

#Zabłocie
#regeneration
#post-industrial areas
#functional areas
#spatial chaos

Dominik Zwiech
Jagiellonian University,
Institute of Geography
and Spatial Management,
dominik.zwiech@doctoral.uj.edu.pl

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Development perspectives and problems accompanying the regeneration of Zabłocie (Kraków) over the years

Abstract

Zabłocie is a Kraków's post-industrial neighbourhood currently in transition. Numerous investments are being made there. The old industrial function (of this area) is disappearing year by year. Dynamic and large-scale transformations began in the 21st century and have continued to the present, influencing the functional-spatial transformation. Rapid changes have resulted in numerous problems that may intensify in the future. The annually increasing change seen in the Zabłocie neighbourhood, and the emerging doubts about the correctness of the changes taking place, make it necessary to undertake a thorough analysis and evaluation of the regeneration process.

The purpose of the article is to present the conditions, barriers and perspectives accompanying the development of Zabłocie. An attempt was made to identify problems related to the ongoing functional and spatial changes occurring in Zabłocie. Emphasis was given to both the positive and negative aspects of the regeneration process in this area. The identification of the transformations that occurred made it possible to define contemporary problems.

The following were distinguished as falling amongst the main problems: obscure planning and strategic documents, the lack of preservation of valuable facilities, planning chaos, special conflicts of interest (between developers, investors, residents and city authorities), the lack of parking lots, the occurrence of the gentrification phenomenon, and a shortage of public green spaces. A key task should be to take action to improve the way the area functions so that in the future it has positive associations. It was emphasised that the development and transformation processes do not always have a positive effect. In the case of Zabłocie, it is necessary to fully control this process in order to prevent the formation of negative phenomena in the future. In the coming years the research results obtained may have a positive impact on the anticipation and monitoring of the progressive regeneration of this area and will enable the occurrence of negative aspects to be identified. The results of the research may be useful during the analysis of the process of regeneration and the identification of problems in other cities.

Introduction

Recent dynamic changes in Zabłocie are accompanied by the occurrence of unfavourable and problematic phenomena. The study area forms an urban neighbourhood in Krakow, located in the Podgórze district, on the right bank of the Vistula River, near the city centre. The total acreage of the study area is 2.25 km². The boundaries of the area are formed by Solna, Na Zjeździe, Józefińska, Henryka Dąbrowskiego and Nowohucka Streets. The northern border is Boulevard Podolski and Portowa Street by the River Vistula (Figure 1).

What factors have influenced the fact that the area was stagnant for many years? Why has the area begun to show dynamic and intensive development in recent years? Have these changes had positive effects and what are the prospects for development of this area in the future? Are the intense, modern transformations associated with problems that were not previously considered? The author will try to find the answers to these questions.

Zabłocie is an area of land whose industrial function has become degraded. According to the generally accepted definition urban brownfield sites are degraded, unused or not fully utilised areas originally intended for business (Ministerstwo Środowiska 2004).

It can be assumed that regeneration is a comprehensive restoration and conversion of areas that are degraded or in a state of crisis. Thanks to this process, these areas can become economically active (Domański 2009). The most intense transformations in the regeneration process take place in industrial districts (Huculak 2009). In Poland, many urban spaces lost their function in the second half of the twentieth century. Old industrial buildings have been degraded. From the beginning of the 1990s, they began to undergo intense processes of regeneration (Domański & Gwosdz 2010). During the regeneration process, the degraded area is prepared for the introduction of a new function (Maciejewska & Turek 2012). Regeneration projects for the renewal of areas require the integration of activities over the long term (Węglowski 2009). In the process of regeneration of old industrial buildings, it is particularly important to protect historical values (Gasidło 1998).

Different stakeholder groups may be involved in the regeneration process to achieve mutually beneficial outcomes (Urząd Miasta Krakowa 2016a). Stakeholders can be defined as any person or a group of persons that is interested in the project or could be potentially affected by its delivery or outputs. The main groups of stakeholders during the implementation process in post-industrial regeneration projects include: Institutional stakeholders (municipality, city, regional government), public officers employed in local administration, interest groups and

leaders, landowners and tenants, developers and investors, and various groups of citizens e.g. residents, employees (Lorber et al. 2012). In Europe this has very often resulted in opening questions of ownership and conflicts of interest between the public and private sectors (Lorber 2014).

The problem of transformations of post-industrial areas and changes in the function of such areas has been investigated by numerous researchers. There are numerous examples of well-implemented processes of regeneration of former brownfields or former mining areas such as in Katowice, the Nikiszowiec housing estate, and Nowe Gliwice. Due to proper spatial management, the unique character of space can be preserved. In Nowe Gliwice, the post-industrial area was transformed into an area of education and entrepreneurship. In order to construct a consistent image of the area, minor buildings and burials were abolished, while valuable buildings were preserved and modernised. In addition the location of numerous services nearby led to further investments that are well integrated into the character of the place (Gumienny & Szulc 2013). The processes of regenerating areas destroyed by industry were also occurring in Bytom and Chorzów, where the challenge was to tackle the remnants of industry found in the 4 districts of the city (Urząd Miasta Chorzowa 2017).

