

MAŁGORZATA MELGES*, HUBERT MELGES**

BUILDINGS IN CONSERVATION AREAS IN CRACOW
– TECHNICAL AND AESTHETICAL SOLUTIONS ON
EXAMPLE OF BUILDING OF ST PADRE PIO'S WORKS
AT SMOLEŃSK 4 STREET

BUDYNKI W STREFACH OCHRONY
KONSERWATORSKIEJ KRAKOWA – ROZWIĄZANIA
TECHNICZNE I ESTETYCZNE NA PRZYKŁADZIE
REALIZACJI BUDYNKU DZIEŁA POMOCY ŚW. OJCA PIO
PRZY UL. SMOLEŃSK 4

Abstract

While designing new structures in urban conservation areas, one should: respect the context of a place, the character of a building resulting from the urban analysis and a variety of existing urban and historical themes and details. One example of these issues is the newly established facility in Krakow at 4 Smolensk Street. It is the next stage of the expansion of the Holy Padre Pio's Work Foundation and it will be open for public use. The building is located in a conservation area of the city. Processes: the design and realization of the investment were subordinated to the aforementioned criteria, but in a manner congruent with contemporary design and technological solutions.

Keywords: conservation thought, renovation, infill buildings, revitalization

Streszczenie

Projektując nowe obiekty budowlane w strefach ochrony konserwatorskiej miast, należy: uszanować kontekst miejsca, charakter zabudowy wynikający z analizy urbanistycznej oraz różnorodność istniejących wątków historycznych i detali. Przykładem wymienionych zagadnień jest nowo powstały obiekt w Krakowie przy ul. Smoleńsk 4. Stanowi on kolejny etap rozbudowy Dzieła Św. Ojca Pio i przeznaczony zostanie na cele użytku publicznego. Obiekt usytuowany jest w strefie ochrony konserwatorskiej. Procesy: projektowy oraz realizacyjny inwestycji, podporządkowane zostały wyżej wymienionym kryteriom, jednak w sposób przystający do współczesnych rozwiązań projektowych i technologicznych.

Słowa kluczowe: budowla, kontekst, technologia

* Ph.D. Eng. Arch. Małgorzata Melges, Institute of Structural Design, Faculty of Architecture, Cracow University of Technology.

** Ph.D. Eng. Arch., Hubert Melges, Institute of Urban Design, Faculty of Architecture, Cracow University of Technology.

1. Cracow – a city inscribed on the UNESCO list

In the scale of our country Cracow is considered priceless when it comes to its historical past and the accumulation of material culture. Here, as in hardly any other city, you can visually encounter a one hundred-year-old urban and architectural stratum. It is no wonder then that this royal city, a symbol of the Polish state and the place of coronation and royal tombs, was inscribed as one of the first cities on the UNESCO World Cultural and Natural Heritage¹ list in 1978. Since 1257, when Boleslaw the Chaste gave it the rights, the city has been developing, gathering talents, skills and experience of successive generations of builders and artists of many disciplines. In this way, an excellent urban planning idea has survived hundreds of years and today serves as an excellent model. But to what extent does it meet the requirements and various (how different from the ones in the past) needs of the twenty-first-century man? How far can these new needs be adapted to the existing and historic reality?

2. Monument protection and conservation development in Poland throughout time

It should be mentioned that the royal city of Krakow also served a special role in monument protection in the history of the Polish nation and especially, in the partitions. However, it can be admitted that the first steps in conservation in Poland took place in the mid-seventeenth century after the Swedish wars. From the point of view of history of monument conservation, one can distinguish five phases corresponding to the periods from 1840 to the last one in 1945 after World War II,² when massive war destruction in Poland forced Polish conservation ideas to develop a new general concept. It took into account all restorational treatments, as well as the reconstruction of entire complexes of historic buildings. After World War II, from 15 February 1962, the *Act for the protection of cultural heritage and museums* came in force. Since 17 September 2003, there is the new Act of July 23, 2003 on the conservation and care of monuments, which repealed the existing law in force for over forty years.³ Bearing in mind the wealth of ideas in conservation in Poland and without going into an analysis of its development, but only to emphasize the climate in which the foundations of our thinking on conservation, it seems appropriate to recall the words of Artur Potocki in 1825 during the Sejm of the Republic of Cracow, addressed to the Governing Senate: "... Order in the country and the good name of the residents provide one of the important objectives of any government. I am glad therefore, that we care about them well, however, there still remains a holier obligation to fulfill (while we are debating in Cracow), guard and preserve the monuments of the past with responsibility. In this classic land of native memorabilia,

¹ The convention concerning the Protection of World Heritage was adopted in Paris in 1972. The Paris Convention is one of the most universal normative acts that were introduced by the United Nations system. Adam Bujak, *World Heritage. Poland on the UNESCO list*, Biały Kruk, Kraków 2004, 6.

