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Adaptacja obiektów przemysłowych dla celów sportu

Rozprawa doktorska

STRESZCZENIE
SUMMARY

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SUMMARY

- **Title.**

Adaptation of post-industrial facilities for sport purposes.

- **Presentation of a scientific problem.**

The phenomenon of the formation of post-industrial areas and objects and the processes of their adaptation to new functions have been the subject of scientific research for many years. The literature on this subject is very rich (see the state of research and bibliography). Adaptations of post-industrial facilities for commercial, office, cultural, tourist and residential purposes are most often described. Sport as an accompanying function, or sometimes the main one, is a topic rarely discussed in the scientific literature and studies on the conversion of land and facilities, although more and more often examples of the use of brownfields and industrial facilities for sports purposes can be found.

The subject of this work are adaptations of post-industrial facilities for sports, including those that can be grown without infrastructure specially designed and built for this purpose, such as sports halls, stadiums or swimming pools.

The scientific problem is the lack of answer to the question whether the adaptation of objects and post-industrial areas for sports purposes, including urban sports, may be a separate direction in the process of their functional transformation and whether there are regularities accompanying this phenomenon.

- **Justification for the choice of topic.**

Taking up the topic of adaptation of post-industrial facilities for the purposes of sport as a subject of research work is due to three reasons:

- the first is the author's many years of sports experience related to with practicing climbing (including urban climbing) and professional experience related to the functional transformation of areas and facilities, including especially post-industrial ones;
- the second is the observations related to the speeches at scientific conferences and seminars. During them, the author drew attention to the discrepancy between the scale of the occurrence of the phenomenon of urban sports and a small number of scientific studies devoted to it;
- the third are numerous examples of the adaptation of areas and facilities, especially post-industrial ones, for the purposes of sport, which have not been the subject of separate research works devoted to them in the discipline of architecture so far and urban planning. Many of them are located in Upper Silesia, where the author lives.

- **The state of research.**

For the purposes of this work, the issues of the research conducted so far have been divided into two areas:

- the first area concerns the problems of transformation of facilities and post-industrial areas and has been divided into three fields:
 - ✓ transformation of post-industrial areas
 - ✓ revitalization as a tool supporting the transformation processes of post-industrial areas
 - ✓ the role of post-industrial objects in the landscape
- the second area is related to sports and recreation in urban areas, including facilities and in post-industrial areas, and has been divided into two fields:
 - ✓ the role of sport and recreation in urban spaces
 - ✓ use of post-industrial areas and facilities for tourism and recreation

- **The scope and research field of the work.**

The subject of research is the phenomenon of adaptation of post-industrial facilities for sport purposes. With particular emphasis on sports disciplines called urban sports. During the research work, their definition and classification were formulated. The history of the development of selected disciplines of urban sports as well as places and facilities for their practice was also presented.

The thematic scope of the work covers the disciplines of architecture and urban planning. The research topic is connected with technical, functional and cultural issues and social, resulting from the conditions resulting from the adaptation of post-industrial facilities for sport purposes. Technical issues related to are the structural conditions for adaptation to new functions. Functional issues concern the adaptability of objects to adaptation as well as the safety and quality of functioning. Cultural issues concern related determinants with the preservation and protection of the elements of material cultural heritage. Social issues are related to the role of sport in the integration processes and counteracting the phenomena of exclusion.

The territorial scope of the work covers the Śląskie Voivodeship, within which there are areas that have been subjected to dynamic industrialization processes. The parallel occurrence of mining and many branches of industry, as well as the processes of their transformation, have resulted in the fact that in the Śląskie Voivodeship we can find probably one of the largest differentiation of the types of post-industrial facilities in the country. Therefore, the scale of the phenomenon that is the subject of research may also be the largest here.

The time scope of the work covers the years 1989 - 2020, because 1989 was the year of the beginning of the transformation of the economy, and thus also the beginning of the mass appearance of the above-mentioned objects.

The research field of the work are examples of completed adaptations of post-industrial facilities for sport purposes. Including examples of adaptations implemented in the area of the Silesian Voivodeship, and created after 1989.

- **Hypothesis and research questions.**

Based on his own research and experience, the author formulates the following research hypothesis:

Adaptation of post-industrial facilities for sport purposes may be a separate direction in the process of their transformation.

Research questions:

Question 1. Are there any specific physical features and location conditions of post-industrial facilities that predispose them to be adapted for sport?

Question 2. Can the scale and types of transformations related to such adaptation affect the physical features of the object?

Question 3. Do such adaptations require interference with the structural elements or technical installations of the facility?

Question 4. Can these kinds of adaptations be of behavioral relevance and protection of tangible post-industrial heritage?

Question 5. Can such a direction of adaptation of post-industrial facilities be used in the process of transformation of degraded areas?

