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# Brutalism in Poland on the Example of the Architecture of Krakow

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The impact of brutalism on Polish architecture has not been recognized. Therefore this academic problem still needs thorough researches. The relevant study results are presented in the article. They are claimed to be precursory and they bring new knowledge to the history of architecture in the 20th century. Brutalist style became popular in Western Europe in the late 1950s, then spread all over the world and passed in the 1970s. Brutalism in Polish architecture was developed later than in the rest of the world and it did not become such a dominant trend as in other countries, however many elements and forms of this style could be also seen in Poland. Research conducted by the author in recent years led to formulation and classification of brutalist attributes and elements in world architecture. This systematics has become the base for further research of Polish architecture. In this article, the author focuses on the architecture of Krakow, i.e. the city, where brutalist influences were particularly evident. He has choosen five the most representative buildings from the period 1956-1989 and analyses their forms and spatial arrangement. After that the author describes the key features that connect examined buildings with brutalism, such as: heaviness, massiveness, severity, expressiveness, exhibition of construction and internal functions in architectural form, chiaroscuro effects. Besides, the brutalist elements of the buildings are also examined; these include: three-dimensional facades, overhanging solids, rhythmically repeated modules, staircase towers, pedestrian bridges and courtyards, rough textures of concrete, brick and plaster. Finally the author distinguishes several ways of devaluation of brutalist buildings, which are unfortunately evident in Krakow. He emphasizes the great importance of the relevant architecture heritage protection, as the brutalist architecture is still underestimated in Poland.

KEYWORDS: brutalism, Krakow, Polish architecture, theory and history of architecture.

### Introduction



Journal of Sustainable Architecture and Civil Engineering Vol. 1 / No. 10 / 2015 pp. 40-49 DOI 10.5755/j01.sace.10.1.9980 © Kaunas University of Technology Brutalism was present in the world-wide architecture from the end of the 1940s to the 1970s. It was born in Great Britain and was called New Brutalism. Its main advocates were architects Alison and Peter Smithson and a critic and historian of architecture Reyner Banham. They were convinced of necessity to return to the roots of modernism and the deep reform of this trend. They also opposed to post-war tendencies which headed for decorative modernism called New Humanism. The Smithsons preferred raw aesthetics and simple forms and emphasised ethical values of architecture, such as sincerity in exposing materials and structure of building. A definition of New Brutalism was included in three points by Banham: "1, Memorability as an Image; 2, Clear exhibition of Structure; and 3, Valuation of Materials «as found»" (1955). According to Werner Nehls "New Brutalism was the first step of the incoming anti-functional architecture" (1967). However it wasn't evident in the forms of buildings designed by the Smithsons at the time. This happened due to the fact that they were

looking for an architecture reflecting everyday life of English society after the end of the World War II. Life conditions were very difficult at that time and the period was marked by the post-war trauma. As Anthony Vidler writes "New Brutalism was born out of the post-war culture of «austerity Britain»" (2011) which marks could be seen in simple and severe forms of the first completed buildings. Much more complex and expressive forms were designed in other countries which were reached by ideas of New Brutalism. These ideas found favourable conditions but were stripped of the Smithsons' ethical assumptions. Thus, New Brutalism as a specific architectural ethic had not stood the test of time and transformed into architectural style. "As it became clear to Banham [...] his desire to characterize and thereby establish a new ethic of architecture called New Brutalism inevitably, in global dissemination, degenerated into a rough concrete style, married to the parallel fashion for megastructures in the quest for «new» monumentality. The ethic, he concluded [...] had indeed become no more than aesthetic." (May 2013)

Another architect who had a particular impact on brutalist aesthetics was Le Corbusier. In his works, symptoms of the rejection of smooth, sterile aesthetics of the machine for the benefit of more complex structures and stronger articulation of solids, which create architectural form, could be already seen at the beginning of the 1930s. Le Corbusier considered that aesthetic doctrine of early modernism became too tight for him. In a way, he distanced from the ideas of functionalism. "My house is practical. I thank you, as I might thank Railway engineers, or the Telephone service. You have not touched my heart. But suppose that walls rise towards heaven in such a way that I am moved. I perceive your intentions. Your mood has been gentle, brutal, charming or noble. The stones you have erected tell me so. [...] By the use of raw materials and starting from conditions more or less utilitarian, you have established certain relationships which have aroused my emotions. This is Architecture." (Le Corbusier 1927) Le Corbusier began to put form before function. He decided to create more sensual and expressive architecture, in which emotional experience played the leading role. He rejected white, box-like buildings for the benefit of sculptural, heavy forms, as it can be seen in Unite d'Habitation in Marseille (1947-1952) and in many other of his post-war buildings.

