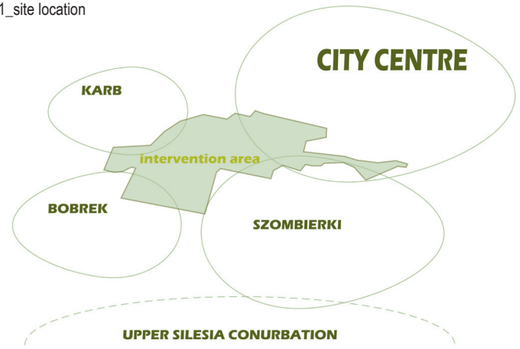

03.35_biking as recreation

SUMMARY

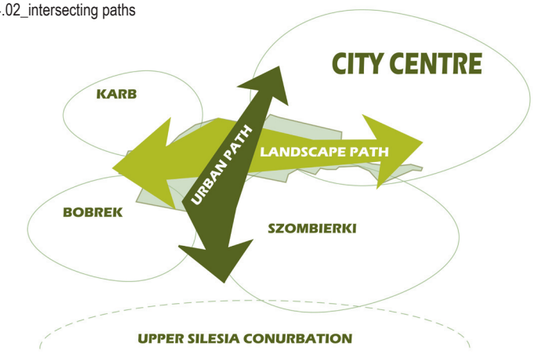
The analysis of the city structure, infrastructure, and functional organisation has revealed some urgent problems in the city general, which are very strongly stating upon the popularity and use of the intervention area. The main issue in the city scale is the spatial division of settlement and voids, what leads into the dysfunctional organisation of the city. The spatial organisation is framed by the infrastructural paths and nodes, which are dividing even strongly the city. The evident example of such a problem is the intervention site and its surroundings, with two minor accesses, and the strong edges in the form of the old industrial sites and railway tracks.
On the local, intervention site scale, the need of supporting the alternative connection to the city appears as the most urgent need. The other issue is the presence of the post-industrial void and in future, the post-industrial heritage building of Power Plant Szombierki, which should be dedicated for new functional disposition, in order to test the positive approach of Geuze and Dijk, and try to find creative solutions for the spaces of “unlimited opportunity” [gust,1999,242]. Among stated problems the issues of lack of any special cultural and recreational functions is the area is visible, the city is very oriented towards the centre and the other districts do not posses any stronger and qualitative functions. The void can be thus seen as the possible area for redefining of the city’s cultural, recreational and work nodes.

CONCEPT

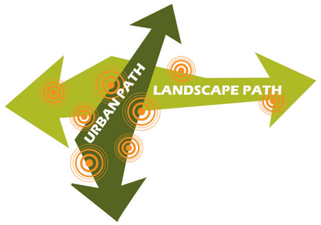
04.01_site location



04.02_intersecting paths



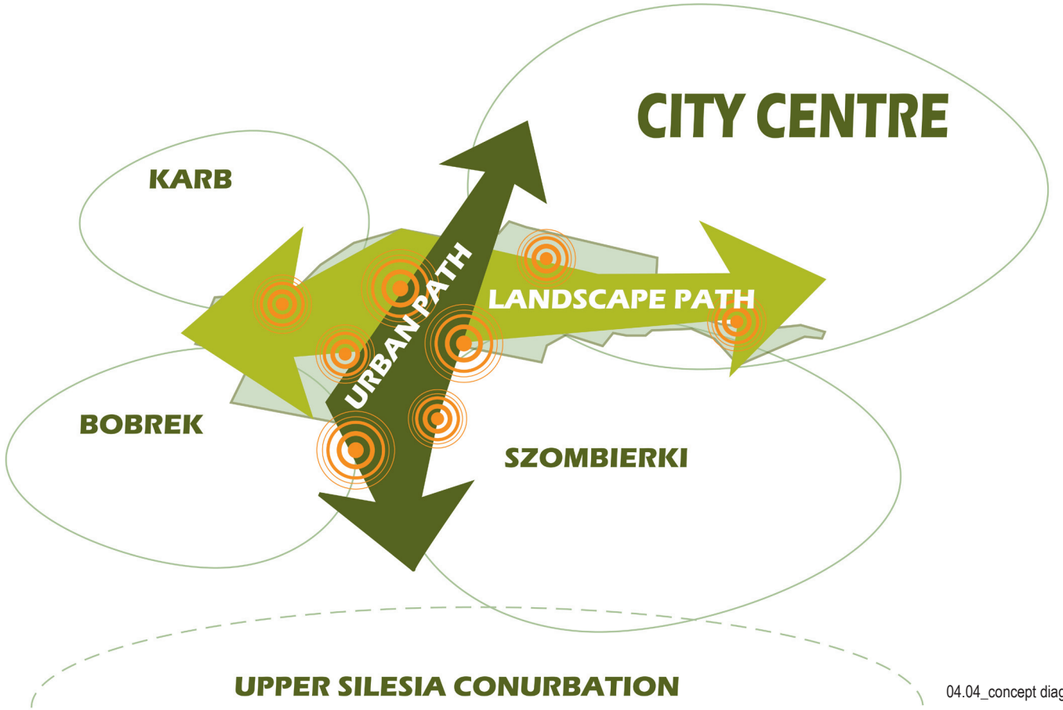
04.03_hotspots



CONCEPT

The undertaken analyses have revealed the site's lack of coherence and quality connection to the rest of the city. The area is defined as a post-industrial void, which by revitalization can contribute to a determined development of the city. The site has been chosen upon the overall urban analysis of Bytom. The site is located in the close proximity to the city centre but also is a strong edge towards the other districts of the city, especially to the relatively young west-south part of the city. The central location of the site is an important feature characterizing it into an important city part, which up to now was left over and forgotten. **Therefore, the idea of re-conquering of the post-industrial void into the urban structure is seen as the main concept.** In order to develop such a vast part of the declining city the specific approach has to be found. The idea is to work with many layers of interventions over the time by methods of landscape and urban acupuncture.

The understanding of the concept of the redevelopment of a post-industrial site has to be set in order to outline the specific layers of intervention. The redevelopment of a post-industrial site is understood as an operation on the intervention site in order to interconnect and activate the void into the city structure. The re-linkage is to happen in the physical re-conquer into the structure and as well in the users' perception. The means of the physical connection are seen as two interrelating paths in the area; the landscape path and the urban path, which will lead different user through out the site. The further interventions of revitalization of the heritage and applying the new functions and identities are to be performed based on the overall strategy of re-linking of the void to the urban form in a new attractive and efficient way.
It is very essential to prepare the strategy of such an intervention over the years, when the steps are set for long-term process, in order to lay them along the city's development dynamics, as well as to provide the time when the city and its inhabitants will get the opportunity of re-understanding and re-discovering of the urban landscape.



04.04_concept diagram

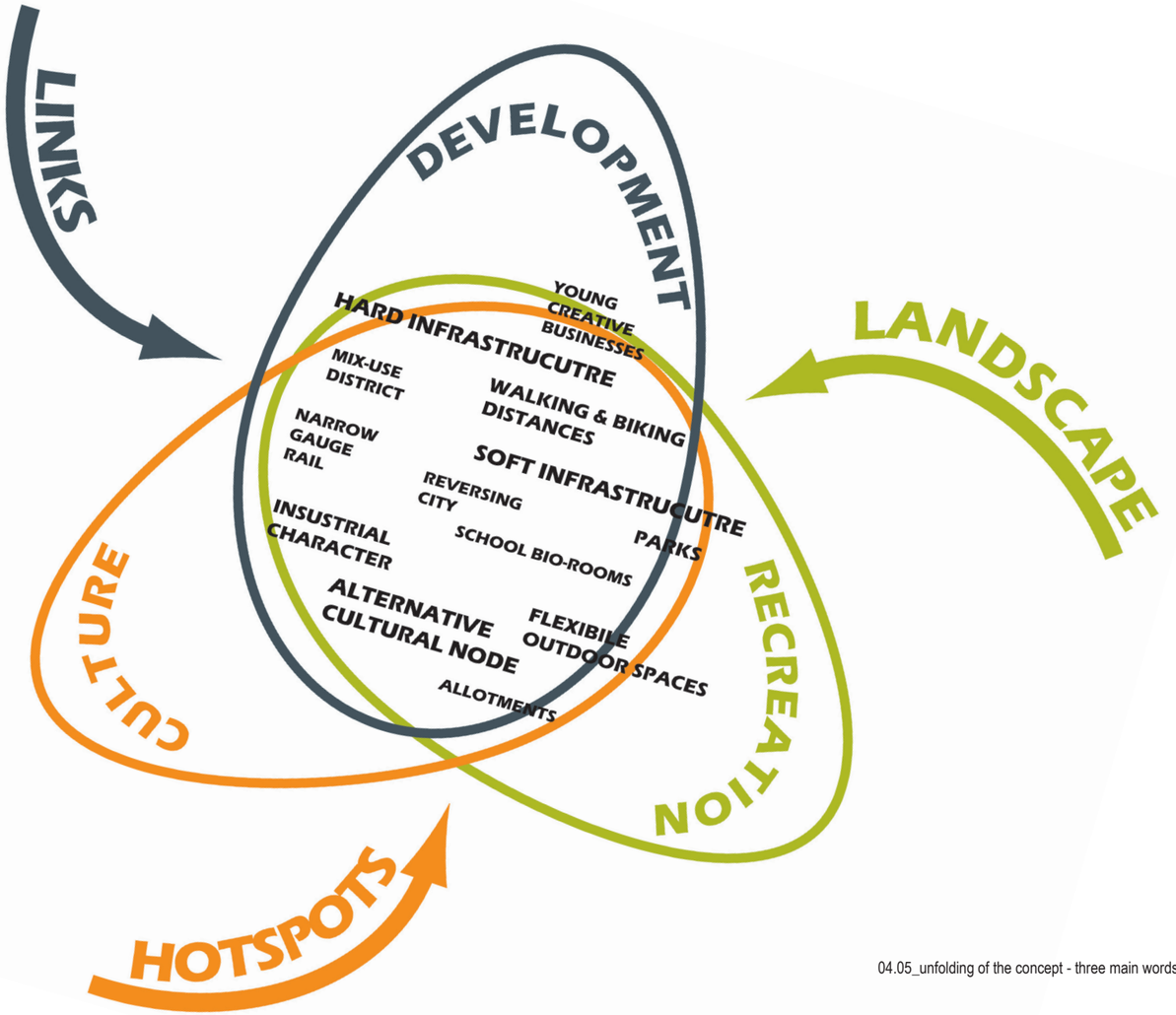
The layers of the acupuncture intervention at the post-industrial site in Bytom:

! LINKS - the new paths set in the landscape, which are to lead the main soft and hard transit, as well as the new development into the area of intervention

! HOTSPOTS - the areas of special attractive and nodal character; where the intervention is to strengthen and establish the specific points, as well as the overall new network of connections.

! LANDSCAPE - new outdoor space with strong industrial character sets the combining layer of the linkage, meeting, recreation, and culture happenings in the re-conquered part of the city

- the urban landscape of the new linking district setting quality living in Bytom with access to multi-functional spaces, city centre and the core of region; promoting the re-use of the post-industrial sites in order to limit the green field land use the city and the region development



04.05_unfolding of the concept - three main words transformer

CASE STUDY

The reference projects have been chosen with three focuses. First, it was looked into the projects of the landscape design with the strategic and flexible design for the establishment and use of the areas requiring the transformation. It was looked into the strategies of separate projects in order to find the similarities and differences, as well as to organize the approaches in order to set the starting point for the design guidelines for the project. The other approach, when looking into the projects was the human scale and the design with special focus on the pedestrian and biker, as well as project working with the preserving of the industrial heritage of the place. The third insight was made into the projects working with the shrinking areas in order to understand the different concepts towards the sites as well as the obstacles of the sites in the declining area.

EMSCHER LANDSCAPE PARK

The Ruhr District is an example of successful and long-term development of the post-industrial sites in the Ruhr area of Germany. The historic background of the area is characterised by the heavy industry and coal mining. The Ruhr District was one of the most important industrial areas in Germany and in Europe for about 100 years. In the middle of the 20th century, the prosperity of the industrial area was over and the region started to loose inhabitants and its overall importance.
The new approach for the future development was found. The International Building Exhibition gave the framework for the interventions and in the period of years 1989 - 1999 the Emscher Landscape Park was developed. The park length is 70 kilometres, its area reaches about 320 square kilometres, and it runs from west to east through the Emscher Region. The park is the special structure providing a better living environment for 2 million inhabitants of the region.

The main objectives for the Emscher Landscape Park were:
- preservation of the remaining leftover landscape
- linking up segregated areas of the agglomeration
- reorganizing the divided areas as coherent parkland
- preparing the regional and local strategy for the individual projects with a long-term perspective
- maintaining and managing the new open spaces in a permanent regional park association.

The park development happens on two axis. The main axis is the east-west corridor, called the new "Emscher-Valley". The supporting axis running along north-south directions constitutes of seven corridors of re-development. Along the seven corridors many smaller and following different theme projects are established.

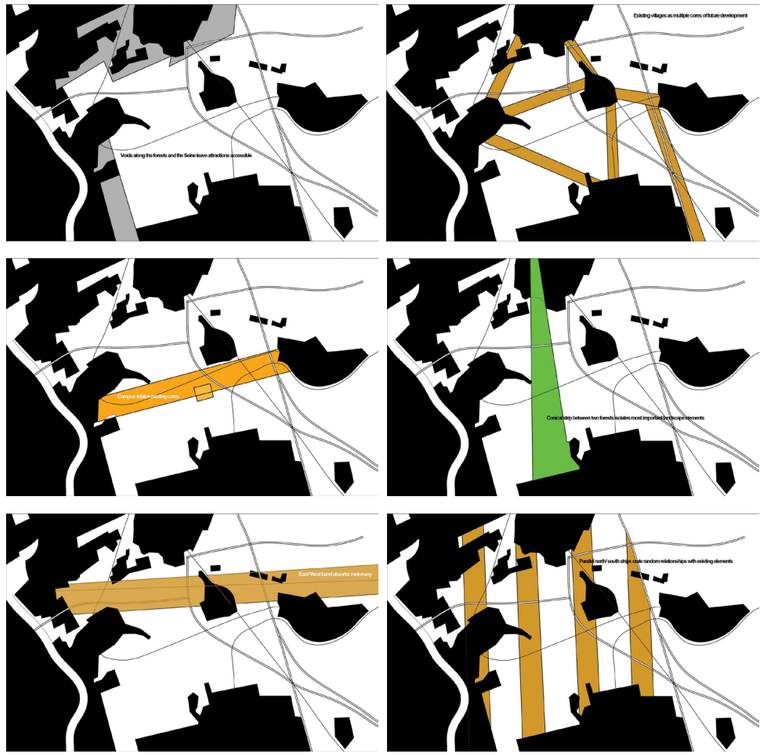
The park's landscape design is very strongly anchored in the historic background of the area. The industrial character is preserved and underlined, by design which re-uses the old mines, cooking plants and winding towers. The relicts of the industrial era settled in the new landscape are creating special atmosphere of the place and preserving the strong identity of the post-industrial region. The heritage is 'exhibited' along the Industrial Nature Route and Landmark Route. The park contains of the system of linking paths, both for walking and biking. The setting promotes the recreation and physical activity while being surrounded by the heritage. The arrangement has also several differently programmed open spaces.
The main development spots are Shrubbery garden House Ripshorst, Duisburg-Nord Landscape Park, Garten Osterfeld - OLGA Park - Oberhausen, Nordstern Landscape Park, Mechtenberg Landscape Park, Lakeside Park Lünen, Parkways Emscher Landscape Park - Cycle Path and the Landmarks Route.