Post-industrial areas offer unique opportunities to introduce new business activities. Brownfield regeneration projects have to consider broader socio-economic development goals which are to be pursued through their regeneration, and the strategic context of modern sustainable development of urban structures. Brownfields are a challenge in many countries in Europe. In the process of regeneration, it is important to have a large amount of knowledge about the post-industrial areas, which is often overlooked (Vanheusden 2007). The ReT-InA project has defined a *brownfield* as an abandoned, idle, or underused industrial site arising after the process of regional economic restructuring, where expansion, reuse or regeneration may be complicated, and creates an opportunity to connect the heritage past of the place with the newly renewed future (Lorber et al. 2012). ReT-InA could be the chance for an economic re-boost and social growth in urban areas, where heavy industry used to play a key role - an example is the regeneration of the Galati neighbourhood in Romania and Tirighina landfill (Georgescu et al. 2014).

The majority of European countries do not have adequate strategies to tackle the problem of brownfields (Lorber 2014). Industrial brownfield sites often face problems of degradation, underuse or conflicts between stakeholders (Jamecny & Husar 2016). In the traditional industrial regions of Southeastern Europe, regeneration

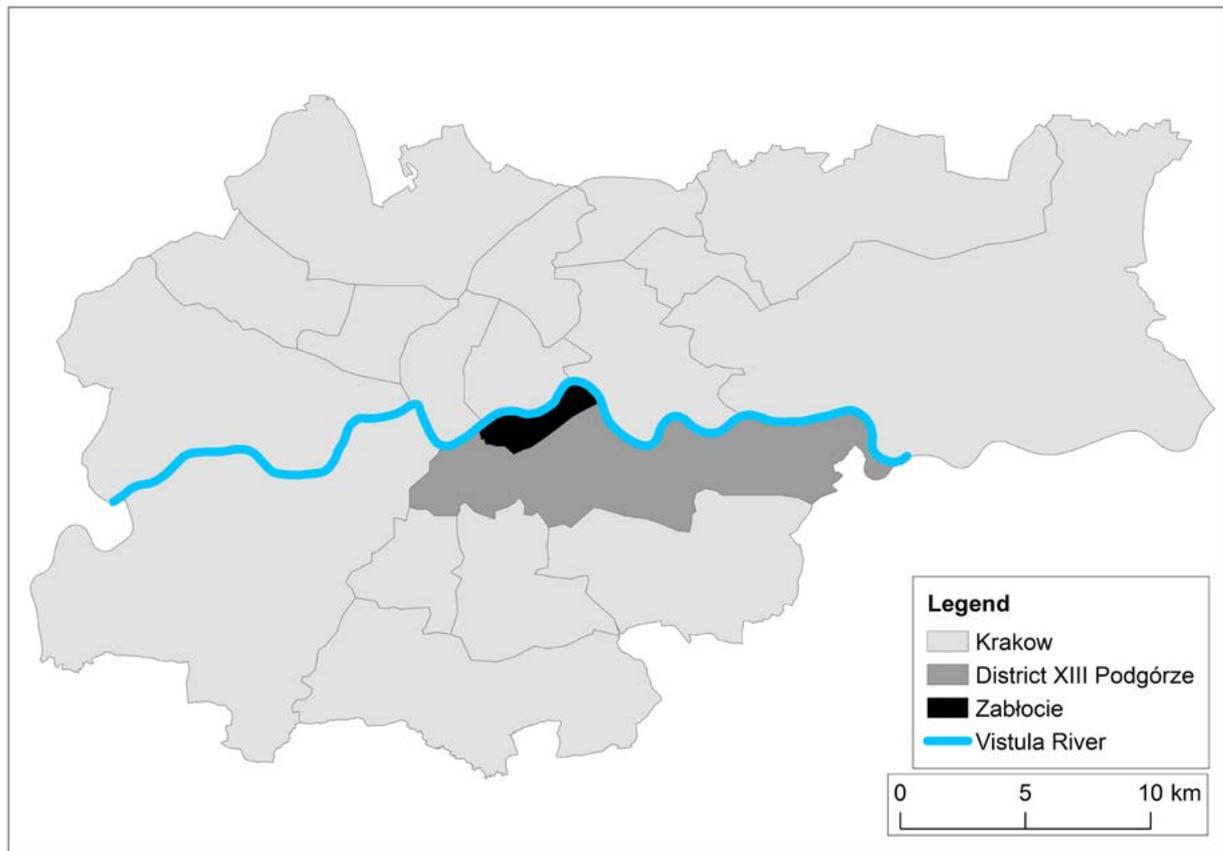


FIGURE 1
 Location of Zabłocie
 Source: own elaboration based on
<http://www.codgik.gov.pl>