Brutalist style became popular in Western Europe (France - Le Corbusier, Switzerland - Atelier 5. Italy – Vittoriano Vigano, Germany – Oswald Mathias Ungers) in the 1950s, and then it reached Japan with Le Corbusier's students (Kunio Mayekawa, Junzo Sakakura, Kenzo Tange). Later on, it was popularized in the USA (by Louis Kahn, Marcel Breuer and Paul Rudolph). It took on different forms in each of these countries, because "the nature of brutalism is not a universal entity, but actually quite a regionalist concept" (Parnell 2012). In Eastern Europe, after the World War II, socialist realism style reigned in the architecture, that is why brutalism reached these countries with a delay. However, after the period of architectural aesthetics being imposed by the communist authorities, designers took ideas from the West with euphoria. For example interesting, brutalist buildings appeared in former Yugoslavia. After the earthquake in 1963, many concrete buildings were built in Skopje, among which four brutalist skyscrapers were outstanding, namely, Goce Delcev Dormitories, which were designed by Georg Konstantinovski, Paul Rudolph's student. Besides, brutalism left a stamp on the architecture of former Czechoslovakia, especially after the Prague Spring in 1968. It reached also Baltic republics, where cultural edifices and sport buildings were built in this style, e.g. the Palace of Sports in Vilnius (designed by E. Khlomauskas, J. Kruklis, Z. Landsbergis, built in 1964).

The aim of this article is to prove that brutalist trend was present also in Poland. This issue was absent in former academic works, so far. Neither the studies on architecture in the period of socialism focused on the problem of brutalism, nor the publications touched the subject matter, except of a few publications that included only a brief mention of the brutalist tendencies, as the book on the Polish church architecture by Konrad Kucza-Kuczynski (1991), or in the monograph about the architecture of Krakow in the 1960s by Malgorzata Wlodarczyk (2006). Notwithstanding, the city of Krakow is

particularly important for the development of brutalism in Poland. Therefore, brutalist tendencies in Polish architecture are examined in the paper on the example of Krakow. Buildings in this style were built from the end of the 1950s to the 1980s. Brutalist influences are evident in their forms, although some of the buildings presented in the article include also elements of other tendencies. Five buildings, with different functions and built in different years, have been analysed. Their features and elements showing the bonds with brutalism have been discussed. The author emphasizes also relationship between Polish brutalist architecture and the general brutalist architectural movement in the World. He concludes how important is to protect the heritage of brutalism, which is still underestimated in Poland and is often in poor condition. The author distinguishes several ways of devaluation of brutalist buildings, which are unfortunately evident in Krakow.

### Methods

Deeply rooted opinion that brutalism, as a style of the second part of the 20<sup>th</sup> century, had marginal meaning for the development of Polish architecture, requires verification. However, this objective should be seen in a broader perspective on the global architecture of the period. Therefore, the author of this article had studied literature on brutalism in different countries, including significant book of Reyner Banham "The New Brutalism: Ethic or Aesthetic?" (1966), early articles of Peter and Alison Smithson, monographs on the work of brutalist architects, the newest publications about brutalism (articles in "CLOG" and "October – MIT Magazine", book by Alexander Clement) and many others. Recent research conducted by the author led to formulation and classification of brutalist attributes and elements in architecture over the world. This systematics has become the base for further researches of Polish architecture and comparative analysis.

The main hypothesis assumes that brutalism in Polish architecture was developed later then in the world and it did not become such a dominant trend as in Western countries, but many elements and forms of this style are also visible in Poland. The main aim of the author's research is to determine the impact of brutalist style on projects and buildings of Polish architects between 1956 and 1989. For the purpose of this article such comprehensive task was reduced to the brutalist architecture in Krakow. The author has conducted appropriate research *in situ* and prepared photographic documentation of more than twenty buildings. After the analysis, based on the developed classification of brutalist elements, he has choosen five the most representative buildings from different years of the period under examination. Due to the very limited literature on brutalism in Poland he relied mainly on foreign literature and sought analogies between Polish and international architecture.