² It was assumed that the individual conservation periods are distinguished on the basis of George Frycz's research, [1, p. 47].

³ "...The new statutory regulation concerning monuments in the very name divides the whole sphere of activities devoted to their preservation into two basic ranges: 1) monuments protection and 2) the care of monuments" [2, p. 9].

we were surrounded with monuments of great times, and the future taught stones how to speak. I'm afraid that one day our successors would not cry for us as we have done a lot for convenience and our own benefit and have not done anything for the past and for what we have inherited in the monuments" [1, p. 47].

3. Preparatory processes for project activities in conservation areas

If a necessity or possibility of construction (patching losses or free places with infill buildings) or of making any renovations or revitalization occurs in conservation areas, it is necessary that these works are performed with the best possible creative and implementing possibilities. These must be guided by the idea of special respect for tradition that reflects the past and cultural identity. These requirements and challenges typically require careful urban and architectural discernment, as well as many of the necessary arrangements, including ongoing consultation with the conservator. Only as a result of these arrangements, is it possible to obtain permission to conduct these works issued by a competent restorer [3, item 39]. We briefly highlight here the atmosphere related to the design and the responsibility of the designer in such a delicate matter, which conditions of such a historic city rich in the traditions of conservation of the Cracow School of Conservation create.

4. The building of St Padre Pio's Works at 4 Smoleńsk Street in Cracow, the types of functions and location of the building in the context of the existing historic building and architectural reference to the Smoleńsk Street archetype

The conclusion is that all design decisions must be repeatedly reviewed and considered. The authors of the design⁴ and construction of the public building at 4 Smoleńsk Street in Cracow, in order to exchange experiences, wish to share such reservations and thoughts. The building was located behind the wall and within the convent of the Sisters of St. Felix of Cantalice (Felician Sisters). It has a very diverse function, designed for the purpose of serving the poor, the needy and the homeless in various ways. The investors of the investment are two congregations: the already mentioned Congregation of the Sisters of St. Felix of Cantalice (Kraków, 6 Smoleńsk Street) and St Padre Pio's Relief Work of Help St. Padre by the congregation of Friars Minor Capuchin (11 Loretańska Street in Cracow). The basic functions of the building include: a kitchen and social diner with a cold store and food warehouse, bath with storage of clothes for the poor, two laundry rooms (laundry for the poor and laundry facilities run by the staff of the building), medical clinic, rooms for teaching and training activities, administrative rooms and offices. The building was constructed as a free standing building with three storeys, a basement and an attic. It partly adheres to the household buildings behind the wall of the convent along Smoleńsk Street. In the surroundings of the building on the south side, there is a local building block with the urban dominant? of the middle segment of the Krakow Philharmonic Hall located at 18

⁴ The authors of the project are the architects: Hubert Melges, Małgorzata Melges, Przemysław Bigaj and Paweł Mika (staff of the Faculty of Architecture at the Technical University of Cracow).

Straszewskiego Street and 1 Zwierzyniecka Street⁵. In the immediate vicinity of the area of this object, on the opposite side of Smoleńsk street, there is the building of the former Museum of Science and Industry built in the years 1912–1914 (now the building is used by the Academy of Fine Arts)⁶. From the west, within a distance of about 100 meters, there is a neo-Gothic church of the Immaculate Heart of the Blessed Virgin Mary with the entrance through the gate in the wall at Smolensk Street (which is also the fencing wall of the convent)⁷.