is delayed and hampered by legal, financial, environmental and reputational problems (Lorber 2011). Among other issues, the regeneration process should provide the opportunity to have a positive influence on the solution of problems such as a lack of identity in residential areas and a total lack of public spaces and high urban density which prevents the widening of roads or creation of green areas. Many cities in Europe are still far behind European Union standards and are struggling with such problems. In recent decades Romanian cities have had to face issues such as the degradation of built up areas, low competitiveness of cities, unkempt public open spaces, poor urban infrastructure and services; inefficient public transport, and massive loss of green spaces (Alpopi & Manole 2013). In terms of protection, the Rakova *Jelša* Park project is a good example of the transformation of a former degraded area in Ljubljana preserving the quality and scope of the existing green network and developing more active cooperation with citizens in relation to the green infrastructure (Nastran & Regina 2015). The Landschaftspark Duisburg-Nord and Natur Park Schöneberger Südgelände in Germany can be regarded as a proper regeneration of post-industrial areas. In this area, the post-industrial landscape and natural environment have been successfully protected (Latkowska 2014). Another example is the creation of attractive places as a result of the regeneration of the Ruhr area and the river port in Hamburg (Celewicz 2008). Little attention is paid to the inhabitants views of places where brownfield land is located (Martinát et al. 2017). A remarkable example of brownfield regeneration in Europe is the adaptation of the Vienna Gas Works for residential purposes (Turek 2013).

A good example of a regeneration initiative in a post-industrial area in Central and Eastern Europe, in which Poland is actively involved, is the Cobraman project (Muszyńska-Jeleszyńska & Jasińska 2013). Another inter-

esting project for the adaptation of old post-industrial areas is the Lyon Confluence project in France, where intensive transformation of unused areas has taken place since the 1990s. The transformation process has affected the degraded functional-spatial structure. This example is important because the activities carried out did not lead to a disturbance of the historically developed hierarchy of urban areas and the individual elements were well integrated and inhabitant-friendly (Kazimierczak 2014; Gadowska & Gadowski 2014).

An extremely important event in relation to the course of large-scale transformations in Zabłocie was the approval (in October 2006) of the *Programme of Regeneration and Activation of the post-industrial area of Zabłocie* (Urząd Miasta Krakowa 2006). In the same year, the *Local Spatial Development Plan* was adopted. In December 2008, the *Local Regeneration Programme* (Urząd Miasta Krakowa 2008) for the degraded post-industrial area of Zabłocie was in place. It was updated in 2010 (Skorek 2013; Hołuj 2015a). The implementation of the *Regeneration Program* stimulated the development of the spatial and functional sphere and introduced positive changes in the landscape and improved its quality. The reason for the planned regeneration was the demand for apartments in the centre. It has become a major problem to get rid of degraded old industrial buildings but there was a huge demand for land in the city centre. A big disproportion between the prices of industrial and residential buildings and services had become a distinctive feature of the area (Zygmunt & Krochmal 2006).

In the *Programme of Regeneration and Activation* (Urząd Miasta Krakowa 2006), a total of 45,000,000 PLN was planned as part of the most important strategic investments in the programme in recent years in this area. These include: Reconstruction of Lipowa Street 11,700,000 PLN, Museum of Contemporary Art 17,800,000 PLN, Adaptation of Post-Industrial buildings 7,000,000 PLN, Vistula Boulevards 50,000 PLN, Modernisation of KS Podgórze 200,000 PLN, Construction of Nowohucka-Portowa street 400,000 PLN. It is assumed that regeneration initiatives of mainly local importance are to be financed from the City of Krakow budget, with support from external sources, including subsidies from the European Union. In 2008-2012, non-returnable funds from external sources accounted for approximately PLN 930,000 PLN. Additional credit opportunities for the city in these years totalled PLN 72,000,000 PLN (Urząd Miasta Krakowa 2006).

This article describes the conditions, barriers and perspectives accompanying the development of Zabłocie. Problems associated with dynamic change have been identified. An attempt was made to evaluate this

process, defining its positive and negative impact in creating the contemporary image of Zabłocie. The author uses methods of field observation, field inventory, interview, bibliographic query and cartographic analysis. The field observations conducted and field interviews with residents that took place allowed contemporary problems accompanying the development of Zabłocie to be identified, which analysis was supported by a literature survey. In order to determine the development prospects and general course of the regeneration process, planning and strategic documents were also analysed. Analysis of the literature survey was used to determine the conditions, barriers and stages of development of this area. Cartographic studies were developed in the ArcGIS program, which drew attention to the impact of the improvement of accessibility through communication improvements on the dynamic development of Zabłocie. The studies covered the time range from September 2016 to March 2017.

Historical conditions and the development of Zabłocie

The first mention of Zabłocie appeared in the 13th century. Zabłocie belonged to the village of Płaszów and provided the agricultural and economic setting for Podgórze. The area was formerly called the “muddy” or “behind the mud” area.

The turning point was the year 1357 when the Polish king, Kazimierz Wielki, sold part of Zabłocie town in Kazimierz. Although the original character of this area has disappeared, it should be noted that in the past Zabłocie developed as a centre of production and trade (Łyczak 2015), in particular as regards building materials and salt. The development of Zabłocie was encouraged by its location on the River Vistula (an important waterway in Poland). A change took place in the second half of the nineteenth century, when industry was booming in a period when Galicia had a great deal of autonomy. The development of this area took place thanks to numerous favourable factors, including the close proximity of Zabłocie to the centre of Krakow and the presence of large areas of land suitable for industrial development and expansion. In this period the area was industrial and commercial in character. At the end of the 19th century, industrial plants dominated the landscape of Zabłocie and this also led to the development of infrastructure facilities. The old commercial area turned into an industrial area. Zabłocie became an industrial district on the River Vistula (Wiśniewski 2011; Photo 1).