The development of the Emscher Landscape Park is not finished yet, the next step is the Master plan 2010. The main objectives are:
- establishment of the new development yardsticks in co-operation with all participants
- unifying the spatial planning
- rebuilding of the river Emscher
- development of new projects and new park surfaces [emscher 2005.]






INSPIRATORY ELEMENTS:
- BROWN FIELD DEVELOPMENT IN THE DECLINING AREA
- ACUPUNCTURE APPROACH
- LAYERS OF LINKS PROMOTING RECREATION
- LANDSCAPE AS THE LINK AND ATTRACTION IN THE ABANDONED SPACES
- HERITAGE STRUCTURES COMBINED WITH THE LANDSCAPE CREATING THE IDENTITY OF THE PLACE
- MU LIT-DISCIPLINARY COOPERATION
- NEW CREATIVE USES
- TEMPORARY INSTALLATIONS - LIGHTING



INSPIRATORY ELEMENTS:
- LANDSCAPE AS THE CORE ELEMENT
- PRESERVATION OF A LANDSCAPE
- DESIGN WITH THEMES AND FUNCTIONS
- INFRASTRUCTURE AND BUILD STRUCTURES AS PART OF A LANDSCAPE
- STRATEGIC APPROACH
- DESIGN WITH USE OF LAYERS
- FLEXIBLE STRATEGY

SURRENDER_OMA

The project at the site of Melun Senar in close proximity of Paris is a conceptual design for a competition for the development of a proposed new city in the periphery of Paris. The designed area is 5000-hectare rural area south of Paris.

The main concept is to combine the dimension of the nature, buildings, and the transit corridors into the coherent structure, with a great understanding of the qualities of the natural environment of the place. The specific mappings of the existing structures and the needed forms are the main elements for the definition of the final design. In the design most important was the combination of the maps of:
- forest and its surroundings
- existing villages and the corridors between them
- corridors of motorway, green link, north- south links and the university amenities

The urban form thus consists from the infrastructure, recreation, education bands, and the cores. The cores are places for individual development of the residential neighbourhoods, as well as are the places for the preserved farmlands, being the indication of the identity of the area. The creation of flexible and undefined cores is following the general understanding of impossibility of planning of the structures, which could be built in future. Therefore the main focus is set on the framing, natural and infrastructural elements, leaving 'open' the potential development spaces focusing on creation of the urban landscape. [oma 1995,974-985].

Program:
- residential neighbourhoods,
- industrial parks,
- infrastructure for educational,
- recreational and cultural development
- preserved existing farmland
- road and rail infrastructure

The site description
"The vastness of the landscape, the beauty of the forests and the calm of the farms form a daunting presence, hostile to any notion of development." [oma_01]

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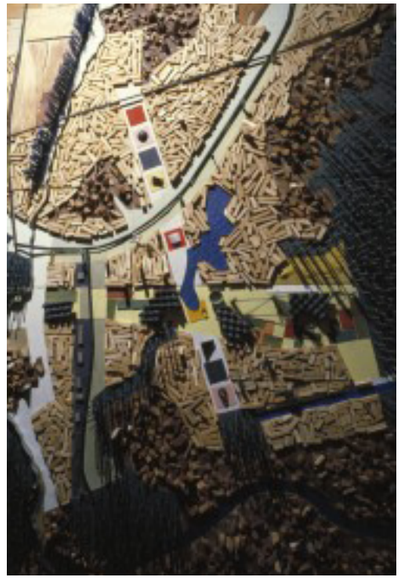
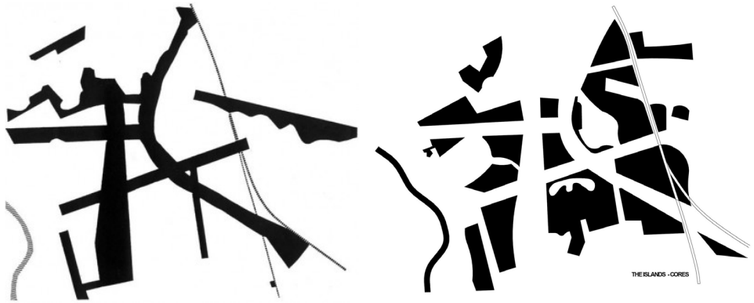
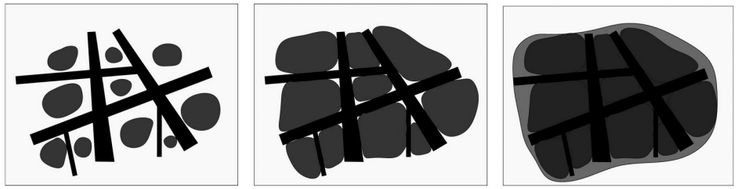
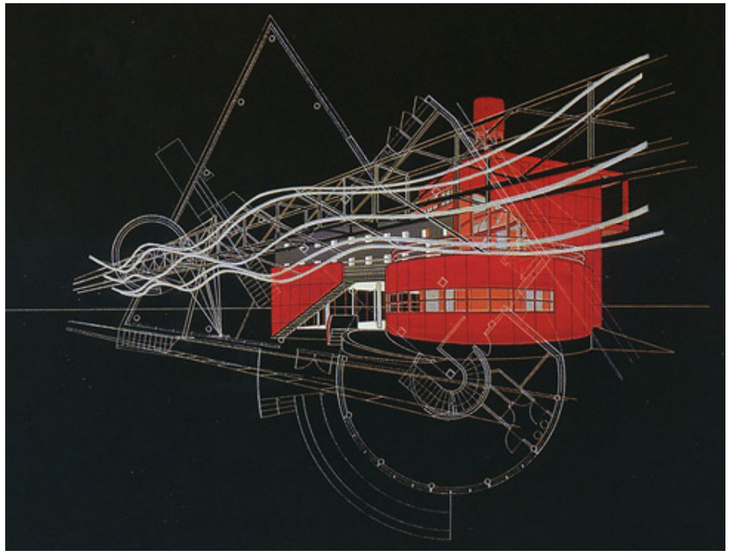






PARC DE LA VILLETTE_TSCHUMI



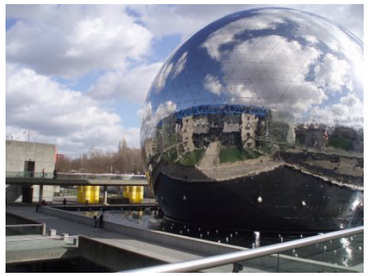
The project of the Parc De La Villette (La Villette) prepared by Bernard Tschumi won the 1st prize in the competition for the new Parisian park design in 1982. The project site is located in Paris on the post-industrial area in the close proximity to the Seine-Saint-Denis suburban district. The site covers the area of 55 hectares and used to be house the slaughterhouse. The project is thus an example not only for the park design but also for the re-design approach for the post-industrial site.

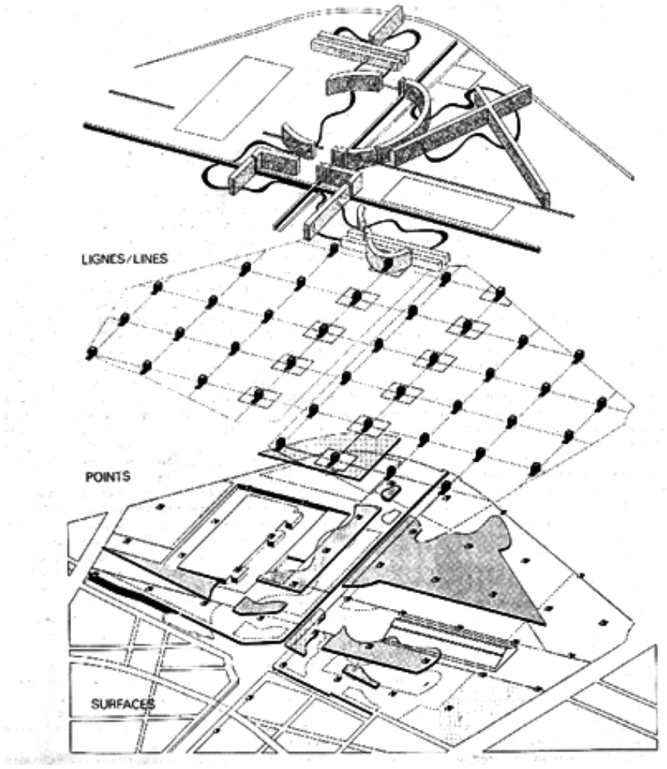
The main objective for the design was to prepare functional, flexible spaces, which would be able to serve different functions already existing in the area and the new one, which are to be implemented in the turn of time. The main structure is to be defined by three main layers of the design.

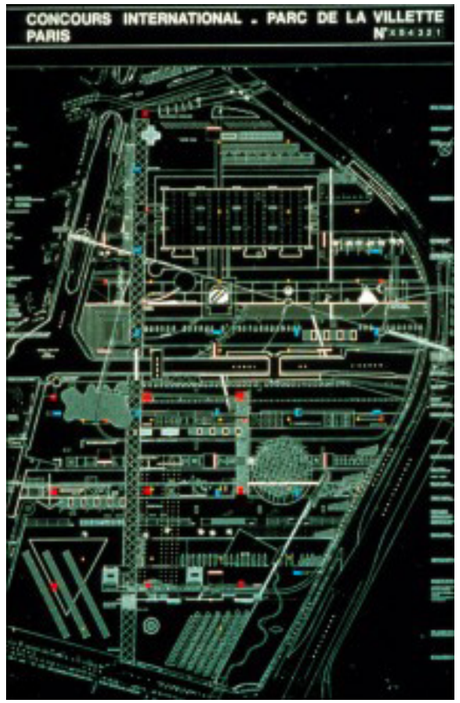
The three main strategic elements:
- POINTS - the points of interest and orientation, each element of 10x10x10 meters cubes spread in the park along the orthogonal grid
- LINES - the lines of the orthogonal grid, where the main communication links are located - the densest transit over the space is to be hosted be the grid main paths. There is also a special element, the path, which does not follow the grid arrangement; it is meandering in the park, leading the calmer wander thought the area
- SURFACES - the area is to be defined also by the kind of a surfaces, the park is a combination of the areas with very urban expression and areas of more natural and wild environments.

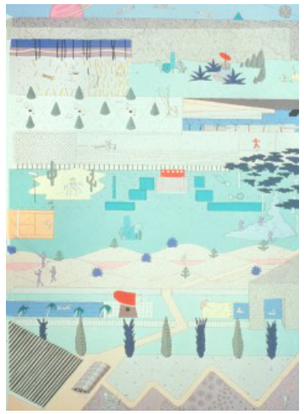
The park gained thus a very strong identity through its specific organization structure, which is an overlay and intensification of the industrial, organized image of area's former definition. It is very visible that the post-industrial heritage of the space was an inspiration and its preservation was a great agenda when re-designing the area [Tschumi,1985].

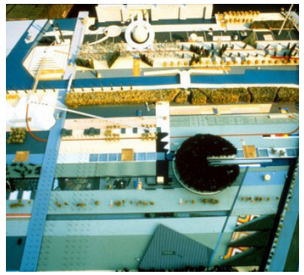
INSPIRATORY ELEMENTS:
- BROWN FIELD DEVELOPMENT
- FLEXIBLE SPACES
- STRATEGIC DESIGN: LAYERS OF LINKS AND STRONG ATRACTORS
- HERITAGE, TECHNOLOGY AND LANDSCAPE CREATING THE IDENTITY











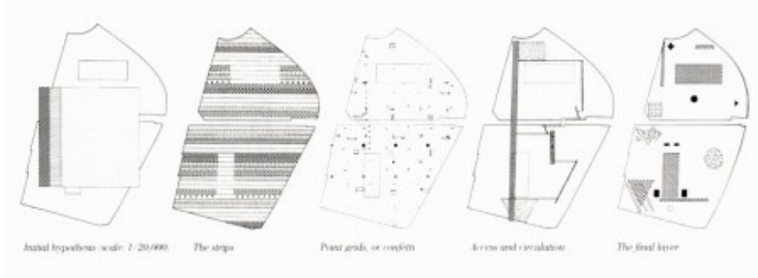
PARC DE LA VILLETTE_OMA

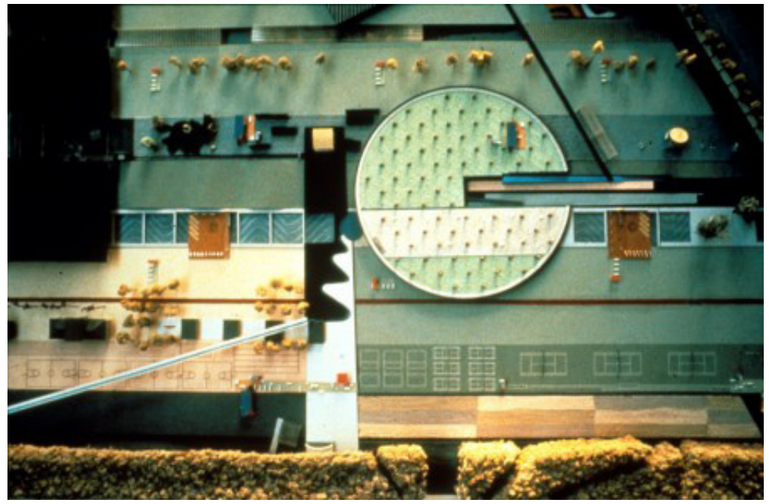
The project of the Parc De La Villette (La Villette) prepared by Rem Koolhaas and OMA won the 2nd prize in the competition for the new Parisian park design in 1982.
The main objective for the design was the understanding of the changing needs in such structure. The designed area must be therefore flexible in order to meet new demands and temporary functions, which might happen in the park. The OMA's approach was therefore to design an interesting area with the strategic elements that would integrate the arrangement, giving it in the same time the needed flexibility [oma_02].

The park design was set on the five main strategic elements:
- the horizontal bonds across the site
- the logic division of different facilities and functions in the area
- green architectural elements, such as 'the round forest''
- connections and nodes
- superimpositions

The elements are giving to the part the individual character, functionality and the sought flexibility. The park is organised by the main structure of the paths and nodes, which deliver the uses to different parts of the structure. The tour thought the park is interesting since the horizontal bonds are changing the expression, look and the function of the spaces. In the same time, the park has many open and flexible spaces, ready to be used in different ways and by different users. The expression of the park gains the tectonic character by implementation of the superimposition and the special elements around the paths. The industrial heritage of the place is preserved by incorporating the theme of the technology and preservation of valuable structures. The area gains new dimension in the surroundings of the landscape framing the flexible spaces for new and changing functions [oma_03].