Ill. 1. View of the building with the church in the background from the perspective of Smoleńsk Street

5. Stages of design activities in accordance with the intended utilitarian function of the object

In the context of this historic part of Kraków and with reference to it, first a design concept maintaining the tradition of monastic buildings was created. A kind of “quarter building” was designed with a glazed courtyard: the atrium, reminiscent of the traditional monastic

⁵ The building of the Krakow Philharmonic Hall with a distinctive mansard roof built in 1931 was designed by Cracovian architects Józef Pokutyński (1859–1929) and Stanisław Filipkiewicz (1885–1925).

⁶ The architects of the Museum of Science and Industry were: Tadeusz Stryjeński (1849–1943) i Józef Czajkowski (1872–1947).

⁷ The designer of the church was Feliks Księżarski (1882–1884).



III. 2. View of the building from the depths of the convent garden

viridarium, glazed at the third level. The building's projection is as mentioned, a rectangle with an inner atrium from the south-west. The side of the rectangle is extended and completed with a semicircular form.

This shape is the dominant of the building, and in a horizontal projection it optimally fits the shape of the building and at the same time it fits the transportation system around the building. It must also be noted that at the design stage comprehensive arrangements concern all the functions of the building and its infrastructure. However, from an architectural point of view, apart from all the other arrangements, the most important element of those consultations was to develop and establish the form of the building, which after numerous drawing simulations could only be finally approved by the Regional Monuments Conservator. We should also mention that on the basis of the "decision on establishing the building conditions", the main determinants of location, dimensions, heights and formal ones related to the building were clearly defined. The building had to meet the requirements of performing several complex tasks addressed to different groups of people of special character. At the same time the building had to be constructed in such a way (have such construction and planning solutions) that none of these groups had a direct contact with each other (for example, kitchen facilities with the bath, laundry, doctor's surgeries or rooms used for educational programs). In particular at the design stage it was necessary to take into account the fact that the building would be designed primarily for poor people, sometimes living on the border of the so called margins of society. The scale and form of the building is a continuation of the size and form of the existing building at Smolensk Street and relates to the tradition of monastic buildings.

6. Solutions of external and internal communication of the object (elimination of architectural barriers for people with disabilities)

Access and entrance to the building leads from the lane on Smolensk street. In the case of the road, the communication entrance to the monastic property will be conducted as a five-

meter wide pedestrian and road way, along the pre-existing monastic way, taking into account the adjustments to adapt to the parameters of a new building. It should be noted that this road also serves as a fire route as well as for delivery purposes. The so called “turning point” for cars is incorporated in it. Entrances to the building and independent exits are situated on the east, from the courtyard of pedestrian communication and adjacent to the said road communication. For safety reasons pedestrian communication is separated from the circular communication with a fence and gates. Two separate entrances to rooms with different functions and an independent exit from the canteen lead from that part of the external communication of the building. It should be stressed that the building has been adapted to the needs of people with disabilities and therefore the following aspects were taken into account: width of the main entrance openings, width of corridors, levels of the ground floor with external levels of land development, toilets with the requirements for disabled people and a special universal cubicle with a shower installed in a bath with shower cabins, toilet and washbasin for disabled people. There are also properly adapted elevators with inscriptions in Braille. Outside, next to a small car park for five vehicles, a separate parking space for a disabled person was allotted.

7. Cubature and types of functional zones and sectors in the facility

In order to illustrate the approximate scale of the building, the following main numerical parameters are provided. For example, the building area with the inner atrium is 655 m², usable surface is 2432 m² and the cubature is 9733 m³. The building was divided into five separate zones. These zones are separated on five floors. For the operation of the building divided into individual zones, the essential role is that of the ground floor area. Here the main entrance is located with a hall and the so called “control wicket” or the information-reception area and a control point in the building (as it is needed for people with different credentials for obvious reasons). As already mentioned, the building has two entrances located in the eastern part. One of these entrances leads to the bath area located in the basement and a medical clinic on the first floor. The second entrance is provided for people who use a social diner on the ground floor and a training area on the second floor, as well as for staff and volunteers having room in the attic. The third door on the east side provides a collision-free exit from the social diner (with a barge crossing to the pavement at Smolensk street). In the exit zone there are toilets and a toilet for the disabled. On the west side there is a door with an entrance to the so called delivery courtyard which among other things provides food products to the warehouses. In this part of the courtyard there is also the door for the staff leading through the annex, where a social room and a household exit of the kitchen are located. Independently, in the southern part of the building, there is the emergency door coming out of the universal mobile space room, which can act as an internal chapel. The ground floor, mostly functions as the kitchen with a canteen. It is anticipated that about three hundred meals a day in a 50-people cycle (because that many people could be seated for a diner at one time) will be given out. The kitchen has the necessary equipment and technological, health and communication solutions concerning processes of food preparation and dishwashing. In the central part of the building there is a multi-purpose space “atrium” covered with a glass roof.