Nowadays, progressive transformation is creating new functions different from the current ones (Żółciak 2015; Table 1).

**PHOTO 1**

Industrial Zabłocie in the 19th and 20th centuries

Source: collections of the National Archives in Krakow <http://www.ank.gov.pl>

The development of industry at the turn of the 19th and 20th centuries was conditioned by many factors. In the following section, the natural and socio-economic factors associated with the location, which have an influence on the intensification of the industrial development of the Zabłocie neighbourhood, are presented separately.

The industrialisation of Poland took place with varying intensity, depending on which partition an area belonged to. Industry developed most actively in the Prussian partition, and least actively in Austria. At that time, Krakow and Zabłocie lay in the Austrian partition. In the nineteenth century, industrial development was concentrated in larger centres and districts. More than 50 years later, during the post-World War II industrialisation, a steady redistribution of industry was taking place and Zabłocie lost its prestige in favour of the development of Nowa Huta (Miszczyk 1986).

Among the natural factors determining the location of industry in the second half of the nineteenth century, its strategic location on the Vistula in the centre of Krakow played a strategic role (Kot & Rawicki 2012). This permitted the development of trade and transport on the River Vistula and created excellent conditions for traders (Mitkowski 1955). The abundance of raw materials was undoubtedly another important development factor. Clay, sand, limestone and construction materials were found in Zabłocie and the dredging of raw materials from the river proved beneficial to the development of the area. There were numerous brickworks in Zabłocie, and there was also a salt trade (Międzobrodzka 2005).

Another important factor was the availability of a large open area used for new development in Zabłocie. The presence of unoccupied land in the city centre created excellent conditions for the establishment of large plants and factories, which at that time increased (Domański 2001). It is important that at the end of the 19th century it was decided to relocate many factories and institutions from the central part of the old town to less strategic areas adjacent to the centre, which at that time belonged to Zabłocie. It turned out to be an ideal area for the location of large industrial facilities (Doległo 2011).

Among the socio-economic factors influencing the location of industry, the presence of the Central European Via Reggia trade route was extremely important. The course of this route through Krakow provided great prestige to the city. At that time this route was part of a great transit route, thus providing great development opportunities for Zabłocie since the trade route to Lviv and Warsaw passed through Krakow (Żóćciak 2015) and the city centre also provided a large market. Another important factor in the development

TABLE 1

Main functions of the Zabłocie neighbourhood
 Source: own elaboration based on Żółciak 2015

NO.	FUNCTION	PERIOD OF TIME	CHARACTERISTIC
I	Production, commercial, agricultural	XIII - XVIII	Trade (building materials, salt)
II	Industrial	XIX - 90. XX	Industrial district of Krakow
	Period of stagnation	90. XX - XXI	Degraded brownfield area
III	Business, service, housing	XXI	Intensive transformation, new investments, creation of numerous apartments, services, buildings for business use

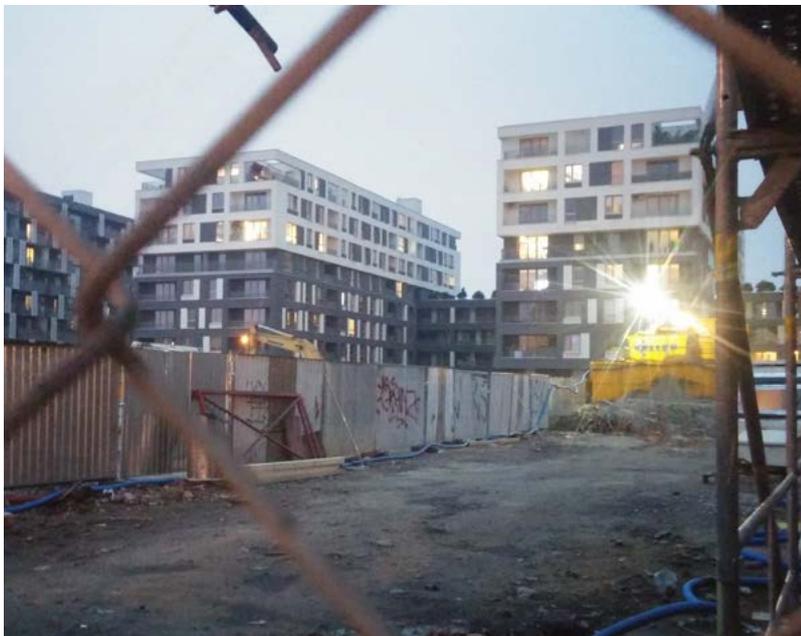


PHOTO 2

Transformation of the area between Zabłocie, Ślusarska, and Romanowicza Streets (2016)
 Source: D. Zwiech