The both entries differ in the physical expression hoverer; they have very similar approaches of working with layers of intervention as well as the process of landscape as the method of establishing of the park in the course of time. The parks organization operated with strong elements of paths and interest nodes, as well as bigger structures defining of the quality and image of the space.





INSPIRATORY ELEMENTS:
- BROWN FIELD DEVELOPMENT
- FLEXIBLE SPACES
- STRATEGIC DESIGN
- HERITAGE, TECHNOLOGY, AND LANDSCAPE CREATING THE IDENTITY
- CREATIVE USES

Carlsberg Our City

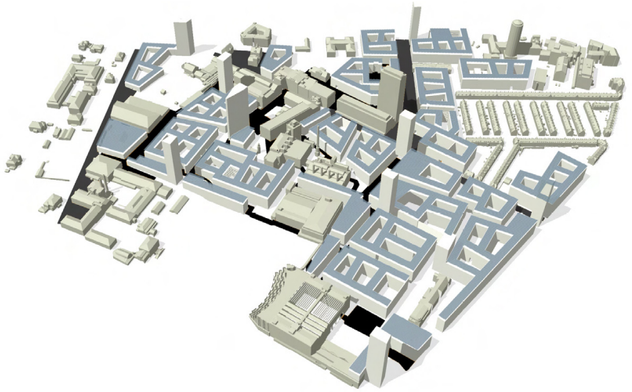
The project 'Carlsberg - Our city' is a complex development on the brown field of Carlsberg brewery. The vision is to create a new urban district designed to be a vibrant, attractive 24/7 district in the city of Copenhagen - the capital of Denmark and Øresund Region. The project is realized in the context of the growing region, however, the qualities of the solutions working with the human scale, city life and heritage reuse are the focus in such a reference project.

The redevelopment of the spaces includes applying "… a mix of residential properties, commercial facilities, retail premises, night life, public and cultural facilities interacting with Carlsberg's own activities in the area" [Carlsberg-VoresBy, 2006,7]. In addition, a project deals with the renovation of preserve-able buildings and the cultural heritage from the old function of Carlsberg brewery together with an adding of new constructions hosting the different functions of the city district. The site consists of very diverse buildings and gardens, which have been serving Carlsberg's company in the past, and the implementation of the 'spirit' and milieu of Carlsberg brewery is part of the narrative bounding the whole project into one coherent story. All the activities, especially cultural, are planned to fit and underline this former history of the place.

The design of the area has been done in a close relation to the entrances to the area so people going into the district will use the same streets and thereby create a more liveable street milieu. Carlsberg is thus establishing and underlining connection corridors already current in the city area by using them for leading paths to the facilities at the site. Carlsberg is well connected to the city centre by all kinds of infrastructure, starting from S-trains and busses to with great bike and pedestrian routes. Car users are welcome in the area but cars will mainly be placed at underground parking lots.

Carlsberg is designed with a special focus on its identity being a combination of the qualities of city life, urban form and sustainability. The philosophy is to use 3E's as a point of departure for developing Carlsberg as a sustainable district and thereby focusing on both the environmental, economic, and social aspects of sustainability. To support social equity and thereby social sustainability the area is designed to facilitate mixed uses and to have divertive population. The residential buildings contain of different sizes and quality, in order to be available for the widest group of people possible. The economic sustainability is provided by a profitable and financially attractive plan for urban development in the area [Carlsberg-VoresBy, 2006,47]. From an environmental point of view Carlsberg city is designed for public transport, which is very important in building sustainable dense areas. It is also planned to look into the building's elements providing suitable solutions to make them more environmentally friendly [Carlsberg-VoresBy, 2006].

What is interesting about the Carlsberg project is thus that it is a modern urban redesign of a brown field. It is planned as a dense neighbourhood offering new spaces for urban, and thereby public, activities. Its main idea is to integrate and 'thicken' urban activities by designing small spaces that allows and invite people to inhabit and use them.



INSPIRATORY ELEMENTS:
- **BROWN FIELD DEVELOPMENT**
- **PROMOTION OF MIXING OF RECREATION, CULTURE AND LIVING**
- **HERITAGE PRESERVATION**
- **LINKING OF THE VOID TO THE CITY**

IBA 2010: DESSAU-ROSSLAU

Redevelopment of the city for IBA 2010 exhibition : CITY ISLANDS - URBAN CORE & LANDSCAPE ZONES

The city of Dessau-Rosslau is facing the shrinkage caused by the de-industrialization after the change of the economic and politic system in the eastern Germany in 1990's. The city is very depopulated; many buildings are empty. The new city definition is needed in the area. The main approaches are:
- the demolition of the waste buildings
- application of the landscape in the empty areas
- creating the new connections and structure between the urban areas which have not been demolished

The urban cores are going to be connected with the landscape zones creating the new kind of the city setting. The urban landscape will thus consist of the open spaces of natural environment, which overtook the waste spaces and of the city structure surrounded by such a landscape [iba 2010,].

INSPIRATORY ELEMENTS:
- **LANDSCAPE URBANISM**
- **LANDSCAPE AS THE LINK**
- **LANDSCAPE INSTEAD THE WASTE BUILDINGS**

IBA 2010: HALBERSTADT

Redevelopment of the city for IBA 2010 exhibition : CULTIVATION OF EMPTY SPACE - EMPTY SPACE AS A CHALLENGE

The city of Halberstadt is over 1200 years old. In the current of history, it has lost the city centre, and now it faces the process of depopulation, known in many eastern German cities. The city is characterized thus by the empty spaces distributes in different part of the city. The city lacks of the hierarchy and coherence. The contrast of the density and emptiness is very strong.

The city's approach for the IBA exhibition is to focus of the empty spaces. The projects happening in the city are trying to re-introduce the empty spaces, make them understandable, and find the quality in the emptiness. The emptiness is seen as a great potential for the temporary uses, which bring the cultural and artistic dimension to the spots as well to the whole city. The city is a setting for the artistic and performative interventions, but also the place of the discussion upon the temporality in general [iba2010_02].

INSPIRATORY ELEMENTS:
- **TEMPORARY USES IN THE EMPTY SPACES**
- **NEW UNDERSTANDING OF THE EMPTY SPACE**

IBA 2010: WEISSENFELS

Redevelopment of the city for IBA 2010 exhibition : TIME FOR FOUNDERS - GREEN BELT AS A LINK

The city of Weissenfels has a specific structure; its south part is an old town of historic value and the north part is the relatively new development of the XX century. The space in between two different developments is the former industrial zone, which in recent times needs a redefinition.

The idea for the IBA exhibition in the city is to create the green link between the south and north parts of the city. The brown field is to be developed into the urban landscape incorporating the old valuable structures and creating the connections for the city's parts. The important feature is the public-private dimension of the development, which creates the involvement of the citizens, private companies and the municipality in the process [iba2010_03].

INSPIRATORY ELEMENTS:
- **BROWN FIELD DEVELOPMENT**
- **LANDSCAPE AS THE LINK**

SUMMARY
In following sub-summary comments have been done upon inspiring elements, which have been helpful in establishing of the concept and the design, however the overall comment upon all of the inputs form the case study is presented as follows. In general the main outcome from analysis of the projects dealing with the development in case of decline or growth indicates the approach of landscape process as fruitful. Such an intervention is thus seen as the main inspiring element. The following input focuses on the layering of the intervention as well as processing it over the time. The other inspirations have been found in the approaches of physical linkage and focusing on the infrastructure set in the landscape. The temporary use and user involvement have also been seen as the important frames for the work with the post-industrial void.

DESIGN

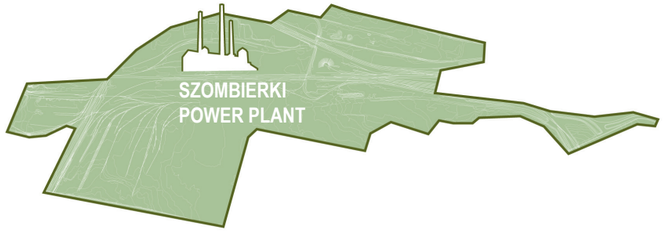
"[T]he reclaiming of sites might be measured in three ways: first, in terms of the retrieval of memory and the cultural enrichment of place and time; second, in terms of social program and utility, as new uses and activities are developed; and third, in terms of ecological diversification and succession." [Corner 1999, 13]

In following the design proposal for approaching of the post-industrial void in Bytom is presented. The overall approach of working with the design was following the words of James Corner, where the main focus has been set on the re-conquering of the site into the city, by means of physical re-connection as well as in the inhabitants perception. Therefore, the site is to be developed in order to gain new links, uses and program, where the cultural and heritage elements are to be the leaders for the functional distribution as well as the design of the natural areas.

DESIGN PARAMETERS

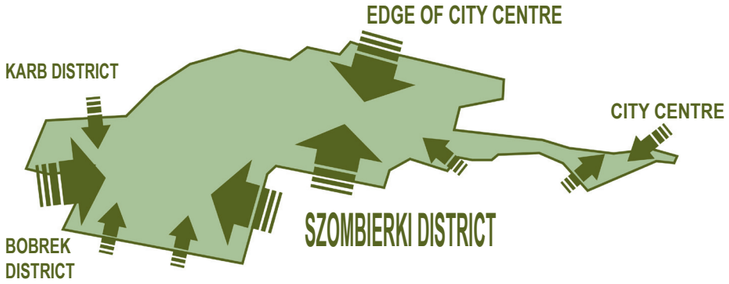
The approach towards the design of the re-development of the site in Bytom is multilayered application of design parameters, which have been proposed after getting close insight into the site parameters and with inspiring features of the studied cases. The different layers of the design parameters are describing different solutions towards variety of problems and qualities of the space. Therefore, the specific layers not only solve the problematic elements in the space, but also they build on its qualities, creating the special character and the identity of the place.

DESIGN PARAMETERS



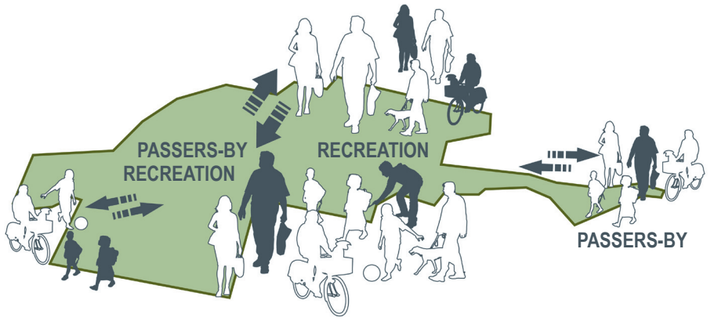
INDUSTRIAL LANDSCAPE

EXISTING:
The area is strongly influenced by the industrial arrangements, such as the power plant and railway tracks. The built structures are located in the undefined and unplanned green spaces, which represent very specific wilderness in the urban space.
ADDED:
The landscape of the area is thus seen as the background and the frame for the overall design. The industrial and the wild character of the space are to be preserved and are to be used as the theme for creation of the identity of the space.



REVERSE THE CITY

EXISTING:
The city structure in the area is very closed in, the spaces are fragmented.
ADDED:
The approach towards a design is to change existing cul-de-sac character of the place, by opening of the infrastructural corridors towards the disused green area, which has a potential of becoming a new, more interesting transit and recreation hybrid space. The reverse of the city's districts towards the middle derelict part has the meaning of 'joining' the areas, which once have not been designed and planned to consist of one urban structure. The physical 'joining' area is therefore the visible step towards integration of the city and its citizens.

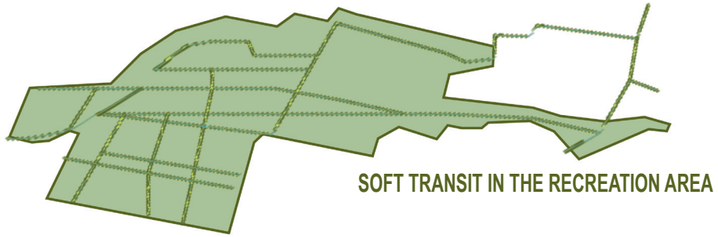


U S E R S

EXISTING:
The area is surrounded by the several districts. The inhabitants of such districts have different needs connected to the intervention area. The people living in the Szombierki and partly in Bobrek districts are using and have an urge of using of the space, both for transit and recreation. The people are crossing through the space already in order to reach the city centre. The other inhabitants are mostly using the space as the wild open space for walks and play, as well as for the transit when directing towards south, where the transit connections and many allotments are located.
ADDED:
The area is thus going to serve different users and different functions in order to provide the spaces for everybody, being open for changeable needs of the different users described previously.

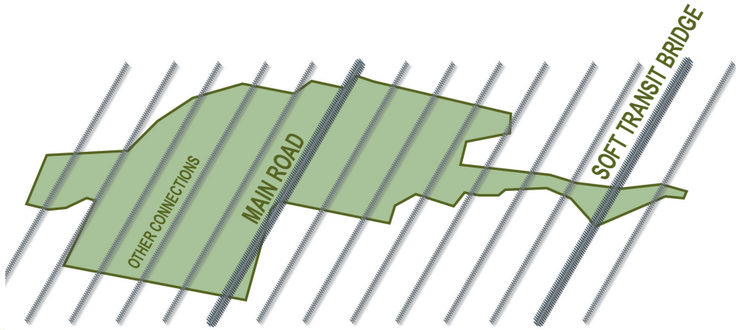
SOFT INFRASTRUCTURE

EXISTING:
The area already has some paths defined by the users, stating upon the usage and need of better quality infrastructure.
ADDED:
The soft network of the pedestrian and biking paths is the first and the simplest infrastructure to be implemented in the intervention area The paths, as well as the lines of the old industrial infrastructure are to define the new network of the soft transit and recreation spaces.. The network is to be combined with the hard infrastructure arrangement in order to gain well functioning and self-supporting space, with east access for all and form all directions.



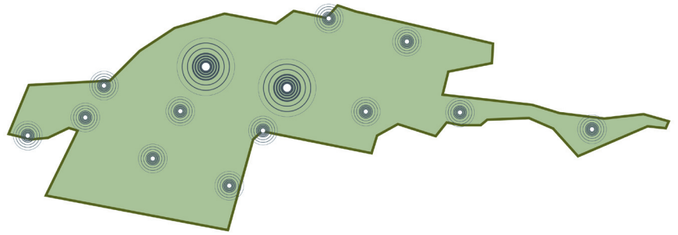
HARD INFRASTRUCTURE

EXISTING:
The areas surrounding the intervention site are characterised by network of dead-end hard infrastructure links and main roads.
ADDED:
The infrastructure is the essential design parameter. The network of the physical links is seen as very first linking element. The main hard infrastructural elements are organized according to the orientation of the main city's street, Dworcowa. The network is to be connected to the soft infrastructure related to the natural and green spaces. The main element is the main street set thought the middle of the intervention site and the main pedestrian and biking bridge from the city centre towards western Szombierki district. The other lines define the other connections to the existing transit structure. The location of the main links approximately every 150 meters provides good coverage and linkage to all of the spaces.