## Results

After the World War II, Poland got under the influences of the Soviet Union. For architects, the period of Stalinism meant the lack of creative freedom and implied the necessity of creating in the style imposed by the authorities. After the 20th Congress of the Communist Party of the Soviet Union, the period of Stalinism ended; and when Boleslaw Bierut, the communist president of Poland, died, the breakthrough came in 1956. The so called "little stabilisation" and partly opening on the western culture and art came and proceed for the following years. Polish architects eagerly came back to the ideas of pre-war modernism, which had been forbidden so far. They started to get the information about last tendencies in world-wide architecture, including brutalism, which was reflected in new designs and buildings. It was particularly evident in Krakow, the former capital of Poland and strong cultural center in the southern part of the country. Many talented architects of older and younger generation gathered in this town after the World War II. They were mostly connected with the Faculty of Architecture at the Krakow University of Technology. It was a dynamic university, opening to the world and maintaining many contacts with architects abroad. Thanks to it, Krakow became a city in the avant-garde of Polish architecture. Wlodarczyk notices the characteristic feature of those days architecture in Krakow. "Ideas were derived from European modernism close to brutalism, national Italian school (neo-futuristic trend) and French school (neo-expressionism). There were not so many possibilities to design directly in the International Style." (2006)

Polish architecture was in a difficult situation, despite the rejection of socialist realism, at the end of the 1950s. The role of architect in the socialist country was restricted. From architect-artist he became one of many participants of design-building process. Primarily quantity and not quality was important in project offices, because they were categorized as manufacturing businesses. There was shortage of building materials and available ones were generally of poor quality. In addition, the flow of information and trade press from the West was limited and provided mainly through private channels. It seems significant that in the period of socialism none of Le Corbusier's books was translated into Polish. There should be a greater admiration for the architects who in those difficult times were trying to design original buildings and were guided by innovative ideas.

#### The Biprocemwap office building

Wojciech Bulinski was one of those architects. In the years 1958–1960 he designed a big office building called Biprocemwap, which was completed in 1963 (Fig. 1). Le Corbusier's influences can be seen in this building. Bulinski wrote about his project: "This individual project was for a young architect (just four years after studies) ambitious and extremely difficult. I was fascinated by Le Corbusier's architecture and used a "free facade" with the withdrawal of pillars inside and independent "free plan" (Bialkiewicz, Kadluczka, Zin 1995).

The form of the building consists of three parts. The main block is located at a city square (now partly occupied by a building of a hotel) while the two side wings are parallel to adjacent streets. The main part is seven floors high while the wings reach height of five floors. In order that the side wings would not towered visually over adjacent, historic buildings, the highest floor was withdrawn. Such an approach honouring the existing context was uncommon not only in Poland but also in other countries. It is worth recalling that the global discussion on the role of context in urban environment was started by an American brutalist architect Paul Rudolph (Moholy-Nagy, Rudolph, Schwab 1970). The shape of the main block of Biprocemwap was also a result of analyses of the surroundings. It is not an ordinary rectangular prism but it is slightly bent according to the course of Morawskiego Street. The ground floor differs from the higher floors because it is partially open (There are clear similarities to the icon of brutalism – Unite d'Habitation in Marseille). The structural system of the building is exposed. Round poles in the background and the raw of massive pillars, widening upward as corbusian pilotis, in the front can be noticed. The facade above is made of strips of glazing separated by the lines of ceilings. This horizontal pattern is divided by alternating rhythms of thin vertical ribs made of precast concrete. These elements resemble brise soleil or ondulatoires (used by Le Crobusier in the monastery of La Tourette). The division of the interior into office rooms is reflected by the system of ribs. There is a pavilion with a coffee bar on the roof of the building. Its form is dynamic thanks to curled canopy. The visible constructional and functional structure of building is a typical feature of the brutalist architecture.

Bulinski designed side facades in contrast to the front facade. They are partly massive and windowless. Their grey texture is divided by recessed lines and resembles beton brut. In fact, it is a wall covered with a rough plaster. The architect applied this approach to induce the illusion of concrete surface. Exposed concrete was rarely used in those days, mainly because of low quality of building services. Grey cement plaster with thick aggregate became an ersatz of beton brut for Polish brutalists.