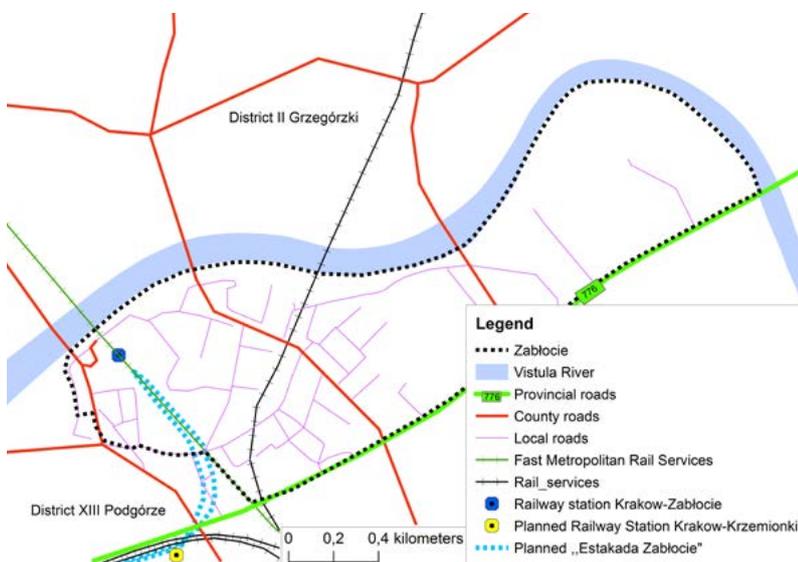


FIGURE 2

Road and railway network of Zabłocie
 Source: own elaboration based on Zarząd Dróg Wojewódzkich w Krakowie (2015); Estakady Kolejowe, Zabłocie - Krzemionki

of industry was the construction of the railway network which now greatly divides up the Zabłocie neighbourhood. The construction of railway lines was accompanied by progressive industrial development.

Good transport accessibility and a large market are important elements influencing the development of industry. An additional advantage was that at that time there were few inhabitants in the large areas available for industrial development. Progressive expansion of the built-up area did not create problems for the inhabitants. Apart from air pollution issues and the degradation of other elements of the environment, this area appeared ideal for industrial development (Doległo 2011).

Barriers to the development of services in the 20th century

The powers imposing a centralised control economy in Poland exercised control over the entire sphere connected with the economy. This was not conducive to the development of services. As a result the Zabłocie neighbourhood was an area that was left behind in economic terms in the 1990s. Compared to surrounding areas, it was in crisis. This area had negative associations for a long time. Zabłocie was often described as a neglected and unattractive fragment of Krakow characterised by poor transport links which did not benefit the development of services in this area, which was largely composed of old industrial buildings (Żabiński 2012; Kopeć 2010). The industrial character that had been scarring the area for years deterred potential investors. An additional barrier was the lack of space for new investment - the construction of new facilities was often costly and involved the need to demolish existing buildings. The low population density and lack of interest encouraged the stagnation of Zabłocie and the lack of further development, and the area was seen as unattractive to foreign capital. The problem was that at the end of the 20th century, this area was considered as separate from the rest of Krakow (Doległo 2011) and the lack of links to other districts led to the slow stagnation of development. The situation of transport accessibility improved after the construction of Kotlarski's Bridge and the new Gustaw Herling-Grudzinski Street (Kaczmarek 2013). In the 21st century, the great potential of the area was discovered, and therefore changes in land use and land development began to take place, making it one of the fastest growing areas in the whole city (Doległo 2011).

Action has been taken to apply the regeneration process to transform degraded facilities and give them a new purpose. The process of functional and spatial change in the area has started and the dynamic and large-scale transformation that has been taking place over the last few years is continuing (Skorek 2013; Photo 2).

Transport accessibility in the 21st century

Thanks to infrastructure and transport investments at end of the 20th century, the area of Zabłocie is characterised by good transport accessibility. Provincial Road 776 lies along the southern border. There are 3 county roads: Stoczniovców Street, Gustaw Herling Grudzinski Street, and Na Zjeździe. There are also numerous local roads (Figure 2).

There are two railway lines running from north to south. The first is the Metropolitan Rapid Transit, which connects the two most important stations in Krakow: Kraków - Główny and Kraków - Płaszów. These have a connection to Kraków-Zabłocie station located within the area. The second passes through Grzegórzki towards Kraków - Olsza.

The railway is used by trains on the routes to Tarnów, Zakopane, Bielsko-Biała, Rzeszów, Kiev and other destinations (Świerczewska-Pietras 2011). At present, work is underway to construct a new railway link between Zabłocie, Kraków and Krzemionki. It is the largest railway investment in Krakow and will cost 257 million PLN to implement (Łącznica... 2016).

Zabłocie is currently also characterised by good public transport networks. In total there are 7 tram lines, 9 daily buses and 3 night bus lines which pass through the area. A high concentration of public transport routes is particularly visible in the western part (Figure 3).

As a result of the analyses, two important public transport junctions can be noted - the first located in the south-west at Bohaterów Getta Square and the second in the north-east on Gustaw Herling-Grudzinski Street. Measurements of the Museum's distance from public transport stops were carried out in the ArcGIS program, indicating good accessibility and a short distance of about 370 metres, which can be travelled in a few minutes (Figure 4).

Identification of problems

The development of Zabłocie in recent years has led to the occurrence of a number of problematic issues that have not previously been noted, but now arouse controversy. Rapid change has produced side effects of the progressive transformation and regeneration. In order to make a general typology of contemporary problems posing a threat to the future functioning of the Zabłocie neighbourhood, methods of field observation, inventory preparation and literature analysis were used (Table 2).

