

## CAMPUS DEVELOPMENT AND DOWNTOWN REGENERATION – PERSPECTIVES FOR KATOWICE

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### Abstract

The scope of the paper is to present the issues concerning the revitalization of an area situated in the centre of Katowice, where an academic quarter of the University of Silesia is emerging. Although this problem has been subject of numerous research works, workshops and competitions, the city of Katowice, despite many investments, has not managed to fully implement the revitalization of this area. Research activities indicated the deficiency in the integration of student functions. The surface of the area is about 10 hectares, located at the quarter comprising Warszawska, Bankowa and Dudy-Gracza Streets and the Rawa river boulevards. In May 2014 the Municipality of Katowice and University of Silesia announced the workshops on concepts of integrating an urban student centre, with the participation of the team from the Faculty of Architecture, Silesian University of Technology. The workshops were focused on analysing the situation of the program and design elaboration for the area in question. The proposed solutions were targeted at creating a student centre integrated with other public sites of Katowice, improving the attractiveness of the Rawa riverside, and providing a competitive advantage for the city of Katowice over other university cities in Poland.

### Streszczenie

Artykuł przedstawia problem rewitalizacji obszaru w śródmieściu Katowic, gdzie w przyszłości ma powstać dzielnica akademicka Uniwersytetu Śląskiego. Problematyka była tematem wielu prac, warsztatów oraz konkursów, ale do dzisiaj miasto – pomimo wielu inwestycji, nie zrealizowało tego projektu. Badania, które były przeprowadzane na tym obszarze, wykazały brak integracji funkcji studenckich. Omawiany obszar ma powierzchnię ok. 10 ha i znajduje się w kwartale między ulicami Warszawską, Bankową i Dudy-Gracza oraz bulwarami Rawy. W maju 2014 Urząd Miasta Katowice i Uniwersytet Śląski ogłosiły warsztaty na opracowanie koncepcji zintegrowanego centrum miejskiego, w których wziął także udział zespół Wydziału Architektury Politechniki Śląskiej. Celem warsztatów było przeanalizowanie umiejscowienia programu i stworzenie opracowania studialno-projektowego. Zaproponowane rozwiązania miały na celu wykreowanie centrum studenckiego powiązanego z przestrzeniami publicznymi Katowic, poprawienie atrakcyjności strefy nadrzecznej Rawy i danie szansy Katowicom na wygranie rywalizacji miast akademickich.

Keywords: Urban regeneration; Urban design; Campus design; Katowice; Integrated student centre.

## 1. INTRODUCTION

In recent years the city of Katowice has been undergoing intensive transformation of its downtown areas. There are many projects in progress to improve the

functionality, aesthetics and image of the city. One of the elements in the revitalization of the city centre is a concept of transforming and intensifying the development of the academic quarter.

Katowice received the town status in 1865. The Inter-War period witnessed a rapid development of the city, which became the economic heartland of Poland. In the next years, Katowice – the capital of Silesia – achieved a rank of an academic city. Further advancement of industry and urban development resulted, unfortunately, in considerable neglect of the technical and social infrastructure.

Degraded sites were included in the revitalization program [7]. They are to be subjected to spatial, economic, and social transformations, and thus, contributing to the improvement of the life quality of the inhabitants, restoration of the spatial order, economic boom and regeneration of social bonds, as well as new housing developments [1]. Among other areas, the program is focused on degraded quarters, post-industrial and post-military sites. Also, obstructive and overloaded traffic structure reduces the functionality of the city centre.

Some transformation activities were initiated in 2006, entailing the reconstruction of General Jerzy Ziętek traffic circle and erection of the Academy of Fine Arts gallery. In the next stage, in the vicinity of “Spodek” (in Polish “Flying Saucepan”) entertainment and sports hall, the Zone of Culture was created, comprising three investments: International Congress Centre, new seat of the National Symphonic Orchestra of the Polish Radio, and new Museum of Silesia. Presently, the space between the above mentioned traffic circle and the city square is undergoing transformations.