HOTSPOTS NODES

HOTSPOTS NODES
The area's hotspots are the places of interest, stay and change the transit modes. The nodes are combining the hybrid structure into the functioning and interesting place. The nodes intensity is growing toward the core of the intervention area, where most of the new functions are to be located. The nodes location relates to the main corridors location as well as to the interesting landscape elements, already existing functions and places visited already be the inhabitants of the city. The character of the hotspots is defined thus by combination of the former industrial image of the space and the new implementations.



DESIGN PARAMETERS

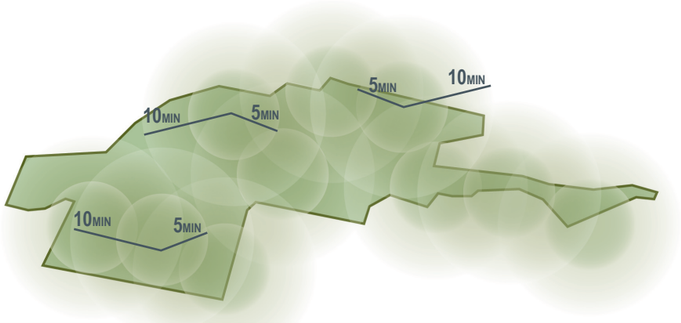
S T A G I N G

The project area requires many interventions, which are not possible to happen in a very short time. The project is thus very much focused on the development over the time, where staging of different interventions is very important, in order to gain the optimal solutions. The staging is to be fitted to the overall economic and spatial situation in the city, enabling the stages to happen in long time intervals and being still complete, even the next stage is not going to be completed for longer time.

D E N S I F I C A T I O N

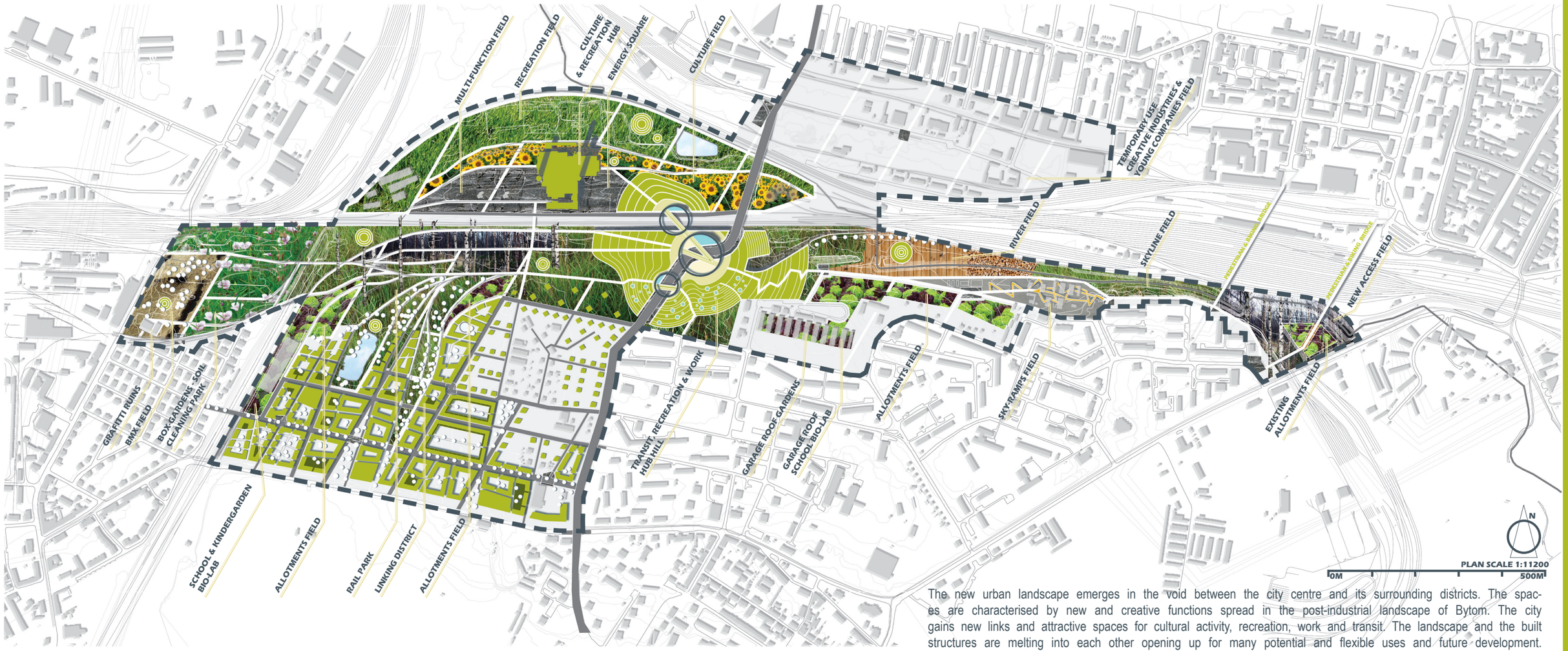
EXISTING:
The divided city structure as well as the overall need for housing in the Upper Silesia is framing the design parameter of densification.
ADDED:
The area needs new definition and more users in order to build up a coherent district in the close proximity to the city centre. It is also an element of the overall policy of building new and more affordable housing in the area. The approach is to provide the dense new district, which specific settings are presented in following chapter.

WAKABLE DISTANCES



The walkable distances is the strategy of providing nodes of transit mode change, access, stop for relax or interning spot in the distance of 5 to 10 minutes walk, so that the 'tour' though the area is going to be pleasant and interesting. It is also a way of combining of the already existing districts with the new structure where the main feature is the accessibility over short and wakable time.

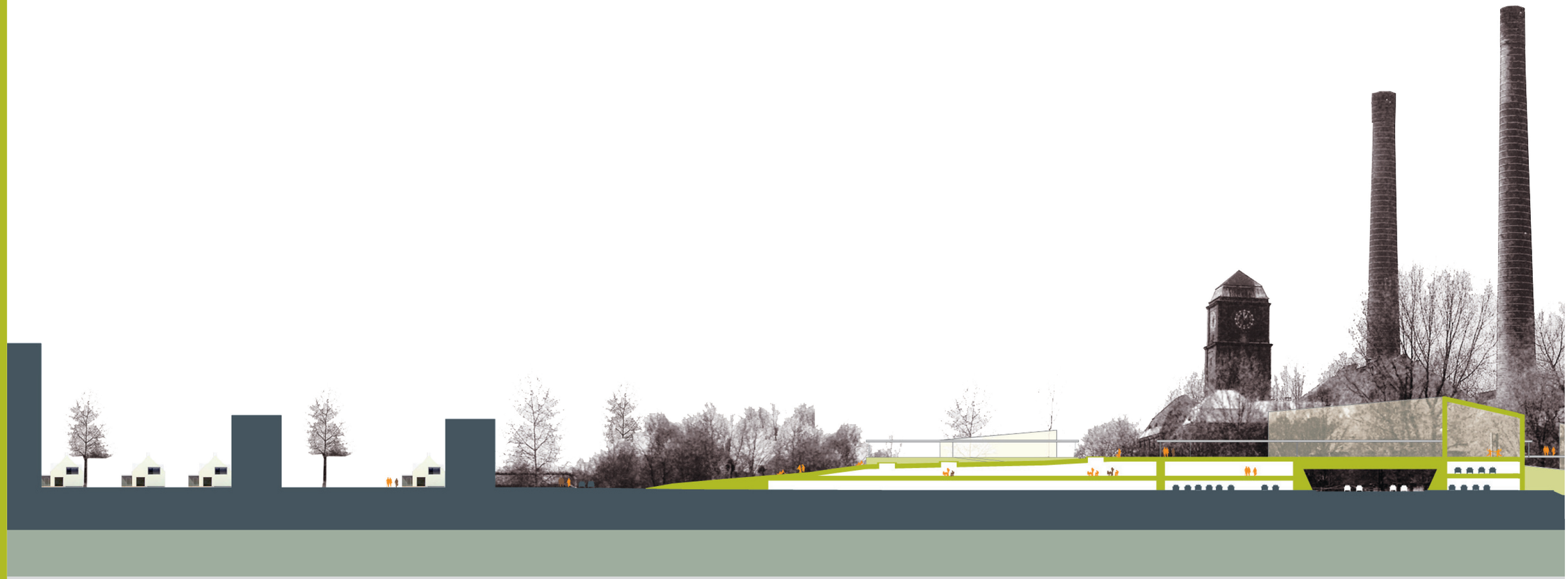
VISION PLAN FOR THE POST-INDUSTRIAL VOID IN BYTOM



The new urban landscape emerges in the void between the city centre and its surrounding districts. The spaces are characterised by new and creative functions spread in the post-industrial landscape of Bytom. The city gains new links and attractive spaces for cultural activity, recreation, work and transit. The landscape and the built structures are melting into each other opening up for many potential and flexible uses and future development.

DESIGN PARAMETERS

The main built structure of the area is the Transit Recreation & Work Hub Hill where the Green Belt functions are intersecting with the hard transit corridor serving the city of Bytom. The hybrid structure is proposed, where the landscape and the transit function are not disturbing each other, but they are building up the new public space. The structure consists of two main layers; the road and the building and the covering up landscape. The built structure hosts the function of transit, work, retail and parking. The landscape layer hosts the soft transit and recreation functions, as well as opens up the access to the Power Plant Szombierki, where the Culture and Recreation Hub is located.



HUB SECTION SCALA 1:1000

0M 200M

STRATEGY: DEVELOPMENT OVER TIME

The transformation of the site into new quality place in Bytom is proposed to happen in four main stages. The stages are chosen in order to support holistic approach for redevelopment of the site, when different parts of intervention are contributing to themselves as well as they bring quality and complete solutions in specific cases. Such approach is essential to provide the long-term development, which would be flexible over time and from economic point of view, as well as will create new qualities and coherence at every stage of the development. The stages are organised as follows:

STAGE '00' – PREPARING
STAGE '01' – GREEN BELT
STAGE '02' - HYBRID
STAGE '03' – COMPLETING

The specific stages are presented in the report with description of the specific interventions in the urban landscape.

06_01_strategy diagram

STAGE '00' – PREPARING

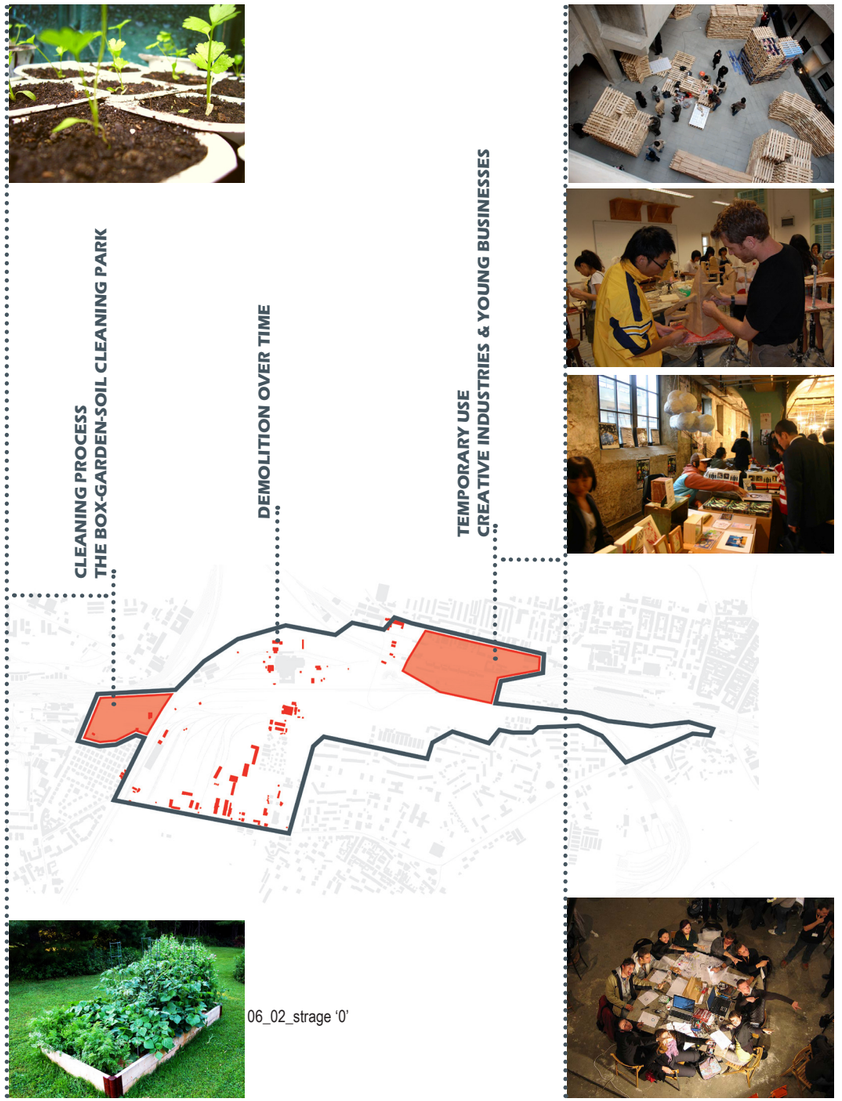
The preparing is the set of the initial interventions into the space as well as in the creation of the common perception of the space. Therefore, the stage '00' is focusing on two main issues:

CLEANING UP

The cleaning up of the site and preparing it for the following interventions is thus the focus. The intervention has very specific time boundaries, since the cleaning up is be happen successively according of the process of redevelopment progresses.
The green, open, and disused area is going to be cleaned and analysed.
The area of the post-industrial pollution (see the map) is going to undergo a special bio-cleaning treatment. The process thus is also starting the procedure of the design of such a space, since the bio-cleaning is predicted to be a long process, of more or less 10 -15 years. The area thus is to host new functions, while being cleaned. The Box-Gardens-Soil Cleaning Park is established, which structure is reflecting the heritage mining settlement arrangement. The area close to the heritage buildings in Bobrek district is thus going to gain a new open space, which is to serve new playgrounds, gardening and recreation spaces for very undefined as well as degraded district.
The built structures, which are seen as the obstacles in the development, and which do not indicate any heritage quality are going to be pulled down in the course of time. The main demolished buildings are now hosting storage rooms either are empty. Their main typology is the one story semi- or wide-spam structure as well as some degraded city houses (see the map)

RECOGNITION

In order to stat up the successful redevelopment process it is essential to provide the opportunity for the citizens to re-discover the spaces. The special intervention enabling social meetings and site visits are to be established. The meetings and discussions can be supported by small events at the sites and by extensive usage of the Power Plan Szombierki rooms and surroundings in order to continue and extend already started process of temporary use of the building. The users should be involved into the process of the redevelopment, both being able expressing their wishes and ideas as well as, if possible, contributing to the physical development. The other help in enabling of the recognition of the area, also in the more vide perspective of the Urban Silesia Conurbation is to try to attract the creative and young companies to the area, especially in the close proximity location to the city centre. The area contemporary defined by small industries could gain new image and users through out promotion of the temporary use of some of its buildings by such businesses and other temporary interventions.