Fig. 1
Wojciech Bulinski, the
Biprocemwap office
building in Krakow,
1958–1963 – view of the
front facade [Photo:
W. Niebrzydowski]

### The Municipal Exhibition Pavilion - Bunker of Art

The first decade after the World War II was a time of raising the country from ruins – reconstruction of industry and providing people with houses. After this period, the authorities decided that the time for facilities ensuring higher needs had come. The end of the 1950s and the beginning of the 1960s brought a mass construction of buildings of culture and art. Architectural styles characterized by emotions and strong, individual forms, such as brutalism, were particularly appropriate. An interesting art gallery was built in Krakow on this wave.

The Municipal Exhibition Pavilion was built within the historic centre of Krakow and close to Planty Park. The project was made by Krystyna Rozyska-Tolloczko in 1959, and the construction was completed in 1965. The building was built in the place of previously demolished historic structures. One of them (eighteenth-century tenement house) survived in a state of ruin, and Rozyska-Tolloczko decided to restore it and join in the form of new building. Such an individual approach to design task was opposite to the modernist inclinations for universal solutions. The quest for "the unique solution to an unique situation" (Banham 1966) was highlighted by many brutalist architects (Paul Rudolph in the project of the administrative centre of New Heaven inserted large neo-Gothic town hall in brutalist mega-structure). The form of the building is very simple – it is actually one large cuboid. Two-thirds of the height of the solid is a windowless concrete wall, above which there is a strip of glazing, and the whole is crowned by a horizontal line of a flat roof. This structure is divided only by the facade of the surviving tenement house and its pitched roof covered with tiles.

The architectural value of the building lies above all in the original texture and sophisticated details. The concrete surface of the facades is a work of art in itself. The sculptor Antoni Hajdecki helped in its design. The concrete walls were poured in specifically shaped formwork. Horizontal formwork boards were set in different positions and trimmed in a different way. Their imprint created a relief extending continuously through the entire building. Three-dimensional treatment of the texture gave expressive result and interesting effect of chiaroscuro. Brutalist architects indulged in experiments over the rough textures of the walls and often applied reliefs in concrete. The solution adopted in the pavilion in Krakow stands out even among the best-known world examples. Banham wrote about brutalism as "an architecture of massive plasticity and coarse surfaces" (1966) and this statement is confirmed by the pavilion. The only accents in the building are two entrances. "One of the entrance portals is a form of concave cutting into the reinforced concrete surface and suggesting that we are dealing with a large solid of concrete, the other one is convex, sophisticated form of a roof." (Kozlowski 2006) The sculptural canopy is particularly interesting and looks like a concrete, curved ribbon which smoothly flows into a bridge leading to the entrance (Fig. 2). Soft, smooth shapes of the roof contrast with the angular, rough texture of walls. The bridge was an element often used in brutalist architecture (e.g. the Smithsons and their "street-decks").

Fig. 2

Krystyna Rozyska–
Tolloczko, the Municipal
Exhibition Pavilion –
Bunker of Art in Krakow,
1959–1965 – the main
entrance [Photo:
W. Niebrzydowski]



It was important to emphasize the aspect of movement and circulation of people.

The Municipal Exhibition Pavilion provoked great discussion. Its avant-garde and distinctive form was a shock for the residents of Krakow. They named the building "the bunker" (such comparisons are accompanied by many brutalist buildings in the world) and this term has clung to it permanently. Today, the official name of the pavilion is Bunker of Art.

#### The Polonia College building

In the 1960s, brutalist style became extremely popular in architecture of universities in the West. This aesthetics was considered to be the most proper for such type of buildings, because it emphasized durability, power and dignity – attributes connected with knowledge and science. "Received as architectural art, brutalist buildings were associated with creativity, individualism, and high intellectual and cultural achieve-



Fig. 3
Dariusz Kozlowski.

Dariusz Kozlowski, Tomasz Mankowski, the Polonia College building in Krakow-Przegorzaly, 1975–1983 – complex composition of the side facade [Photo: W. Niebrzydowski]

ment. Likewise they were appreciated as challenging, enlivening environments able to invigorate the social and intellectual climate of the academic community." (Sroat 2005) This trend reached Poland at the end of the 1960s.