The facilities of the University of Silesia are currently located in the 19<sup>th</sup> century workers’ estate, in the vicinity of Górnicza Street. The insufficiency of funds and complicated ownership structure have resulted in degradation of buildings and marginalization of this part of the city. The tasks undertaken by the Municipality are aimed at creating an attractive city quarter offering the functions of culture, science, commerce and services. The site that complements the urban tissue is the Science Zone, emerging between Warszawska, Bankowa and Dudy-Gracza Streets and the Rawa river boulevards, occupying about 10 hectares. The spaces around the faculties are potentially attractive for people moving around the University area. Since 2010 the city authorities have been planning to place the academic quarter in this area, and, accordingly the sites have been successfully prepared for the investment, by buying out the lots, tenement houses and moving out the occupants [11, 17]. In 2012, within the framework of the revitalization program for the city centre, the Scientific Information

Centre and Academic Library were created, in cooperation of the University of Silesia, Academy of Economics and city authorities. The great advantage of this facility is its good accessibility, not only for students, but also for all inhabitants, which stimulates the student campus site. Moreover, directly within the urban tissue of the housing settlements, a new seat of the Faculty of Radio and Television, University of Silesia, is being built.

Likewise, in 2014, within the framework of the same revitalization program, Katowice Municipality and University of Silesia organized study and design workshops on “Integrated Student Centre at the University of Silesia”. The objective was to analyze the possibilities of locating the designed functional program for the indicated sites and to plan relevant administrative and investment activities, in the form of a design-elaboration which should be an exhaustive analysis of the functions, development features and spatial management of university area, enabling a harmonious implementation of the functional program planned by the University of Silesia and taking into consideration the surrounding sites [12].

In accordance with the guidelines set forth by the workshops organizers, the campus should also house the faculty of philology, centre for biotechnology and bio-diversity, sports hall, and student dormitories. Furthermore, each facility should have the required cubic capacity, and the designed buildings should refer to the typology of place and be easily identifiable. The authors of this paper were invited to participate in the workshops: Michał Stangel, Adrian Zięba, Filip Piaścik. The results of their work are described below.

## 2. THEORETICAL ASSUMPTIONS

Downtown areas are important elements of the strategic structure of at least regional importance. Accordingly, the layout of the city structure should provide an explicit vision of its centre. It may be assumed that the solutions contained in urban plans should constitute a strategic context for revitalization programs [18], focused on the renewal of the sites which, due to economic and social activities, have lost their original functions. In the context of city centres, revitalization projects usually involve the activation and improvement of the attractiveness of sites considered in the program [9]. In the course of planning revitalization activities the following issues should be assumed: improvement of the technical condition of buildings, adjustment for public functions and construction of new facilities and developments. This

should strengthen the economic base and, at the same time, stop the economic and social degradation of central urban areas. The identity of places should be preserved, as well as the heritage values, by supporting buildings and settlements of historical importance. As far as possible, new investments should improve ecological standards [3]. The transformation of brownfields should be consistent with the principles of Sustainable Development. The concept of a sustainable city refers to rational shaping of urban structures, and, first and foremost, rational, economical and effective management of the city resources. Other important issues are: accessibility to public transport, nature conservation and supplementation of the existing settlements [14].

Modern universities are extremely important to the development of cities. Cooperation between universities and industry revives the economy based on knowledge [5]. Thus, in the context of the revitalization and activation of the city, the emergence of universities is essential. University buildings and public spaces of campuses support contacts between the university, and industry and local authorities, generating further progress in the knowledge society [15]. Such is the case of AGH (the Polish acronym for Academy of Mining and Metallurgy) campus in Cracow, Silesian University of Technology in Gliwice, or University of Warsaw. Situated downtown, they fulfil the assumptions of an integrated student centre.

“Studies made in the course of the design process attempt to generate, obtain knowledge and new insights into design transformations and conversions, or design interventions into the existing state of space. In general, such studies have an explorative nature. The first step is to generate new options for a design by regarding the design as a process, where the connections between the options of changes are subject of analyses or lead to adjustments, or, to entirely different solutions. Thus, the concepts may be developed as a completely new, or better understanding of the impact of various design decisions” [8].

### 3. METHODOLOGY OF THE DESIGN ELABORATION

The method of work entailed activities undertaken to identify the conditions and potential of the sites, i.e. research by design [8]. Due to the revitalization nature of the elaboration, the method of work was equivalent to specific successive stages, which, according to Krzysztof Gasidło [3] are: diagnosis of the existing condition, delimitation of the area, urban evaluation, des-

ignation of the objectives, indication of the means and methods of revaluation, revaluation project.

#### Diagnosis of the current conditions

In the years of the development of the University of Silesia the issue of functional connections between faculty buildings, the library and administration headquarters was completely overlooked. Low attractiveness of the University campus results, among other factors, from poor accessibility to student dormitories (about 10 km from the campus), absence of student canteen, absence of space for organizing student events, absence of clubs, insufficient number of parking places, deficiency of greenery. In addition, the Rawa riverbed constitutes a barrier, separating the public spaces of the campus and posing difficulties in the functionality of this area. All of these problems make the academic sites lifeless.