06_02_strage '0'

STAGE '01' – GREEN BELT

The main objective of the creation of the Green Belt is the linkage at that stage of the project, therefore the interventions providing the accessibility as seen as the most urgent and essential. The biking and walking paths over the area are to be established. The two new light-construction bridges for pedestrians and bikers are to be established in close relation to the bus and train stations as well at the access point to one of the 'dead-end' streets in the city centre. The bridges are to provide the access and enable the circulation between the city centre and the other districts. The existing bridge of the narrow gauge railway is to be upgraded so that it will provide temporary safe access for bikers and pedestrians. The biking and walking paths are to be connected to the 'cul-de-sac' arrangements, and therefore opening them up towards the green belt and main soft circulation in between districts. The main soft transit intersections, located in the distance of 5-10 minutes walk are to be underlined and programmed by small squares. The area is to gain special lighting strategy in order to provide public safety and possibility of usage of the corridor also in the evenings.
The spaces functional division is to be organised according to the smaller and bigger acupuncture interventions, spread out in the space, in order to gain interesting places and attract the users to stay in the space. In following the catalogue of interventions possible for implementing in the space is presented. The other function generator is I mentioned in the Stage '00', Power Plant where variety of cultural and recreational events is to happen. The temporary use approach in relation to the Power Plant and towards the north part of the intervention site is going to be continued.

06_03_strage '1'

GARAGE PLAYGROUND

IDEA: ELEVATED PATHS FOR BIKING, SKATING AND WALKING, REUSE OF THE ROOFS

TARGET GROUP: YOUNGSTERS WHO WANT TO 'GO CRAZY' ON THEIR BIKES, ROLLER BLADES AND SKATES

The spaces around the garages can be used more effectively and attract more people than just the car owners. The main idea is to use the roofs of the garages for the new functions, which can provide new interaction and recreation facilities. The first idea is addressed to the young people who want to play and recreate them self in the open air in the middle of the city. The spatial combination of the ramps and the garages is going to provide new structure in the area.

GARAGE ALLOTMENT / TERRACE

IDEA: ELEVATED GARDENING, MEETING POINT OR A TERRACE, REUSE OF THE ROOFS

TARGET GROUP: ALLOTMENTS OWNERS, GARAGE OWNERS

The spaces around the garages and storage rooms can be used more effectively. The main idea is to use the roofs of the garages for the new functions, which can provide new interaction and recreation facilities. The idea is to transform the roofs into the green structure, which could serve the functions of small a scale gardening, a meeting spot or a terrace. The new green roof gardens or terraces can also serve good observation points of the city skyline and provide more pleasant spaces in the area as well as will arrange the transition zone between the wild green and urban 'grey' spaces in the district.

WATER PLAYGROUND

IDEA: WATER ACCESS IN THE 'INDUSTRIAL WILDERNESS'

TARGET GROUP: ALL USERS, PASSERS-BY

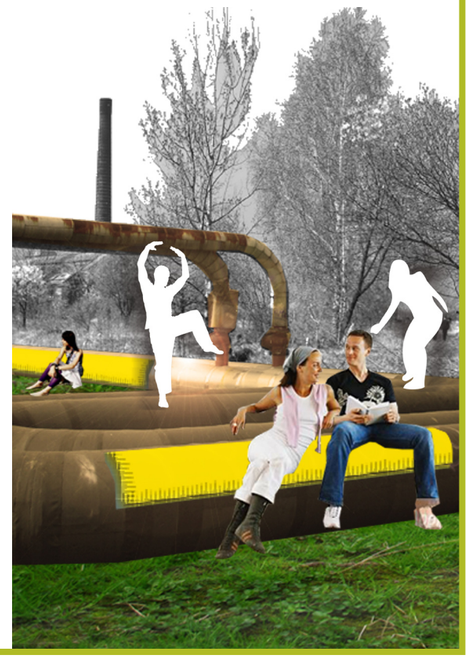
The area consist of many different kinds of water arrangements, the natural Bytomka River beginning stream, as well as post-industrial deepen areas, which in the course of time have gained the quality of pond. The industrial ponds are relatively old, and by now, they create an impression of very wild and almost natural ones. The water is seen as the quality in the space, therefore different accesses and functions by to the water are to be established. The simple solutions are to provide some light-construction bridges and platforms to enhance the water quality and to invite people to use then as recreation areas.

HEATED PIPE BENCHES

IDEA: PIPE BENCHES ALONG THE PATHS IN THE 'INDUSTRIAL WILDERNESS'

TARGET GROUP: ALL USERS, PASSERS-BY

The whole area and especially in the closest proximity to the power plant the heat transit pipes are located and therefore they are dividing and defining the space of the intervention site. The simple idea is to provide the sitting and crossing over facilities in the relation to the pipes. The pipes are insulated, but still they are emitting some heat, what can also be seen as the quality, since the area close to the 'pipe benches' is warmer and more pleasant to stay longer. The pipes could gain new expression and function in the area, as the sitting and framing the site tour facility.



VERTICAL PLAYGROUNDS

IDEA: CLIMBING AND VERTICAL PLAY WITH THE INDUSTRY

TARGET GROUP: KIDS, YOUNGSTERS

The concrete and steel elements supporting the heat pipes network are strong identity elements of the space. They can gain also new function and look. The idea is to provide the structures with the possibility of climbing on it, as well is some places to prepare swings for kids. The most typical playground elements, as swing and climbing walls, gain new quality and image in the untypical setting. The surprising and extraordinary solutions will state upon the special character of such a playground.

RAILWAY TRACKS PATH

IDEA: RAILWAY TRACKS AS PATH

TARGET GROUP: ALL USERS, PASSERS-BY

The railway tracks are the visible industrial heritage sign. The unused railway tracks are to be transformed into the element of the transit path through the intervention area. The rails are to define the directions and the grid of the paths due to their old setting, moreover they are going be built into the pavement of the space and therefore will define even stronger the image of the post-industrial area.

RAILWAY TRACKS GREENERY

IDEA: GREENING OF RAILWAY TRACKS

TARGET GROUP: ALL USERS, PASSERS-BY

The railway tracks are the visible industrial heritage sign. The unused railway tracks are to be transformed into the forms for the greenery cultivation along the circulation path. The direction of the formerly used tracks is framing thus the new paths for recreation and soft transit. The edge of the path with new planting setting will present the combination of the industry and natural environment.

ALLOTMENTS & BIO - SCHOOL 'ROOMS'

IDEA: ALLOTMENTS AND BIO -CLASSROOMS

TARGET GROUP: ALLOTMENTS USERS, STUDENTS, KIDS

The allotment ownership is very typical for the area; therefore, the idea of providing new spaces for new allotments is stated. The allotments are creating special culture of use of the space, where many users are meeting during the day and over the year. The existence of allotments also created special flow, which is also providing life in the spaces. The creation of allotments is rather inexpensive intervention, which provides new users of the space and starts up new possible for social interaction.
The specific kind of a garden is to be established beside the new allotments. The idea is to provide schools with the outdoor bio-classrooms, where children and youngsters could learn more 'hands-on' about the biology, chemistry and physics. The school gardens are seen as form of education, which will also provide more users for the space.

VIEWING THE SKYLINE - 'B-BENCH'

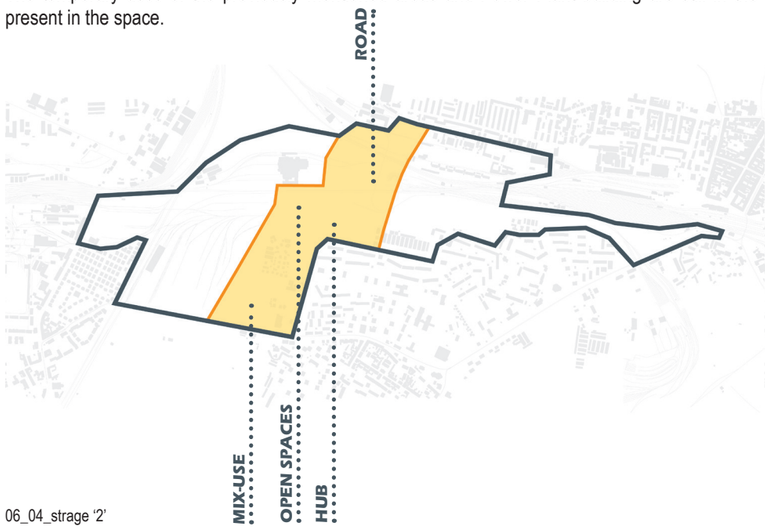
IDEA: B-BENCH VIEWING AREAS

TARGET GROUP: ALL USERS, PASSERS-BY

The openness of the area towards north due to the presence of the main railway tracks creates good view towards the old city skyline.. Therefore, the idea of organising sitting and viewing facilities in the best visibility locations on the main path is proposed. The viewing spots are to be Bytom's 'Gaudi Benches', with the industrial expression so typical for the area.

STAGE '02' - HYBRID

The next stage of the development of the void is inevitably connected to the establishment of the bypass street serving the whole city. The street in the direction north-south is going to be located in the middle of the site. The location of the main street is seen as a quality, where the new users and development possibilities could arise. Therefore, the second stage of intervention is focused on the built structures that could serve the site in order to provide growth possibilities as well as protect the green corridor of the city.
The main element of the intervention is thus the hub structure, where in the form of the artificial hill the green corridor is set as the top layer of the hybrid structure. In the same time the extension of the green corridor towards the Power Plant is provided. The new paths, cultural and recreation spaces in relation to the Power Plant are then available for use. The other layers of the hub, being located in the building of the artificial hill are office spaces, parking, retail, and narrow gauge train stop. The mix of different functions in the building and the public space on its roof-elevation will provide the area with use trough out whole day.
The other intervention is to provide hosing development south east form the main street, and in that way to start the process of combining of the city by the built structures. The new district is to have quality of the mix use space after completion of the development in the area. In that stage housing and extension of the already existing convenience centre are the priorities.
The temporary uses of the previously mentioned areas and Power Plant building are still in the present in the space.



06_04_strage '2'

STAGE '03' – COMPLETING

The last stage of the development, called completing, is to fill and close all the stared up intervention and in the same time to provide the final coherent image of the new space.
The Power Plant and its undefined space are to be renovated and new functions are to find location in the building of the city landmark. The idea for the Power Plant is to create the hub of culture and recreation in the building and in its surroundings, where the alternative culture and the other activates is to fill the context of the industrial space. In the same time the area will gain, two attractors combined by the main square, which will distribute the users and functions.
Parallel, the further development of the mix-use district is to happen .The structure is to be completed so that the city centre's structures will be extend up till Bobrek district. The last intervention is the final development of the Rail Park north for the new district, where the built structures and industrial-wilderness intermingle and create the green space, which grows into the Green Belt arrangement and become the Railway Park.

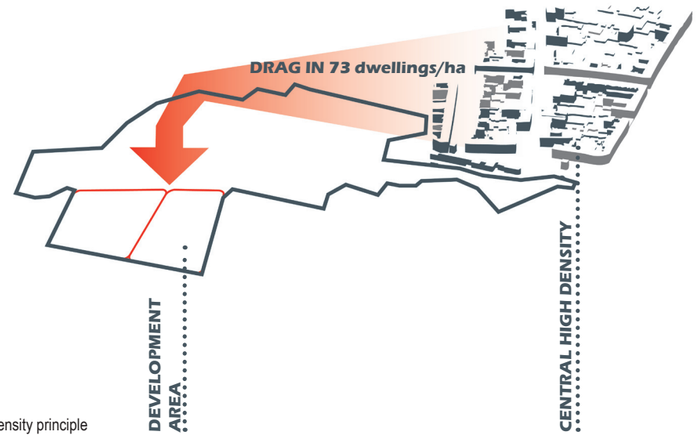
06_05_strage '3'

PRINCIPLES FOR THE BUILT STRUCTURES IN THE STAGE '02' & STAGE '03'

The new linking district located in between Szombierki and Bobrek areas is the element of the structural linkage of the city into coherent form. There could be manly approached of how to establish the structures, for example extension of the existing blocks of flats, point buildings and dispersed single-family. However, as the example the case of the mix-use, relatively dense development is proposed. The choice is made upon the analysis of the context and in relation to presented already design guidelines. The guide lines for the site in general have been worked further on and some new principles concerning of the built structures have been produced.

DENSITY

As the area is the extension of the city centre, it is set as an objective to experiment with densities characteristic for centre of Bytom. The density of the city centre is 73 dwellings/ha and the same approach is set towards working with the area of intervention.



06_06_density principle

TYPOLOGIES

The typologies are decided upon the study of the context of built structures as well as the landscape. Therefore, the strategy of building more dense has been decided for the middle south part of the new establishment, where the city structures of Care are the main typology. Gradually, towards the north where the park starts, the typology is becoming city villas and single-family houses, which are relating to the existing structure of the site. The single-family houses are growing towards the new centre of the district in the form of row houses mimicking the shape of the Care. The typology of the centre is also gradually becoming city villas in the direction towards the heritage mining settlement of Bobrek district.

APARTMENTS' SIZES DIFFERENTIATION

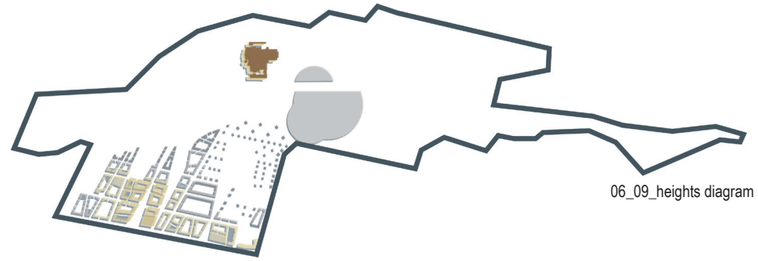
The other parameter of differentiation of inhabitants of the area has been settled. The objective is then to provide different apartments for different households. Thus, the scenario has been established, where the same amount of small, middle and big apartments is provided.
The apartment sizes:
Gross area 60 m2
Gross area 80 m2
Gross area of 110 m2 or more.
Such a division has lead into 2955 apartments, which contribute into the demanded density and typological distribution.

06_07_typology principle

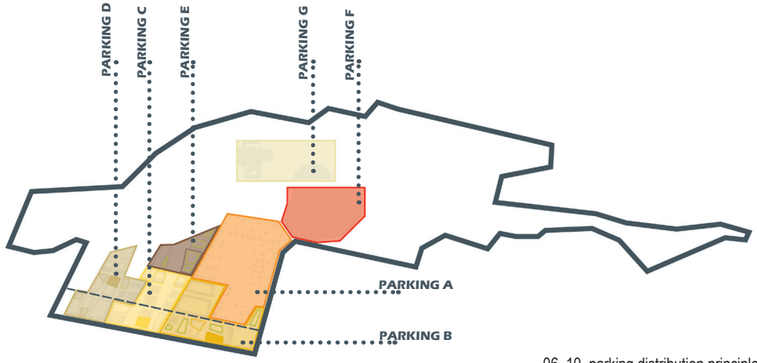
06_08_typology inspiration

PARKING

In order to provide well functioning district part the parking facilities have to be distributed in the area. Having in mind good public transport coverage as well as the close relation of the area to the Green Belt some assumptions towards lowering the parking spaces have been made (see the appendix). The area thus has the 3 parking houses, some basement garages and parking in the courtyards which coverage does not extend till more then ¼ of the single courtyard area. In case of single-family houses the parking is dedicated in the frames of the plots. The distribution of the main parking concentration is in relation to the convenience and work centres where the principle of space sharing by different functions is applied. The separate parking facility is provided in the hill structure for the workers and guests of the hill multi-use building, Power Plant and the green spaces.