Question 6. Are the interventions related to such adaptation reversible and susceptible to a possible subsequent change of function?

Question 7. Can such adaptations be adapted to function in conditions of constraints, e.g. related to the SARS-CoV-2 virus pandemic?

- **Research method.**

In view of the previously presented hypothesis, the research questions posed require the establishment of a research plan that includes four interdependent stages:

- analysis of literature and other sources of knowledge
- field research
- interviews
- synthesis of results and inference

- **Examples of the use of sport in the processes of functional transformation of facilities, including post-industrial facilities.**

Functions related to sport can have a positive impact on the forms and ways of using space and objects, also in the processes of transformation of areas that have been affected by various types of degradation phenomena. The paper presents 24 contemporary implementations from different countries that show how sports, including urban sports, are used in the processes of giving new functions to objects with different primary functions.

Therefore, the examples were divided into two groups for which synthetic Information Cards were created. The first group includes examples of functional transformation of

infrastructure facilities of various types. The second group includes examples of functional transformation of post-industrial facilities.

- **Research on selected objects.**

40 objects and areas have been identified in the area of the Śląskie Voivodeship with various primary functions that have been adapted to sport. Among them, 31 are post-industrial and 9 sites and the areas in the past served functions not related to industrial activities.

The list includes selected areas and facilities that allow you to practice sports in a competitive or recreational sense. The list does not include areas adapted exclusively for recreation, such as post-mining reservoirs serving as bathing areas and areas where physical activity has been limited only to recreation, e.g. due to the protection of resources related to the succession of the natural environment.

Taking into account the definition of a post-industrial area mentioned in the work, the definition of a post-industrial facility, the definition of sport and urban sports as well as the territorial and time scope of work, 8 objects for field research were identified in the area of the Śląskie Voivodeship.

- **In-depth research.**

Three objects from the group of objects that had previously been the subject of field research were selected for in-depth research. The purpose of in-depth research is to identify key issues that may be the subject of further research, and to obtain empirical data for the development of case studies. The objects, built before 1945, are a remnant of the former Hajduki Chemical Works and were included in the Municipal Heritage Register of Chorzów. They have been fully adapted to the new functions and enable cultivation 7 sports. They form a team of three functionally and physically integrated facilities, in which the project called Freestyle Park is located. The facilities are located on the premises of Invest Park Hajduki S.A., which owns them.

- **Case studies of objects selected for in-depth research.**

As mentioned above, post-industrial facilities adapted for the needs of Freestyle Park are located in Invest Park Hajduki S.A. (hereinafter IPH). Currently, on the premises of IPH there are 20 facilities adapted to new functions, in which almost 100 companies representing over 14 industries are located.

Companies from the sports and recreation industry have been operating at IPH since 2014. Sports and recreational functions occupy a total area of approx. 3600 m² and are located in 5 facilities. The Escape Room Loft and the Hajduki Shooting Range were located in two facilities partially adapted to the needs of sports and recreation, and three facilities were fully adapted to the needs of the Freestyle Park.

The Freestyle Park sports and recreation center is a private, commercial enterprise. Works related to the adaptation of three post-industrial facilities were carried out in stages in the years 2014 - 2016. Two adjacent buildings of the former boiler house and the adjacent building of the former workshops were connected with the newly created

connector. They form a complex of multi-storey buildings, in which the sports and recreational functions are accompanied by complementary functions. The level of advancement of the sports and recreational infrastructure enables both practicing sports, including urban sports, and practicing physical recreation.

- **Conclusions.**

Detailed conclusions from the conducted research allow to state that:

- physical features and locations of post-industrial facilities predispose them to be adapted for sport;
- the scale and types of transformations associated with such adaptation may affect the physical characteristics of objects;
- such adaptations may, in special cases, require interference with the construction elements of the facilities and their technical installations;
- such adaptations may be important for the preservation and protection of tangible post-industrial heritage;
- such a direction of adaptation of post-industrial facilities can be used in the process of transformation of degraded areas;
- technical and organizational interventions related to such adaptation are mostly reversible, and the objects are susceptible to a possible subsequent change of function;
- such adaptations can be adapted to function under conditions of constraints, e.g. related to a virus pandemic SARS-CoV-2.

The analysis of the collected research material allows for affirmative answers to the research questions posed, and therefore for a positive verification of the research hypothesis.

The direction of adaptation of facilities and post-industrial areas for sport-related purposes should be, as separate and equal to other directions of adaptation, taken into account in strategic, program and planning documents of national, regional and local range. The discrepancy between numerous examples of the adaptation of post-industrial facilities for sport purposes and a small amount of space devoted to this phenomenon in the scientific literature leads to the conclusion that this phenomenon may be the subject of further research. The research material and conclusions from the work can be used to continue the research in order to better understand and describe the features characterizing the phenomenon of adaptation of objects with different primary functions for sport.