#### Delimitation of the area

The area of the urban student quarter in Katowice is designated by the strategic documentation of the municipality and strategies of the development of the University of Silesia. According to many opinions, in view of a direct vicinity to the zone of culture, the university campus should be connected within the framework of this zone. The site of the integrated student centre constitutes a fragment of this zone, which, for the purposes of the elaboration, was demarcated due to the availability of lots that could be developed in the nearest future. The area in question is, in particular, determined by the streets layout: Warszawska from the south, the Rawa river boulevards in the north, Bankowa in the west, and Dudy-Gracza in the east. The boundaries designated by the streets are rigid and impassable; whereas, the boundary set by the Rawa river boulevards is flexible and may be extended to the space in front of the academic library buildings, Faculty of Social Sciences and the Faculty of Law and Administration. Internally, the sites are divided by the quarters of housing settlements.

#### Urban valuation

The campus of the University of Silesia is located in the downtown of Katowice. In its direct neighbourhood there are attractive public spaces and architectural objects and, therefore, revitalization of this area is important for it to become a cohesive part of the city. The quality of public spaces has been improved in recent years due to new investments into architecture. New attractive buildings have been constructed:



Figure 1, 2, 3, 4.  
Photographs taken in the discussed area



Figure 5.  
Location of the Student Centre in the context of the structure of Katowice and its connections with the surroundings

Museum of Silesia, International Congress Centre, Traffic Circle of Arts. Likewise, a new library of the University of Silesia has been built at the campus sites. One of the advantages of its location is easy access to public transport. The walking distance to the railway station is about 10 minutes, whereas the tramway system is available in Warszawska Street, in close vicinity of the area subjected to the elaboration. There is also a bus stop in Korfantego Street, from which busses serving the Silesian Agglomeration are available. DTŚ (Polish acronym for: Perimeter Motorway) running south of the campus provides connections to the neighbouring cities. The layout of the streets grid and houses constitutes the viewing axis for people present at the campus, from where the shaft of Katowice Coal Mine is also visible, and space still available for the construction of a dominant which could be seen from Korfantego and Damrota Streets, as well as from the square in front of the railway station.

#### Means and methods of revitalization

In the context of revitalization, the improvement of the attractiveness of the campus area is essential, and, in consequence, architectural design of sites joined to a sequence of attractive public spaces along the Rawa river boulevards, accessible from the downtown of the city. Contemporary, multi-functional university complexes can not only serve the academics and intensify student life. Their facilities can serve local community and be used for other means of education, such as youth activities, science popularisation or university of the third age [6]. The creation of an academic quarter must involve the coordination of functions, spaces, economy and society. Important aspects that should be considered in the creation of a student centre are: stimulation of public space connecting the campus with the downtown, possibility of performing diverse activities in this space and at housing settlements, and, last but not least, academic

buildings surrounding this space.

The concept assumes the formation of modern public urban spaces, compact housing settlements intertwined with service facilities and academic buildings. Furthermore, other important aspects to be considered are: joining of the spaces along both banks of the Rawa river, forming places of activities for students and housing occupants, connecting the campus to existing public spaces, and creating active frontages.

#### 4. RESULTS – URBAN CONCEPT OF REVITALIZATION

High quality spatial management of the Integrated Student Centre and its connection to the neighbouring public spaces of the downtown provide opportunities for enhancing the attractiveness of the Rawa riverside zone and turning it into a high-rank urban space, which can have a direct impact on the image of the city of Katowice and University of Silesia, encouraging, at the same time, the inhabitants to visit the Campus. “Academic Square” will not only function as a foreground to academic buildings, but also as a place for meetings, evoking a number of positive associations and sensations, enriching the image of Katowice as an academic city. This area will function as activity space for students and occupants, in line with the concept of “an open university”. The space of the academic quarter is, among other elements, shaped by the viewing axes from the City Square, Damrota Street and new seat of Museum of Silesia. Due to such course of action, legible sequences of pedestrian passages will be formed. To secure the attractiveness of the newly managed space, it is important to follow a precise order of action. At first, the space offering possibilities of various activities for the public should be formed, next, it should be enclosed and supplemented with active frontages, and, finally new buildings designed [4].