06_09_heights diagram



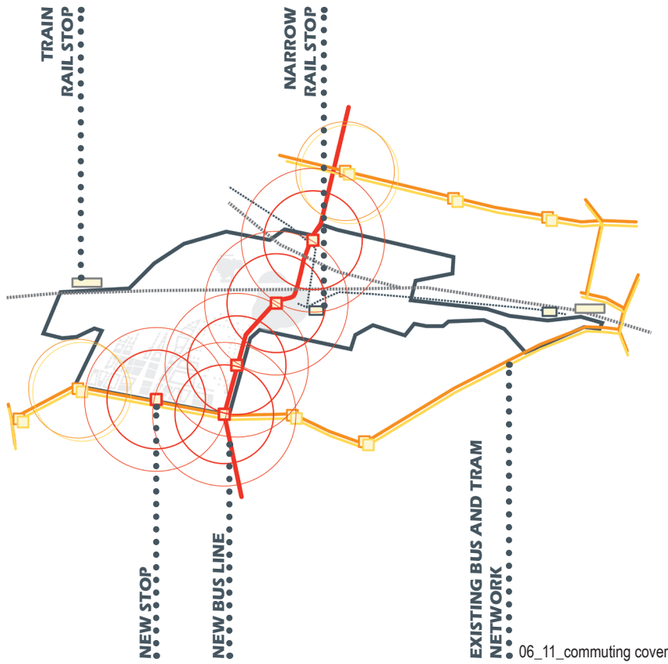
06_10_parking distribution principle

PRINCIPLES FOR BUILT STRUCTURES

TRANSIT

The circulation in the new district is provided by set of streets defined by mentioned design parameters, where the grid structure meets the organic lines of the streets defined by the heritage railway tracks. The area is thus served by the main by-pass street, two boulevards, and mixed traffic streets; which in the direction towards the Railway Park are becoming the elements of the Green Belt structure, focused on biking and walking.

The district has good location towards the public transport nodes. Firs, towards existing services of the Zabrzańska Street, which is to be upgraded by means of applying new bus and tram stops. Second, a new bus line is to be established along the by-pass street in the area. The strategy of 5 to 10 minutes walk is deciding on the location of bus stops on both of the streets in order to provide the access to the public transport for all of the new inhabitants.



06_11_commuting coverage

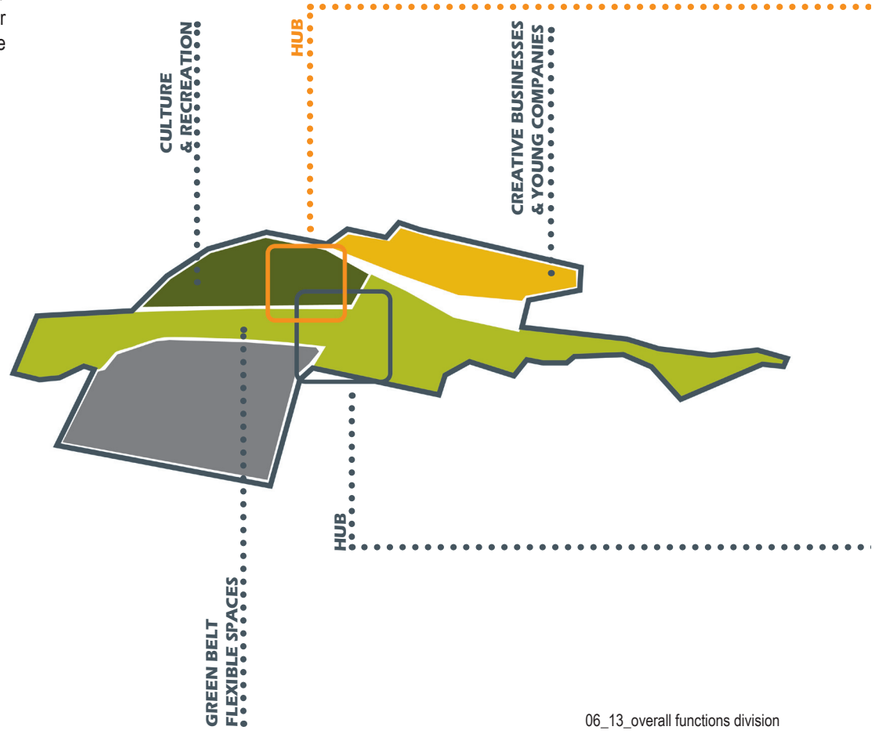
ALL YEAR ACCESSIBILITY

The one issue has to be mentioned in relation to the weather conditions and the climate in Poland, which are frame of the intensiveness of the experiences in the Green Belt as well in the surrounding areas. In the time of spring, summer and early autumn, the green areas are going to attract people to pass-by and stay in the space, due to their functions and due to the good weather and long days. In the evening and during the late autumn and winter the area will need a special strategy of lighting and the focus points of attraction are to be stated, in order to attract people to the space during less favourable, darker, and colder periods. The Green Belt as the transit corridor, important link between city's structures has to serve safe and pleasant flow spaces as well rest space. The strategy is thus outlined as following. The main attractors of the are as seen as the Culture and Recreation hub in the Power Plant of Szombierki and the Transit, Recreation and Work Hub, in the form of the multilayered 'hill. ' The areas are supporting the functions both indoor and outdoor therefore they are capable to attract people during different seasons and in different weather conditions. The main transit corridor following the hard and the soft infrastructure is the other essential element, which is to provide use through all year, therefore the special lighting and maintenance strategy is to be preformed.

06_12_wakable and biking distances

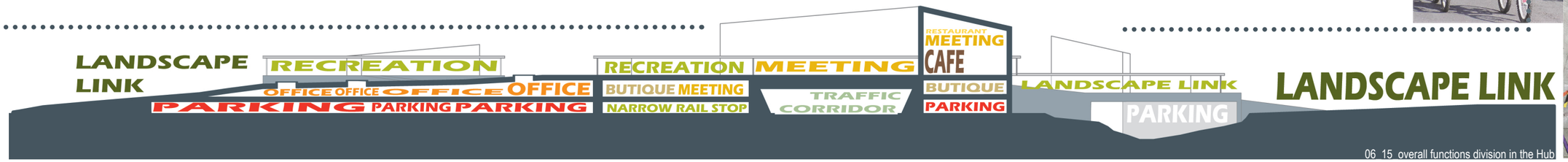
PROGRAMMING AND RELATION TO THE HERITAGE AND NATURE

The programming of the mix use district is focused on providing of the convenience centres, office, and recreation indoor spaces, as well as in relation of the district to the Green Belt and the city in general. The functions are not to compete with the city centre but complement them, for example like setting focus on development of the alternative culture hub in the Power Plant. The main functions are to be located in the central area of the new district, in the hill structure and in the Power Plant. The recreation and culture is to be present also in the outdoors relating to the Green Belt: areas close to the cultural and recreational hubs, as well in the parks reflecting the heritage.



06_13_overall functions division

06_14_overall functions division in Power Plant



06_15_overall functions division in the Hub

IMAGINING ‘01’

The access to Szombierki area gains more active image. The new pedestrian and biking path and bridges provide circulation in the area, of passers-by and the allotments users. The small intervention of opening up of the existing allotments and providing of the path brings new qualities to the space at the very entrance to Szombierki district. The area is thus more open for different users and for extension of the path towards south where other post-industrial void is located.

The bridge and path are then also place where many different people can meet and enjoy the outdoor spaces, but for most they users gain very needed safe and easy access to and from the city.

IMAGINING ‘02’

The area on the edge of the mix-use district and the Railway Park, in close relation to both hubs is the place serving all the users with different possibilities of spending time. The people using the paths and the park for transit or just wandering are served with quality and interesting outdoor space, which can be used in all different ways. The people living in the area are provided with extensive outdoor area, the public and the private one.
The space has character of the clash of the ‘new’ and ‘old’ meaning the contemporary architectural solutions for the district and the historic heritage expression of the railway tracks framing the paths and green spaces.

IMAGINING '03'

The new urban landscape is open for use for everybody and throughout whole year. The functions proposed in the area as well the uses, which are to happen due to the creativity of the users, are stating upon the flexibility of the spaces. The Transit, Recreation and Work Hub Hill servers different users with different possibilities and functions. The area thus gains very mixed and interesting group of users and passers-by, form kids and students to elderly and business people, as well as tourists.

CONCLUSION

STRATEGY FOR A POST-INDUSTRIAL SITE

CONCLUSION – STRATEGY FOR A POST-INDUSTRIAL SITE

The redefinition of post-industrial voids is a complex assignment. Having presented the project focus, I have outlined my interest in the work with the principal design strategy for such sites, in frames of the landscape method. In order to come up with quality ideas following the chosen method, I have undertaken a three-angle inputs strategy in the project: the site-specific case, the reference cases, and the theory upon the topic of landscape urbanism and transformation. The work with the design of the site-specific interventions has brought up many ideas for possible specific scenarios and solutions. When reflecting the project on the studied cases and the theories related to the topic, I have outlined five main strategic elements for approaching of the post-industrial site in the declining territory, which are going to be presented in the following chapter. As follows the design outcome summary, reflection on the cases and the theory are presented in order to sum up and set the framework for the principal strategy towards the development of the post-industrial site using the method of landscape.

THE PROJECT CONTRIBUTIONS TO THE SITE

The project of "Transforming Bytom" outlines two main contributions to the city development. First, it gives the possibility of re-conquering of the post-industrial void into the city structure as the attractive and active space for everybody. Thus, the re-concurring of the site happens, the new development trajectory emerges in the city structure. The most evident advantages are the opening up and connection of the city main districts and giving to the city new circulation structure. The different transit modes and new functions are interrelating in the central sphere of the arrangement, what enables mentioned new flow directions and interchange, as well as gives easy access for users to the redefined superfluous land. The land, which formed the strong edge, becomes a green, active, flexible cultural landscape linking the surrounding districts. The location of the Green Belt and the main development in the city southeast area is also not without a meaning, the location is underling the strong connection of the city to the Upper Silesia Conurbation. The area thus is very well located in the close relation to the main transit corridors leading the users to the core of the development and job market, making the area a good location for settlement, and thus improving city's image.

Second, the contribution is introduction of the landscape process in the city disused spaces, as the experiment and kick-start for the discussion upon the future of the other voids in the city. The process is seen as the most effective and flexible way of approaching the site, when the development is staged and the urban landscape is gradually emerging physically and in the common perception through different acupuncture applications. The means of process described thoroughly in the design chapter are focused on the work with the present qualities of the area, the temporary use, and the old and new infrastructure as frame for the design. The spaces of the Green Belt and the infill mixed-use development area are gaining the overall functional pre-definition. Such a choice is suggested upon the understating of the long-term development process, where the specific functions might become devaluated in the course of time and therefore the approach of only overall designation of the spaces is argued as the solution.

THE CONTRIBUTIONS OF PREFERENCE CASES

As follows, the main inspiration contributions of the reference cases are presented. Both, winning and second prize proposals for Parc la de Villette in Paris have been looked into. The main inspiring elements for the project in Bytom have been found in both entries; therefore, the presentation is going to cover the idea of Tschumi and Koolhaas in the same discussion. The main inspiring element has been the layered landscape in the urban context. The solutions both are strongly arranged upon the infrastructural layer, providing connections though out the park filled with the fields of flexible spaces, which in course of time are able to contain many different functions. The other layer is the relation to the post-industrial context, where the park gains the combining narrative of technology set in the urban landscape.

The other project, also prepared by Rem Koolhaas is the conceptual vision for the rural area Melun Senar in close proximity to Paris, popularly called the Surrender. The strategic approach of working with the layered intervention over the rural area defined for the development is very inspiring. The project approach of reading the natural and infrastructural context present at the spot and applying its features into the core concept of the design gave to the area new definition. The strip areas, where the infrastructural and built development are to happen are framing the rural and open spaces, which are to be preserved as the expressions of the former qualities in the area. The natural appearance of the area is thus preserved since now only the defied growth strips are the 'surrendered' elements for development. Such an approach not only preserves the existing natural environment, but also creates the patchwork of fields, which are possibly available for the development over the time, what creates very flexible area.

The project of the Emscher Landscape Park is a typical example of the intervention in the old declining post-industrial area, with using a creative, layered, and long term planning method. The main features framing the design are the work with the industrial heritage and the recreational landscape as the combining elements for the creation of the coherent park on such a wast area. The next level of the development planning is the promotion of different infrastructural and industrial areas as nodes of light transit and recreation. The third approach learned form the project is the work in the close cooperation with the different agents and future users, as well as promotion of the temporary use approach in different areas of the park. Incorporation in the project of the users and different investors and municipalities has given form the start a close relation and recognition of the intervention.

Following the places of decline, the project of shrinking cites is emerging. Even though the 'Transforming Bytom' project is not focusing of shrinkage, imputes form analysis of some of the shrinking cites in Germany have been inspiring. From the project IBA 2010, three cities have been presented in the cases part of the report. They have been chosen according to the city situation and the character of the interventions in the urban structure. The main topic of the most projects is the work with understanding of the city and its shrinking. The next steps are related to finding the strongest elements of the urban context and trying to work from them in order to find a solution for the shrinking place; in case of the described cities, they are temporary use, working with the emptiness and the post-industrial identity. All of the interventions are strongly related to creation of green areas, letting the landscape to 'take over' the disused spaces in the city creating in the same time quality spaces for common use.

The last project located in the setting on growing metropolis, Copenhagen, is showing some of the principles of linking and re-conquering of the post-industrial site into the urban fabric, which are seen even more significant in the case of stagnating or declining area, where the urgent need of economic and spatial changes and investment emerges. The project Carlsberg Our City is strongly focusing on the relation of the new structures and the heritage of the space in order to create the space of specific identity related to the history of the area. The linkage throughout the area of intervention, in order to gain the most optimal infrastructural connection providing the most users of the city passing by the new area, which up to now was sealed off void in the metropolis, is the next strong design parameter. Functional definition of the space is very much oriented towards providing usage all over the day, what is very much relating to the character of the location of the space in the city as well as the creation of safety.