In Krakow there is an unclear planning situation resulting from the loss of the spatial development plan, in place of which local plans have been prepared. Inadequate production of these plans meant that by 2009 they covered only 30% of the Krakow city area. By 2017, the coverage of local plans had increased to almost 50%, which

FIGURE 3
Public transport network of Zabłocie
Source: own elaboration based on Mapa komunikacyjna Krakowa (2017)

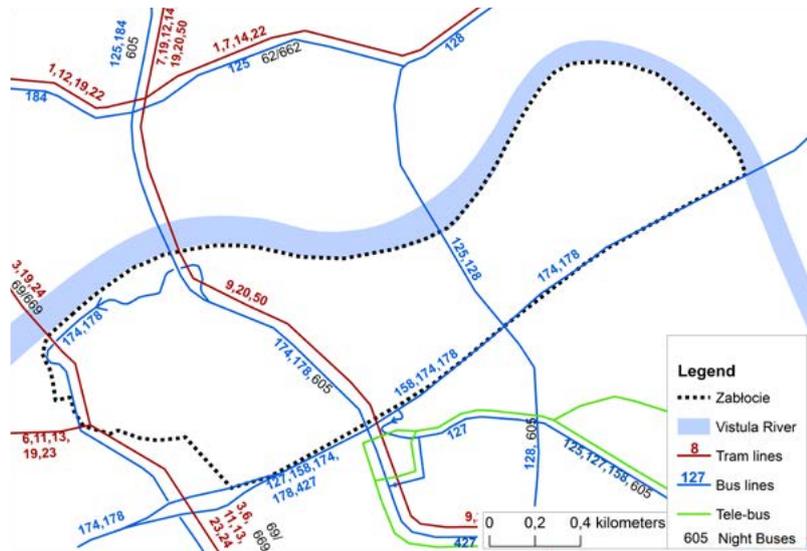


FIGURE 4
Accessibility of the Schindler Factory Museum
Source: own study based on Mapa komunikacyjna Krakowa (2017)

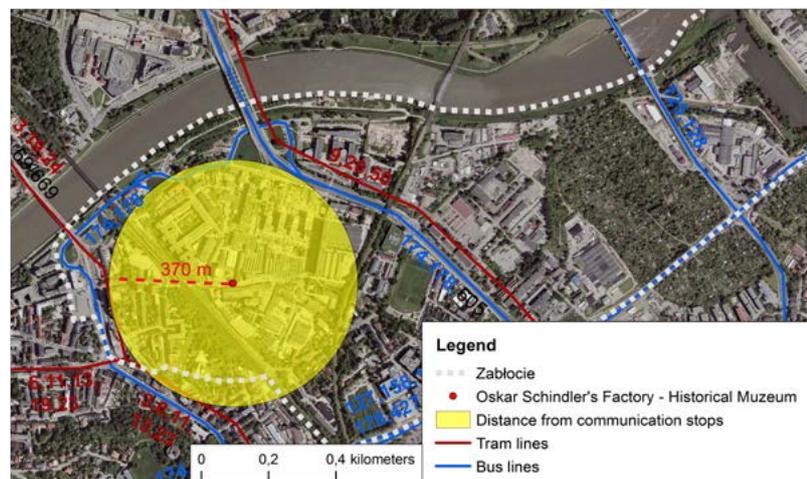


TABLE 2
Problems accompanying the creation of the image of Zabłocie
Source: own elaboration based on Wiśniewski 2011; Zięba & Telega 2016;

Problematic issues	Effects
Unexplained planning situation	Uncertainty about the correctness of land development
Obscure planning and strategic documents	Excessive expansion of buildings
The lack of preservation of valuable facilities	Risk of loss of industrial character, loss of historical value
Spatial chaos	Large variety of buildings
Spatial conflicts	Lack of agreement and compatibility between stakeholders (developers, investors, residents, city authorities)
Deficit in parking spaces	Congestion, insufficient number of parking spaces
The phenomenon of gentrification	Social stratification, division into rich and poor
Shortage of public green spaces	Excessive development of green areas, the risk of creating a negative image

means that it is still a matter that needs to be clarified as soon as possible (Biuro Planowania Przestrzennego 2015, 2016; Wiśniewski 2011).

Zabłocie is an area that is particularly vulnerable to the risk of inappropriate spatial management due to its rapid development. The increasing intensity of office, apartment and service facilities has led to the risk of too intensive development, which in the future may result in the creation of a so-called 'concrete jungle' (Wiśniewski 2011).

The outdated planning and strategy documents pose a big problem. Intensive large-scale transformation of Zabłocie was based on local plans and regeneration programmes from 2006 and 2008. During this period, post-industrial development was largely transformed. With a high intensity of development; the use of an obsolete plan over about 8 years can bring about irreversible effects of excessive intensification of building development (Biuro Planowania Przestrzennego 2016).