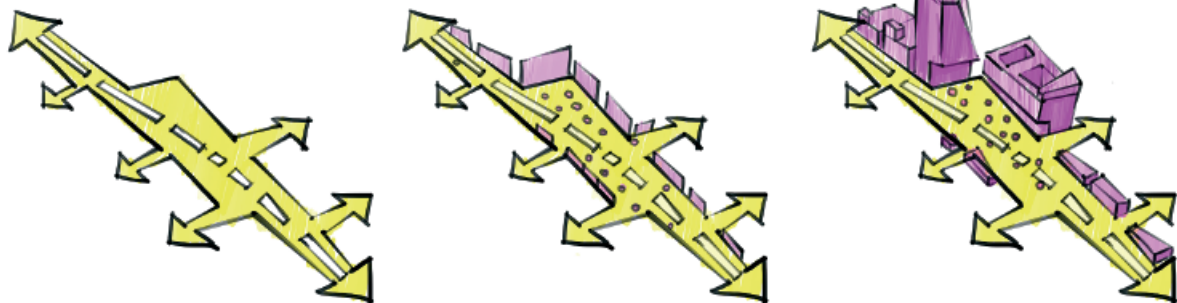


Figure 6.  
Order of space formation

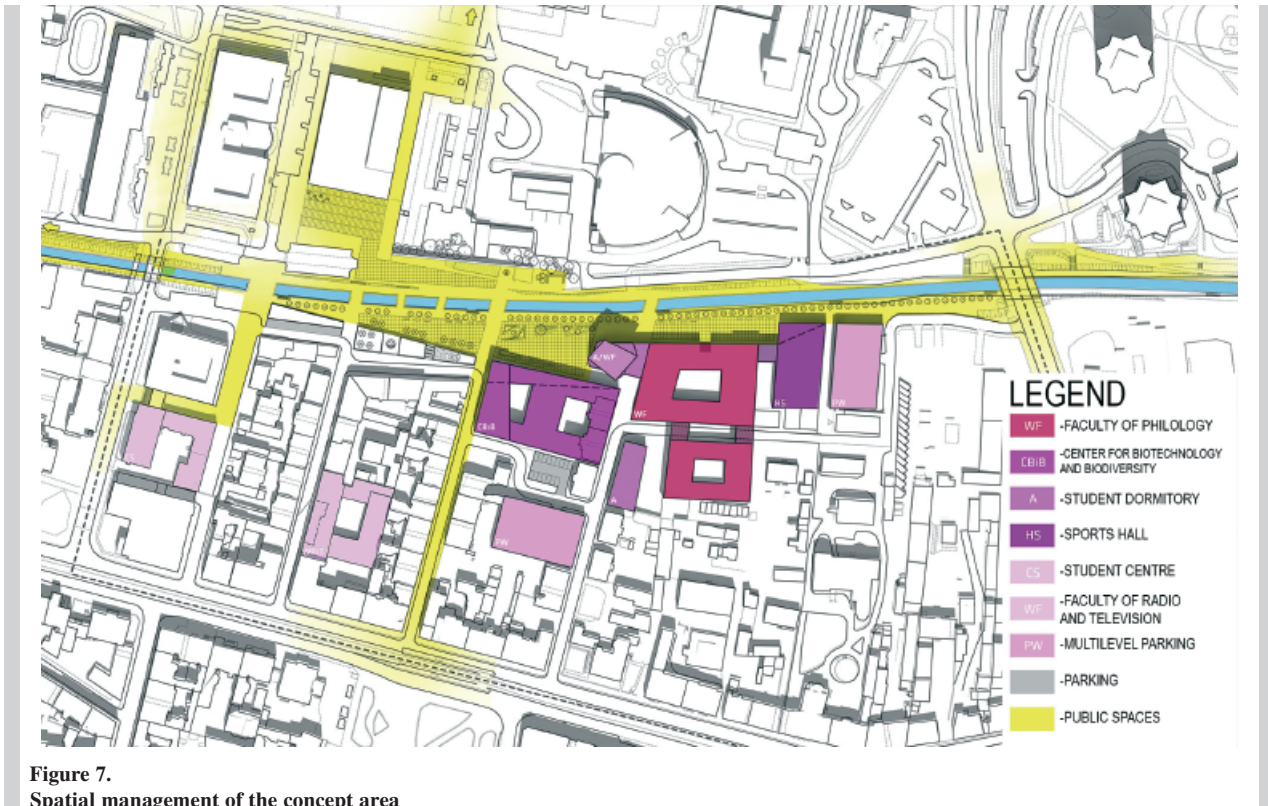


Figure 7.  
Spatial management of the concept area

Multi-valiant management of the square and possibilities of performing diverse functions: recreation, artistic events venue, plenary events, fountain with water nozzles, seasonal ice-skating rink, concerts, teaching in the open air, exhibitions, workshops, etc. The pavement must be formed in a manner enabling the assembly and access to a movable scene[14].