07_01_morning light in the void

THEORETICAL REFLECTION

The approaches of the project and the cases recall many theories, where the problem of reclaiming of sites is discussed. The main theorist of landscape urbanism are discussing approaches towards the transformation and sites reclamation in general, where most of the focus is put into the leftover voids, especially the post-industrial cases. Charles Waldheim argues that the "[*l*]*andscape is a medium /…/ uniquely capable of responding to temporal change, transformation, adaptation and succession"* [Wladheim, 2006; 390] and therefore the approach of landscape method is seen as the convenient approach towards areas in transformation. The areas understood as potential for landscape re-design are more likely to sustain the process of transformation, especially when the transformation is to happen over a long time, what is usually a case in the post-industrial context. Moreover, in cases when the integration of the urban elements as the built, infrastructure and open spaces is the focus, the landscape is very operative as the integrator and creator of the hybrid structures. The possibility of a "*fluid exchange between (natural) environment and (engineered)*

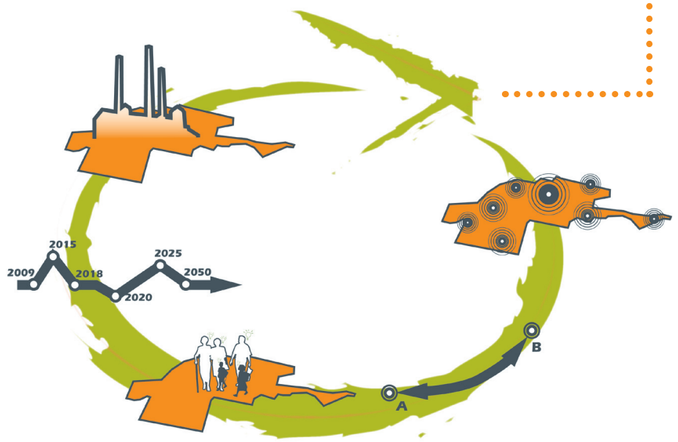
infrastructural systems" [Waldheim, p.043] is a quality which stands out especially in comparison with the past periods approaches, ecpacially in modernistic planning time, when those elements have been set in the opposition towards each other. Alongside to the hybrid approach of nature and infrastructure, the understanding of the landscape as the creator and location of the new cultural setting is risen by James Corner [Corner 1999;01]. The statement is set upon the possibility of creative reuse and re-imagination of the spaces and structures, which are to be built in the new setting, and even strongly if the case follows the structures already existing in the landscape, in form of old industrial arrangements or landscape features. As follows other landscape designer, the Danish professor Steen Høyer stated upon richens of the places, when saying *"…every site is already unique"* [Høyer in Corner 1999;73] and advises more thorough mapping and finding of the inspiration for the new design in existing landscape. It is to lead into the design truly related to the area and framing the new functions in the character and/or history of the space.
In the work of scholar not connected to the landscape movement the similar reflections come up, when discussing the design and the common perception of the place. Professor at Columbia University Robert Beaugard's states: "*[p]laces are newer empty*" [Beauregard in Kahn and Burns 2005;39], what means that the areas always exist in the common understanding of people using or just living beside the intervention sites and it is very important to relate to such associations in between the people and the places. The understating of the place changes over the time, however the perception of the space is very important in the overall success of the re-development. The statement can be followed the discourse of the German landscape architect Klaus Overmeyer:

"[w]hen intensive participatory procedures accompany planning processes, as is the case on urban redevelopment or construction projects for example; there is always a direct link between the people and the sites involved." [Overmeyer 2007;...]

The dismantling of the old narrative related to the place might bring up new ideas and a solution, as well dismantling of that narrative with users is going to set the frames for the new perceptions of the space already, even before the intervention. Such a process is extremely important in the project of redefinition of the areas in order to convince people on the rightness of the project and to invite them already to use of it. There are many ways of incorporating of the users in the project. One of them is the introduction of the temporary use. It has been learned in course of time, especially on German examples, that the temporary use can be a way of acupuncture interventions in the city spaces in order to improve the livability, quality and recognition of the spaces. The short term interventions, with engagement of the locals and mostly with low budgets are recently in avant-garde of the development projects. The Urban Pioneers are stating that "*temporary use project largely unfold beyond the reaches of planning procedures and models*" [Overmeyer 2007;118]. Such a opinion seems to be very adequate in the case of the redevelopment of the forgotten and leftover spaces when the typical planning methods are actually not produced, since the focus is set on the design methods for the growth not for the declining areas. Therefore, the need of new urban catalysts is urgent and it is evident that space pioneers, meaning all people participating in the temporary use of the voids, leftover buildings, or different forgotten spaces are enhancing the spin-off of the urban development in such areas [Overmeyer 2007] and strongly contributing into creation of the cultural landscape of the place.

THE STRATEGY

In the presented cases, project and theories some issues are overlapping and throughout the discussions emerging to be important in the cases of re-development. In my opinion, after what I have learned form the work on the site and study of the cases and theory I am convinced that there is possible to kick-start the redevelopment of the site using the model of five main strategies. The strategy is thus outlined as overall and flexible in order to be applicable in context of post-industrial transformation.



07_02_Five Elements Strategy

FIVE ELEMENTS STRATEGY

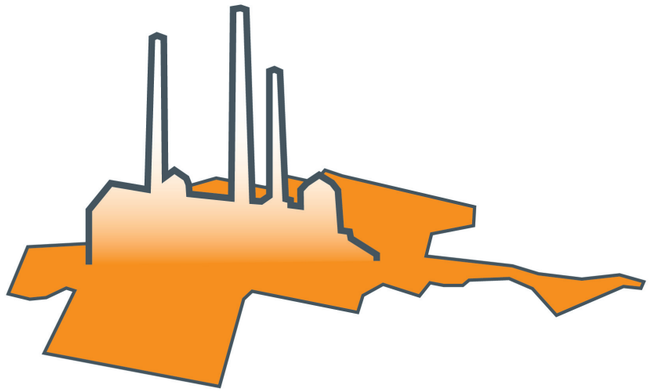
1. RE-CONQUER THE SITE IN THE COMMON PERCEPTION

As it has been argued, the sites consist of narratives and perceptions. Mostly the leftover post-industrial spaces are not percept as the common areas, for use and spending time. The solution is to bring the people to the site and to start the process of the redefinition of the space in the heads of the inhabitants. There are many means of providing such a twist, like:
- Temporary uses
- Events
- Involvement of the citizens into the design and the physical creation of the place

2. PROMOTION OF THE SITE QUALITIES

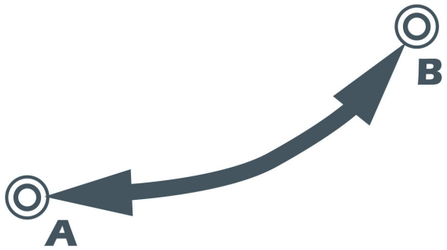
The thorough study of the landscape and the heritage leftovers is the way for finding of the special features, which decide upon the speciality of the site and might help in building up the identity and the narrative of the space.

"… the designer can draw from the specificity of what is given and what has past to project new futures based on requirements of a brief or program." [Høyer in Corner 199974]



3. PHYSICAL RE-LINKAGE

The post-industrial sites are mostly spatially and infrastructure wise disconnected form the city active spaces and therefore are not attractive for use. They are also negatively influencing the areas surrounding them, being the dead ends of the city structure. Therefore, the overall linkage is the key intervention in the case of spatial rehabilitation of the void. The good infrastructure is thus understood as the frame for the physical development of the area. The area is thus to gain new access point and routes, leading the transit into – making the city emerge into the new hybrid landscapes. The infrastrcutre is always located in relation the landscape and therefore the landscape is seen as the main medium of re-linkage.

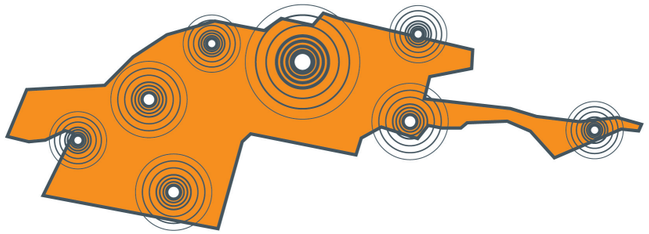


4. STAGING

In the case of working with the declining sites, the long-term strategy is required in order to be able to create the quality solution in the course of time. The staging in the case of landscape method is an essential element since the recognition of the place and the biologic, green structures are built over the time. Moreover, the creative and flexible staging process can possibly be extended in time without any charm to the project, in the same time being organised along the economic condition of the market or investor.

5. ACUPUNCTURE – HOTSPOTS

Interventions focusing on the spots of special quality, or very problematic, where the intervention might bring a great improvement are seen as the immediate and important intervention is the spaces of re-definitions. The small interventions, very often, very low cost ones are stating upon the start-up of the process of rehabilitation of the spaces and therefore are seen as the first creators of the identity of the space, and important creators of "sustainable socio-economic urban development" [Overmeyer ,123].



REFLECTION

UPPER SILESIA DEVELOPMENT DIRECTIONS AND LANDSCAPE STRATEGY

Many scholars discuss the development chances of the Upper Silesia, as some examples of the main views have been presented in the introduction part. The first observations and the understanding of the region development dynamics have been strengthened by the site-specific analysis and project. It is understood that the Silesian post-industrial voids are potential areas. Especially since the location of majority of them is very much related to the cities, where they might become new development catalysts of the growth of cites of the conurbation.

SUMMARY UPON THE POSSIBILITIES AND OBSTACLES IN DEVELOPMENT OF UPPER SILESIA

In the writing concerning the social, economical and cultural aspects of the re-development of the post-industrial regions of the Ruhr District, the Ostrava Region and the Upper Silesia Region, Karl Eckhart outlines the main spheres of intervention, which might be essential for the future trajectories, and dynamics of the development of the stated regions. The main ideas for the Upper Silesia are presented as follows, in order to outline the direction for the region and the conurbation possible development. According to the scholar, the following focus areas are essential when disusing the future chances and obstacles for the growth of the region:

FURTHER RESTRUCTURING OF HARD COAL-MINING, IRON, AND STEEL INDUSTRY

The restructuring of the industry in Upper Silesia is mostly happening form 1990's and now is in the stage of further lowering of the employment and output. The main element is the Regional Contract for the Voivodship of Silesia (former Katowice) which states upon the targets for the region, such as vocational training, the environment, culture and tourism, diversification of businesses. The approach is very wide and covers many issues of the complex recovery process.

SPECIAL ECONOMIC ZONES

The comprehensive approach of attracting investors by creation of special zones for investment has already proven the positive outcomes in the strategy for the region, for example in Katowice and Gliwice, where the re-industrialization of the sites has brought economic surplus effect and stated upon much faster growth indicators in the mentioned cities [Eckhart 2003, Domanski 2003]. The following approach is thus very popular and in the smaller scale, it is expressed by so called technology parks ,for example The Technology Park in Bytom [bytom_01], which is a recent investment at the post-industrial site of Bytom city (see analysis chapter).

COORDINATION, DIVERSIFICATION, ENTREPRENEURIAL DEVELOPMENT, SUPPORT PROGRAMS

The approach of establishing of the platform of regional agencies and technology centres focusing on promotion of the area, finding of the new strategic investors is an essential element of the re-development phase, where the different leading agents are sought in order to provide the coherent process. The agencies also cooperate the building up of the economic zones and promote the establishment of the "incubators" in relation to the technology and science centres, for example in Gliwice at the Silesian University of Technology.
In situation of the new-comers to the European Union many founds and support programmes are available as the help in the process of upgrading and re-developing of the old industrial areas. Therefore the active work of agents specialised in the EU founds are also very essential in the improvement of the region.

MOBILITY

The mobility is an increasingly important issue in the contemporary world. In the Upper Silesia case there have been many improvements in recant years, still a lot need to be done in order to gain well functioning network of car, rail, and plane infrastructure. It is worth to mention that the Upper Silesia is the one of the best-communicated areas in Poland. The description of the infrastructures has been outlined in the introduction and the analysis of the site-specific case chapters, and thus only the final remarks are stated as follows. The focus on motilities is 'be or not to be' sphere in the re-development of the area, since the infrastructure is the element framing the access of all investments.

ENVIRONMENT MANAGEMENT

The issue of the environmental degradation and pollution is very problematic in the area of Upper Silesia and the coherent approach has to be found in order to change the image of the 'black' and degraded post-industrial Silesia. There have been many interventions since 1989's in the direction against air pollution, which has significantly improved the quality of air and life in general. The extensive use of the land by industries and for the industrial waste is the main problem in the region, where many of the sites are not possible for use for redevelopment, without extensive and expensive investments.

AREA MANAGEMENT

The area management is only focusing on the special economic zones and small sub-zones in the towns of Sosnowiec-Dąbrowa Górnicza, Tychy, and Jastrzębie-Żory. The investors locating themselves in the mentioned areas are granted tax benefits and only some of the industries branches are preselected for such zones; they are mostly prequalified in order of environmental friendly production [Eckhart 2003, 337-388].

The focus areas of the re-development of the Upper Silesia region are stating on the holistic approach; however, there could be more applications, which would support the trajectories of the development even stronger. The approach is mostly focused on the economic interventions, which are to influence the overall organisation of the Upper Silesia governance, the infrastructure, and the environment in general. Very narrow definition of the area management is however seen as the weakest element of the strategy, where the focus is not set on the redevelopment of more post-industrial areas, which could in significant way improve the competitiveness and attractiveness of the Silesian cities. Mentioned in the introduction scholar Bolesław Domański has been strongly underlining the need of focusing even more attention on the voids of the industrial sites located in the area. His approach is very much related to my own understanding of the Upper Silesia region and its development possibilities. Fist, I fully agree with his statement that the *"[r]egional development needs adequate regulatory and institutional framework, which will also be indispensable in order to utilize structural funds for the European Union"*[Domanski 2003,18]. Such statement has the reflection in the work of Eckhart, and the overall approach of the specific agents deciding on the development in the Upper Silesia. Second, I do see the urgent need of working and re-defining of the waste void of post-industrial areas in the region. The main issues are the degradation process of the leftover structures, the location of the most of the areas in the urban forms, what makes them edges of disuse and spatial segregation, as well as the recently urging problem of the green field development in the Upper Silesia region. The sites of post-industrial character can become the catalysts of the development and be the answer for the problems of growing land use in the conurbation as well as the attractive places for the investment and living.

BYTOM AS THE CRITICAL EXAMPLE

The design case, city of Bytom is thus seen as the critical example of the void development possibilities. Up till now, Bytom is an example of the peripheral declining area, which however, has potentials towards development. The key problem leading of the city into the decay of dynamic functions in the city is its lack of self-reinforcing mechanisms of development. Since the decline is caused by the collapse of the industry in the city, the new direction of the development has to be found in order to reverse the negative development. The city is already in the stage of trying to attract the investors by means of small economic zone on the post-industrial area, located close to the city core. There are also regional indicators of possibilities for Bytom, especially in connection to the new Trans European corridor cutting through the city, serving it with potential new transit and economic investment. However, in the long term planning, the rapid growth is not expected since the peripheral location of the city in the conurbation is an issue. Therefore, with the understanding of the city's location and its voids qualities the approach of redefining city's image and development trajectories is to be set. Thus, the example project is presented in following report, where the long-term landscape process approach is presented as the suitable form of re-conquering of a site into the city structure, and by doing it, creation of the quality spaces in the city core area as well as attraction of the users and new investment to the site. Therefore, I see the project of 'Transforming Bytom' as the statement and contribution in the discussion upon the approaches and strategies, which could be applicable in the definition of the development of the Upper Silesia. The application of the landscape method is seen as a linking element for the other development strategies stated in the discussion of Eckhart's wrok. The focus areas stated by Eckhart are all possible to be incorporated and build upon in the process of landscape in order to re-conquer the voids to the city's physical, economical, social, and cultural spheres.