III. 3. Glazed atrium at the level of the second floor



III. 4. Fragment of the illumination of the atrium

In the area of the first floor, surgeries for individual specialists are arranged, such as a cardiologist, dermatologist, internist, surgeon, gynecologist and dentist. For the smooth functioning of the clinic, there is a separate room to test urine, blood, etc., and a room for pressure measurement. In this section there is also a reception desk, waiting room, internal storage of medicines, cloakroom, separate toilets for patients together with a toilet for a disabled person and independent toilets for staff, a social room for staff and an office for the head doctor. The second floor sector is devoted to the function of teaching and training along with supporting spaces like a lobby with reception, cloakroom, self-service cafe, social room for staff, toilets and sanitary appliances for the disabled and independent ones for the personnel. Above part of the atrium a multifunctional footbridge connects the opposite sides of the building: the north with the south.



III. 5. View from the communication bridge at the atrium in the direction of the classrooms

In the sector of the attic there are office rooms, a handy office magazine, social rooms and toilets including one for a disabled person. In this part of the attic there is also a separate gas boiler room. It supports a universal system of building heating using heat pumps and solar collectors located on the southern slope of the roof on the south side (in a part of the atrium). In this way the disfigurement of the southern elevation with solar panels was avoided. In the basement zones there is a bathroom with shower booths including a cabin for a disabled person. There is also a zone for storage facilities with a supply of clean clothing. In addition, a special sanitary-hygienic room for separating people with the so called “isolated incident”. In this section there is also a laundry room with a towel drying-room. For people in need, an independent laundry room with a dryer and laundry ironing was arranged. Additionally, in the basement area a technical room with a heat pump for heating the building and preparing hot domestic water was located. In a separate basement area there are also food warehouses and cold storage. This part is supported by a bisected service lift. For the purposes of the kitchen an independent laundry room for towels and such items as aprons (clean and dirty) is provided.

8. Construction issues – types of technologies used

The building was built in mixed technology: the basement and ground floor in a monolithic and traditional brick technology. The ceilings are made of reinforced concrete technology (based on the external walls, internal structural walls and reinforced concrete pillars in the atrium). Due to the nature and strength of the soil (glacial valley of the Vistula) for the foundation of the building, a monolithic reinforced concrete plate with waterproof concrete was used.

9. Conclusions – aesthetical issues

The building is topped with a hip roof (resembling the mansard type) resembling the archetype of characteristic adjacent buildings (the building of the Philharmonic Hall, the building of the Academy of Fine Arts). The main rationale for determining the form of the building was the compositional and scenic aspects, dimensions and constituent materials. The front elevation facing Smolensk street resembles the building of the Academy of Fine Arts by the use of clinker brick and stone for the wall facing.

The continuation of the crenellation of the convent's wall is introduced in the form of a cornice on the front elevation. The roof was covered with patina copper double seam sheet metal.

Characteristic elements of the mansard roof are stylized roof dormers with wooden windows; the style of the division corresponds to the historical style of windows in the frontages of Smolensk street. As it turns out, these basic elements and finishing details of the roofing lead to the overall effect that even the very modern building, in terms of technology, is still integrated into the whole of the street – and monastic buildings.



III. 6. The main facade facing
Smolensk street



III. 7. Fragment of a part of the roof dormer covered
with plate

References

- [1] Małachowicz E., *Ochrona środowiska kulturowego*, tom 1 (Protection of the cultural environment, vol. 1), Państwowe Wydawnictwo Naukowe, Warszawa 1988, 47.
- [2] Golać R., *Ustawa o ochronie zabytków i opiece nad zabytkami (Act on the conservation and care of monuments)*, Zakamycze 2004.
- [3] *Prawo budowlane i inne teksty prawne (Construction law and other legal texts)*, C.H. BECK Publishing House, Warszawa 2007, item 39.