The situation associated with the construction of numerous large-scale investments and the process of transformation of old buildings may result in the loss of the historical value of the area. As a result of the great changes, the traditional functions of historically important industrial buildings disappear. Valuable industrial buildings are often subject to demolition. The potential of historic buildings is lost, which with a proper regeneration process would combine industrial character with modern buildings. The Zabłocie neighbourhood is therefore characterised by a lack of coherence of architectural policy. There are very often cases where cultural and historic heritage is not protected, as in the demolition of buildings directly connected with the history of this area, such as the Miraculum Factory and Korngold Factory (Kuboś 2012). It should be noted that not all post-industrial buildings with unique development and character are entered in the register of monuments and entry in the register itself, does not always provide adequate protection.

In recent years there has been a dispute between the Association Podgórze.pl and the Voivodeship Heritage Conservator in terms of which buildings should be preserved and protected and which should not. Currently, only a small number of them are included in this entry. A common argument for the absence of an entry is too much conversion and lack of architectural value. When analysing the historical potential of the area, one should bear in mind the development of tourism associated with it. On the basis of their own field observations, it was found that both golf buggies and walking were very popular in Zabłocie (around Lipowa, Przemysłowa, Zabłocie, Romanowicza). In the event of the disappearance of interesting post-industrial facilities, this area may no longer enjoy such popularity among tourists.

Another problem is the spatial chaos of the area. Legacy development includes private housing estates, old tenements, former industrial plant and other large industrial buildings. Currently, there are modern apartment complexes and services being added on. This has produced a highly diverse functional and spatial structure that is often disorderly and chaotic (Urząd Miasta Krakowa 2006; Zięba & Telega 2016).

Field research has shown that old post-industrial buildings are often used for other purposes. Since the 1980s former hall-buildings have been performing functions other than those originally planned, often being used as gyms or office space. In many cases an improvement is needed in the standard of service offered. The present condition of the infrastructure in the vicinity of old buildings is often poor (Photo 3; Hołuj 2015a).

The process of transformation involves developers, investors, city authorities and residents. In Zabłocie there are many conflicts occurring between investors and local initiatives. One of the most frequently discussed issues is the question of whether the Zabłocie neighbourhood is developing in the direction desired by the city authorities and the inhabitants. The views of the inhabitants in shaping the area around them are very often not taken into account by the investors and the city authorities (*Zabłocie: Park a nie parking* 2016). The inhabitants' participation in the process of creating the future image of the area is not working out and over the years there has been increasing dysfunctionality of individual groups in relation to the space they use. This phenomenon has not been sufficiently mitigated. Investors, in pursuit of their goals, take into consideration the needs of the mass consumer, ignoring the needs of people who have lived there for years. It is extremely difficult for public initiatives and investments to preserve the character of a valuable property in the face of the masses of investors and developers who do not pay attention to matters that are important to citizens. An example may be the ineffective struggle of residents and associations to preserve the traditional character of the Miraculum factory. Despite large protests, it was very rapidly demolished (Hołuj 2015b).

Another issue is a lack of sufficient parking space. This shortage is partly caused by parking bans or lack of adequate space necessary to create a parking lot. The problem is noticeable on Przemysłowa Street, Lipowa and along the Vistula Boulevards. The reason is intensive development, a large number of tourists and a growing number of newly arrived residents (Hołuj 2015a). Underground car parks are located near the largest residential and office complexes. In spite of this, the problem is still very serious throughout the area. Vehicles are parked on one-sided pedestrian walkways, and this prevents pedestrians from moving freely.



PHOTO 3

Old industrial and warehouse development
between Romanowicza and Lipowa Street
Source: D. Zwiech

There is a gentrification phenomenon occurring in Zabłocie. This process, on the one hand, increases the status of the place, but also carries with it many problems. Currently Zabłocie is a place which provides accommodation for various social groups - residents, students, tourists, entrepreneurs and employees of companies. It is disturbing that the problems of older people, who have been living in Zabłocie for decades, have still not been dealt with, as they continue to be an important social group among the inhabitants. This area attracts wealthy people. It also attracts young people. So far no analysis has been carried out to find out whether this area is suitable for its current inhabitants. It is often the case that their voice is not taken into account in the creation of the future vision of Zabłocie (Biuro Planowania Przestrzennego 2016). In Zabłocie many services have mainly been provided for new users of this area and for visitors. These include numerous rental properties and special services such as a wine cellar, culinary garden, and a café in an industrial environment (Hołuj 2015a; Hołuj 2015b; Nózka 2014).

Examples of the high standard of facilities in Zabłocie include newly built apartments, which offer a great choice of space and price of apartments. Zabłocie offers both standard and exclusive apartments such as penthouses or lofts. The prices are favourable compared to those in other districts of Krakow. The modern apartments are distinguished by fenced areas and the presence of underground car parks (Hołuj 2015). In the eastern part of Zabłocie there is a small deficit of services for residents (Urząd Miasta Krakowa 2016b, 2016c).

Intensive transformation also results in excessive development on green areas. Nowadays, there is a tendency to get rid of every spare piece of green for housing and services. This may result in the disappearance of public green space in the area. At present there are only two areas where residents can find such space. The first is on the Vistula Boulevards and the second is Dekerta Street. Both sites are planning to establish parks. The realisation of these investments is extremely important, as in Zabłocie there is a lack of adequately developed publicly available recreational space. The further disappearance of green space may affect the negative image of this area in the future. At present, the outer boundaries of Zabłocie are characterized by excessive traffic. Other issues of concern include the natural environment. The unfavourable form of the terrain contributes to the accumulation of pollutants from all over Krakow (Matuszko, Piotrowicz & Kowanetz 2015).