URBAN LANDSCAPE APPROACH IN CONTEXT OF POST-INDUSTRIAL URBAN SILESIA CONURBATION

The overall conclusion is to be put up in order to outline the general possible approach for the post-industrial sites in the Upper Silesia Conurbation. Since the overall economic interventions have been already proposed, the supportive element from the point of view of urban designer has to be set. To support the on-going interventions and to create the quality urban spaces in the era of global cities and widespread urbanity the approach towards the post-industrial voids is an urgent need. I see the landscape urbanism with its capability of creation of the cultural landscapes is the way to approach the sites in the transformation. The advantages of understanding of a city as a landscape and approaching it with the process of landscape is thus the most flexible and suitable means of development of such a complex structure as the city, conurbation, and region is.

08_01_view on narrow gauge rail and power plan

'SHRINKING CITIES' VERSUS UPPER SILESIA CONURBATION DEVELOPMENT STAGE

The area of the Upper Silesia has already been facing the shrinkage process since 1980s, when the decline period started with the first signs of the economic and social change in the eastern block. Already in those times, the industries have been reaching the melting point of under-finance, rapid loos of clients and therefore low income. Nowadays, the interventions, which have been undertaken in the area since 1990's are bringing the region back to the economic life. The scholar, Eckhart claims that the Upper Silesia is defined form economic point of view as the area at stage of the cumulative growth process. The statement is supported by listing the successful interventions in the region. The main interventions are the special economic zones and general investment into the redevelopment of the infrastructure and some of the post-industrial sites [Eckart, 2003;379]. However, the optimistic statement upon recent growth and future development of the conurbation is thus cooled down with the pointing out of the areas of stagnation and decline, which are present in the Upper Silesia. Thus, such a division of positive and negative development in the area is very typical for territories in transformation [Laursen 2008]. The example of declining but not shrinking area is discussed city of Bytom, which is example of the geographic and economic periphery of the conurbation. The difference in the development stages in the different Silesian cites is going to be an issue due to the overall dynamics of the development in the area. Despite the variables of the growth and decline in the Upper Silesia, it becomes obvious that the region is not to be called shrinking any more. The theoretical shrinking cites, defined by Oswald and the other researchers discussing the shrinkage phenomena, is not applicable in the case of the discussed conurbation. The data describing the growth and investment, presented in the introduction, locating Upper Silesia in the group of attractive areas for investment, as well as the location of the region in the cumulative growth group are staging upon the positive direction of the re-development. In such case, the only defining element of the term shrinkage is the decline of population; what also is discussed against, since the decline in population is the problem of developed European countries in general.

There is also another issue, which makes the term 'shrinking cities' not operative. From the designer's point of view the description of the area as a place of shrinkage is linking the site already with the pessimistic narrative. The story, which in any case of the design, no matter if for growth, decline or stagnation, is going to narrow down the creative part of searching for the concept for the new space. Instead of naming the spaces in decline, as shrinking cities, it might be operative to call them, as Lea Holst Laursen suggests, places in transformation [Laursen 2008;180]. The term 'urban transformation' outlines the understanding of both possibilities and obstacles of the site, what makes it dynamic and changeable in relation the context of growth or decline. The narrative of transformation also gives the possibility of perception of the positive future for the site, which is to TRANSFORM into something NEW and promising, in the same time still being related to the context of the actual situation of the site.

GROWTH AND DECLINE – DUALITY ESSENTIAL FOR DEVELOPMENT

In order to close up the journey through out the theory and their real life applications concerning the post-industrial setting in the peripheral area of the European Union some final remarks are to be done. During such journey, two main lessons have been learned. First, as mentioned already in the reflection chapter the possible and suitable method of working with the post-industrial areas is the method of landscape. The main defining feature is the flexibility and holistic approach of such a method, being therefore applicable in all kinds of development settings.

"In the urban landscape there are always areas undergoing transformation and it is a dynamic field. Urban areas never stop changing but will transform over time and this transformative landscape can accommodate both growth and decline." [Laursen 2008,184]

Second, the understanding of the growth and decline interrelations and coexistence is essential in order to set the mindset for the design in different locations. The main conclusion is that growth is not possible to happen without causing of decline or stagnation somewhere else. In the global world of global cities, there are also global territories of negative development, which is a characteristic element framing contemporary world. I such a conclusion it is suitable to recall the words of Graham and Marvin, who say that the contemporary urbanity is the set of "*complex patchworks of growth and decline, concentration and decentralization, poverty and extreme wealth…*" [Graham and Marvin 2001,115]. The interrelations of those two extremely different development factors is thus framing the development setting of all places in the world, including the development situation in the European Union, which growth corridors are stating upon the polarization of the development of the periphery.

FORMALITIES

LITERATURE REFERENCE LIST:

The references list organization is based on the strategy presented as follows.
References are presented for the specific chapters.
In a case of books, an author's surname is followed by the year of publishing. For specific quotations or reference, after the coma the page numbers are stated. The reference thus looks as follows: [Carta 2007] or [Eckhart2003,165].
In a case of a municipal report or document, the situation is similar. The author name is replaced by the report name or name description, for example: [report 2007,25-28] or [report 2007]
When a website or overall statistics data are referred to, the name of the item is the first element of the reference. After the coma the number of the chapter of the report is stated, which is followed then by the classification number of the reference [wiki02_01] – reference from Wikipedia located in the second chapter of the report and referred to for the first time.

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APPENDIX

QUALITATIVE DATA

OVERALL HOUSING UNITS ESTIMATIONS FOR THE MIX-USE AREA

PLANNED APARTMENTS FOR DENSITY AROUND 70-80 dwellings/ha

TYPE	AMOUNT	AREA
more than 110m2		
120.00	56.00	6720.00
200.00	28.00	5600.00
160.00	89.00	14240.00
110.00	812.00	89320.00
80.00	49.00	3920.00
80.00	936.00	74880.00
60.00	985.00	59100.00
TOTOAL	**2955.00**	**253780.00** m2

DENSITY	HOUSES	PLOT AREA
	2955	**38.01 ha**
DENSITY		**77.74 dw/ha**

AREA OF DENSIFICATION

STAGE01	24.88 ha
STAGE02	13.14 ha
TOTAL	38.01 ha

garages	floor area	floors	total	cars capacity
G1	2612 m2	4	10448.00 m2	553.74
G2	2195 m2	4	8780.00 m2	465.34
G3	1902 m2	4	7608.00 m2	403.22

TOTAL CARS= **1422.31**

DEMAND

parking 90 degree 100m2 = 5.30 car

STRATEGY FOR PARKING

MIX-USE DESIGN - PARKING SHARING (sharing with the function in the building)
ON-STREET PARKING
P-HUS
MOUNTAIN PARKING
COURTYARDS PARKING (1/4 area)

SINGLE FAMILY HOUSES	1	CAR/HOUSEHOLD	
ROW HOUSES	1	CAR/HOUSEHOLD	
APARTMENTS	0.7	CAR/HOUSEHOLD	GOOD TRANSPORT FACILITES LIKE IN BO01

OVERALL ESTIMATIONS OF PARKING NEEDS

PARKING SPACES ESTIMATION

Mixed-use parking strategy

	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
office	100%	10%	10%	5%	5%
retail/restaurant	60%	90%	100%	70%	5%
entertainemt/other	40%	100%	80%	100%	10%

Lowering amount of parking spaces for mixed-use - STRATEGY

HOUSING			MIXED-USES
1.0	0.7	1.0	
ROW	APARTMENTS	SINGLE FAMIL	SHARED PARKING

AREA DIVISION — **PARKING AREA - A** — ON-street parking provided on boulevard

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	84	psc	1.00	84					
School	12668	m2	1 per 100m2	127	127	13	13	6	6
				sum	127	13	13	6	6

The parking spaces are provieded in the areas of the properties of the single family and row houses, as well as at the school plot. It is designed to use also the on-street parking facility along the boulevard west-east.

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 211

AREA DIVISION — **PARKING AREA - B** — ON-street parking provided on boulevard

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	89	psc	1.00	89					
Appartments amount	627	psc	0.70	439					
Restaurants area	2596	m2	1 per 50m2	52	31	47	52	36	3
Shops area	5426	m2	1 per 20m2	271	163	244	271	190	14
Other	0	m2	1 per 100m2	0	0	0	0	0	0
				sum	194	291	323	226	16

The parking spaces provided in: P-house 1 (4 levles - 553 cars) in the coutyards (11 and 12 and14 and 18 - 71 cars) in the buildings of row houses (89 cars) in the basement of north parth of the building 13 (138) and at the boulevard west -east.

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 851

AREA DIVISION — PARKING AREA - C

ON-street parking provided on boulevard

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	725	psc	0.70	508					
Restaurants area	1429	m2	1 per 50m2	29	17	26	29	20	1
Shops area	2297	m2	1 per 20m2	115	69	103	115	80	6
Other	1102	m2	1 per 100m2	55	22	55	44	55	6
			sum		108	184	188	156	13

The parking spaces provided in the parking house P2 (465 cars on 4 levles) and in the basements of the buildings 33, 34, 25, 26 (259 cars) and along the boulevard west-east

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 695

AREA DIVISION — PARKING AREA - D

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	571	psc	0.70	400					
Restaurants area	989	m2	1 per 50m2	20	12	18	20	14	1
Shops area	2483	m2	1 per 20m2	124	74	112	124	87	6
Other	1101	m2	1 per 100m2	55	22	55	44	55	6
			sum		108	185	188	156	13

The parking spaces provided in the parking house P3 (403 cars) and in the basememnt parking of parts of the buildings 1 and 2 (94 cars) and marked area of the basements of the buildings 42 and 44 (105 cars

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 588

AREA DIVISION — PARKING AREA - E

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	493	psc	0.70	345					
Restaurants area	0	m2	1 per 50m2	0	0	0	0	0	0
Shops area	0	m2	1 per 20m2	0	0	0	0	0	0
School	0	m2	1 per 100m2	0	0	0	0	0	0
			sum		0	0	0	0	0

The parking spaces provided in the basememnt of the building s 27 and 28 (271 cars) and on 0.25 areas of the avaiable coutyards of the area (74 cars

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 345

AREA DIVISION — PARKING AREA - G

	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	0	psc	0.70	0					
Restaurants area	0	m2	1 per 50m2	10398	6239	9358	10398	7279	520
Shops area	0	m2	1 per 20m2	0	0	0	0	0	0
Offices	0	m2	1 per 100m2	10398	10398	1040	1040	520	520
			sum		16637	10398	11438	7799	1040

The parking spaces provided in the "0-level" mountain structure and partly on the "1-level"

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 16637

AREA DIVISION — PARKING AREA - H

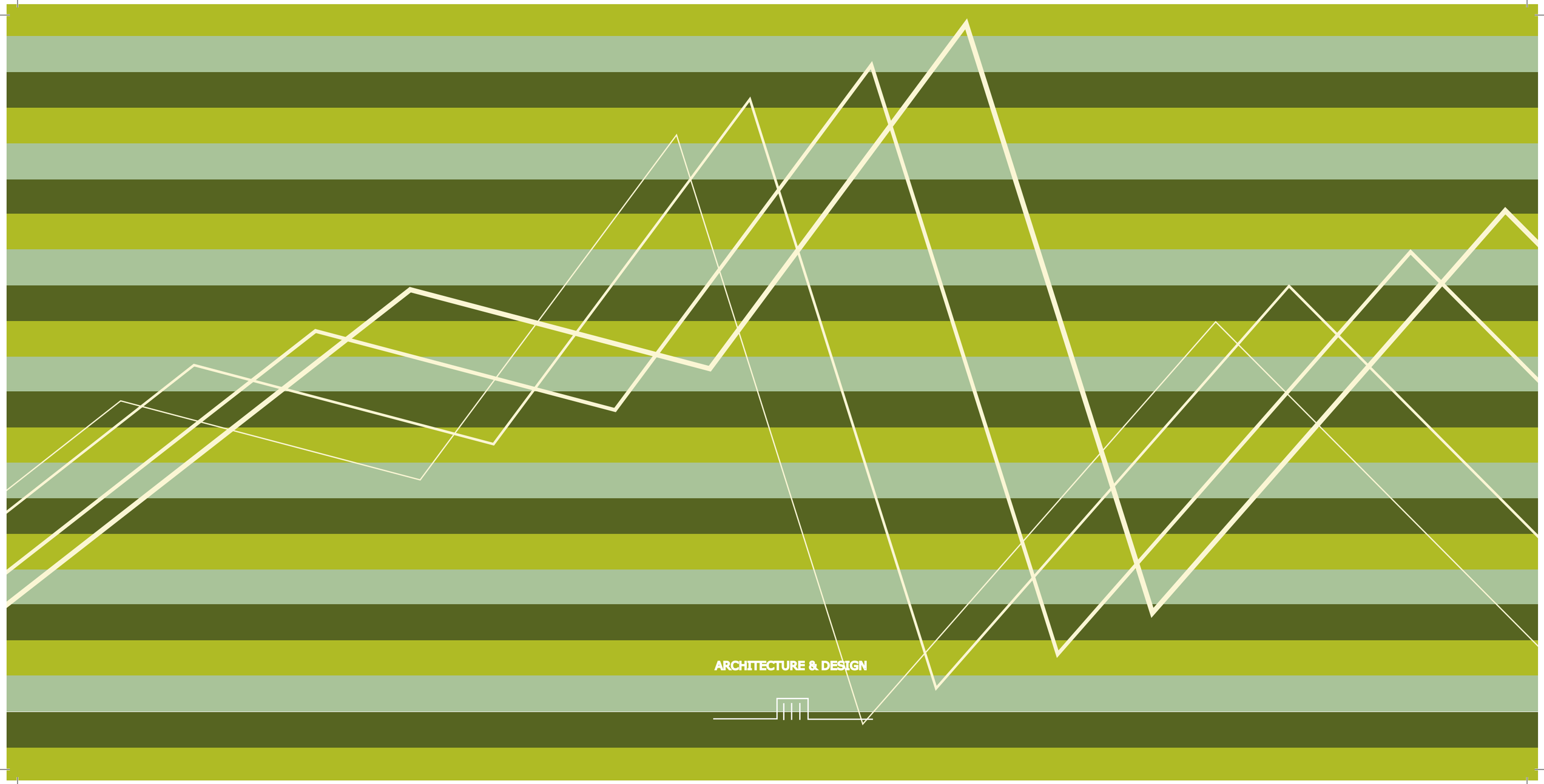
	Ammount	Unit	Factor	Required amount	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Overnight (12-06a.m.)
Appartments amount	0	psc	0.70	0					
Restaurants area	22894	m2	1 per 50m2	458	275	412	458	321	23
Shops area	0	m2	1 per 20m2	0	0	0	0	0	0
Hotel SPA	2160	m2	1 per 100m2	108	108	11	11	5	5
			sum		383	423	469	326	28

The parking spaces provided in the smaller part of the mountain structure - 2 layers

parking 90 degree - 100m2 = 5,3

TOTAL PARKING AMOUNT NEEDED 469

CARS 19795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