Active functioning of the student square depends on closing the frontages. It is crucial that service facilities, student organizations, catering outlets, open out towards the square, and that the frontages are highlighted by small architecture and greenery. Whereas, the elements of the existing infrastructure that diminishes the attractiveness of the revitalized quarter should be obscured by pergolas and plants.

Academic settlements should be placed around the newly created public space, next to the Rawa river, whereas, transport services inside the quarter should be removed. The building of the Faculty of Philology is situated at the frontage running along the Rawa river boulevard, with an atrium connected to the square. Together with a tower block, housing the academic dormitory, it will close the viewing axis from the city square. There are connections to the catwalk leading to the sports hall and a multi-level parking lot. The building of the Centre for Biotechnology and

Biodiversity is located at the southern frontage of the square and connected to it by means of arcades and an atrium. The student dormitory (also for foreign students) is the tallest building, also functioning as a landmark of the quarter. It is easily accessible due to its visual availability at the viewing axes. The entrance is situated at the Faculty of Philology and connected to the sports hall.

The existing pedestrian routes should be preserved, but, nevertheless, their connections to public bus stops improved. To facilitate car traffic in the area, it is necessary to build two multilevel parking lots, located among the existing buildings, whereas, the present parking lot along the Rawa river should be demolished to improve the functionality of its boulevards [15].



Figure 8.  
Visualization from a bird's eye view

The advantages of compacting and creating the academic quarter are the following:

- Traffic and spatial connections with existing academic and culture sites in the city (National Symphonic Orchestra of the Polish Radio, “Spodek” entertainment and sports hall, International Congress Centre, Museum of Silesia, downtown parts of the city, Centre for Scientific information and Academic Library, campuses of the University of Silesia and Academy of Economics)
- Improved communication between students and the University
- Noticeable presence of students in the city, thanks to the vicinity of dormitories to cultural institutions and the campus)
- Integration of the existing academic sites belonging to different universities into one functional and spatial complex
- Increase in the number of students
- Intensification of student life and cultural life of students and inhabitants
- Enhanced attractiveness and competitive advantage of Silesian universities
- Improvement of the integration of the academic environment.

#### 4. RECAPITULATION

The workshops finished by selecting the concept elaborated by “Atelier PS” architectural design office as the best (Marek Skwara, Mirosław Polak, Michał Jadczyk). According to the Committee’s opinion, their design elaboration was well-suited to be continued at the next stage of the workshops. Nevertheless, the concept described in this paper was assessed as the second best in consideration of the number of points, and in the course of the discussion the jury detected a number of similar solutions and considered them as recommendations for further development [10]. The effect of the second stage was the introduction of changes in the local spatial development plan, which, at the time of writing this paper, is still at the phase of the assessment and resolution procedure.

It should be noted that, during the second stage of the elaboration, a team of British students supervised by Professor Nawratek undertook the same task, upon the invitation of the University of Silesia [16]. The team proposed the construction of student dormitories in the area subjected to revitalization, but leaving the dispersed faculties as they are, to provide

the conditions for better integration between students and local communities. However, this solution did not convince the Municipality and the University authorities, so the concept of creating an academic quarter was not abandoned.

The revitalization of the downtown areas involving the creation of an integrated student centre poses opportunities for the regeneration of degraded sites, integration of student life with the city and its inhabitants, improvement of the image of Katowice. The presence of the academic centre will not only provide a competitive advantage for the city, but also possibilities of further growth [12]. The student centre and the campus integrated with the downtown site are supposed to be the next big urban development endeavour, the implementation of which we will be able to observe and assess in the times to come.

#### 5. CONCLUSION

The elaboration of the concept was possible thanks to the invitation to the workshops issued by city architect of Katowice – Stanisław Podkański, Katowice Municipality and University of Silesia. The Dean of the Faculty of Architecture, Silesian University of Technology, professor Zbigniew Kamiński, appointed the following team: Michał Stangel, Adrian Zięba, Filip Piaścik. There were also two other teams participating in the workshops upon the recommendation of SARP (Polish Association of Architects), another team representing our Faculty, a team from WST (Tertiary Technical College), and PA NOVA Stanisław Lessaer design office, which did not take part in the competition as such, but prepared a local spatial management plan for the area. The winning team was “Atelier PS” – Mirosław Polak and Marek Skwara.



**Figure 9.** The authors team in front of the design concept, together with the city architect of Katowice – Stanisław Podkański (left), and the dean of Faculty of Architecture, Silesian University of Technology, prof. Zbigniew Kamiński (right)

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