In the past, a zone of influence of electromagnetic radiation was designated in the central part of Zabłocie. Solid, liquid and municipal wastes are stored here (Urząd Miasta Krakowa 2016c). Nowohucka Street is one of the biggest

noise emitters and measurements of almost 70 dB have been recorded (Matuszko et al. 2015). One of the sources of pollution is found in the very numerous coal stoves and it is necessary to get rid of these (Urząd Miasta Krakowa 2006). Due to the large scale of development, it is important to take care of the natural environment of the local terrain. The area is crossed by fences, railway lines and communications infrastructure. Such land development has led to disturbance of the natural functioning of this area (Urząd Miasta Krakowa 2016c).

Discussion and conclusions

Zabłocie (Krakow) is an example of a post-industrial area in which huge transformations are taking place today and for which the process is extremely important. This area was created as the future business district of Krakow, ravishing by the modernity, good accessibility and variety of services offered (Korenik & Rogowska 2011; Kopeć 2010). This area has faced many problems over the years. It has been developed thanks to the development of strategic documents and regeneration programmes and its buildings have begun to form a new urban structure (residential, service and office complexes). Tourism has also played an important role in this area. Due to intensive development after 2006, Zabłocie has become one of the fastest developing areas of the city. The anticipated results of the planned projects of the Local Regeneration Programme have resulted in the fact that from a neglected and completely unattractive area, it has been transformed into an area attracting investors, not only from Poland, but also from the world (Urząd Miasta Krakowa 2008).

The implementation of investment projects in this area may positively influence the attraction of similar investments to neighbouring areas through spill-over effects (Świerczewska-Pietras 2011). The actions taken under the Programme of Regeneration and Activation (Urząd Miasta Krakowa 2006) include encouraging activity among the inhabitants, promoting economic development, putting damaged structures into order and protecting cultural values (Gasidło & Kuboś 2012). Year by year the prestige of this area is growing, as is evidenced by the influx of many innovations. Modern projects such as residential and office complexes are being undertaken, offering a wide range of services that are close at hand and meet the needs of the residents.

By attracting young people, one can effectively rejuvenate the age and sex structure of the area. For a dozen or so years, it has attracted students, businessmen, locals and tourists. However it is crucial to remember the negative aspects of the development of Zabłocie. This area has great potential embedded in the characteristic elements of space, culture, history, which stand for its spe-

cial character. Unfortunately, actions are currently being undertaken which contribute to its partial destruction. Transformations require appropriate control measures to ensure the correctness of the course in progress. Action should be taken which in part will preserve the traditional character of the site. Thanks to modern architectural projects such buildings can combine old industrial character with modernity.

There are many problems that require the finding of an effective solution. To prevent over-development, documents regulating this process such as the Local Spatial Development Plan need to be prepared. In 2016, an update of the Municipal Programme for the Regeneration of Krakow was produced (Urząd Miasta Krakowa 2016b). Currently, work on the new Local Spatial Development Plans is underway in Krakow, including the Local Development Plan for Zabłocie-West (Biuro Planowania Przestrzennego 2015). A solution to the problem of a lack of adequate protection of valuable buildings could be the introduction of an obligation to check the correctness of the entry by the Voivodship Office for the Protection of Monuments and the Office of Monument Conservator. The buildings included in the register of monuments only include the museums on Lipowa 4, the building at ul. Romanowicza 7, Hall at Romanowicza 5 and the steam engine at ul. Zabłocie 37. It is recommended that the remaining valuable historic buildings also be protected. At Dekerta Street there are abandoned collapsed ruins, which have not been appropriately adapted (Bednarek 2014). One of the solutions to the problem of a shortage of parking spaces is the replacement of a fragment of Przemysłowa Street and the allocation of part of it as a parking lot. It is crucial to look for other ways to deal with this problem (Biuro Planowania Przestrzennego 2016).

To sum up, the article highlights key aspects of the problems and issues that cannot be overlooked in the process of creating the future image of the area. These issues are often underestimated and generalised in the general process of transformation, which in the future may have negative consequences - often irreversible (Kazimierczak 2014). Therefore, the author of the text suggests the problems presented today should be analysed and effective ways to prevent them from occurring in the future should be examined. Preserving the historic "genius loci" of the area is extremely important in terms of creating urban tourist space. Such actions are being taken in Manchester and Lyon (Kazimierczak 2012). Putting the unique character of the Zabłocie neighbourhood to the fore will attract more tourists and possibly more investors. Local tourism in the coming years cannot be based solely on the Schindler Factory and the MOCAK Museum of Contemporary Art. The future of Krakow's Zabłocie and the way

it is perceived by future generations depends on actions that can be taken now. Through monitoring the course of progressive dynamic and large-scale transformations, it

is possible to exclude future problems that could distort the vision set forth in the planning documents and help to avoid the occurrence of serious issues.

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