The Polonia College building of the Jagiellonian University in Krakow-Przegorzaly was built in the years 1975-1983 (Fig. 3). It is one of the most distinctive examples of brutalism in Poland, because it has exclusively brutalist features, without traces of other styles. Tomasz Mankowski and Dariusz Kozlowski were its designers. They did not hide their fascination with brutalist architecture - Mankowski was Louis Kahn's student and Kozlowski admired British brutalists. The building consists of four wings, encircling the courtyard, which is the solution often encountered in brutalist architecture. Precursors of brutalism were fascinated by centripetal arrangements, as exemplified by the Smithsons's, John Voelcker's, Leslie Martin's and Colin St. John Wilson's projects. The courtyard is a reflection of the idea of a common space, where social contacts cumulate like in the ancient forum. According to the ideas of brutalism, Mankowski and Kozlowski showed the internal functional structure in the form of the building, especially the circulation routes. Staircases were pulled out from the wings of the building and placed in the vertical solids. The entrance to the courtyard was emphasised by the outer reinforced concrete bridge. Rooms for other functions were also articulated in the facades. "Separated forms – blocks of rooms with loggias and bay windows, galleries, staircases, housing clusters, halls, auditorium room - create the composition of the building." (Kozlowski 2001) In addition, a monolithic reinforced concrete structure, which elements pillars and beams – were cutting the brick walls, was exposed in facades of the building. However, the form of the building is shaped mainly by articulated angular solids. They are arranged in such a way, that they form deep offsets, both horizontally and vertically. Due to differences in the height of each part of the building, its silhouette has dynamic line. The composition of the facade is vertical in character. Freedom in combination of different elements of the form, gave the effect of irregularity and picturesqueness, which many brutalist architects were searching for.

Kozlowski believed that "for brutalism there was nothing more natural than the brick" (2001). Brownish-red bricks with deep welds form a rough texture of most of walls. Alhough, the smooth concrete is equally important textural material, which contrasts with the brick walls. It is used in elements which require to be emphasised. An overhanging reinforced concrete bay window is the most important of these elements. It is used as a repeatable module, enabling architects to obtain varied rhythms on the facades. The monolithic structure of the bay window is made of reinforced concrete poured into a steel form. Massiveness and almost defensive character typifies the building. The significant thickness of the walls is highlighted by deep installation of windows. Some of them are just narrow slits, which an observer reads as cracks, a dark voids in the wall.

The aesthetic principle of "solid – void" was often used in brutalist architecture. The interiors of the buildings are similarly raw. The same brick dominates there, and the brutalist character is highlighted by industrial lamps and electrical cables running on the surface of the walls.

#### The Church of Saint Jadwiga the Queen

During the first decades after the war the authorities tried to fight manifestations of religious life, that is why they did not give permissions to build new churches. The brutalist aesthetics became characteristic of the great wave of Polish sacral architecture, which came in the early 1970s. It was not restricted to the construction of churches, but additional buildings with various functions (educational, cultural, sports) were also built. Thanks to this, parish centres appeared, which "aim was to maintain local activities and gather artistic and intellectual elites" (Bialkiewicz, Kadluczka, Zin 1995).

The Church of Saint Jadwiga the Queen was such a multi-centre, built in the years 1979-1988 according to Romuald Loegler's and Jacek Czekaj's project. The building is an example of late modernism in which brutalist aesthetics was juxtaposed with elements of high-tech. This combination is typical for the final phase of brutalism in the West. During the design, Loegler and Czekaj applied "a method based on the spatial concept of cube as a symbol of order" (Szafer 1988), involving the adaptation of a cube as a parent module from which the whole architectural concept arises. This method was clearly reflected in the form of the church and its interior. The main solid of the church consists of "quarters of a cube, diagonally cut and adjoined with glazing at vertical edges and skylights on the roof at the horizontal edges. The presbytery is emphasised by two of these parts elevated above" (Kucza-Kuczynski 1991). Thus, the form of the church is a cube, which is deconstructed, broken into smaller fragments and bonded by glazing continuing throughout the building. The building is dynamic thanks to this deconstruction, however large surfaces of concrete walls make the impression of severity and monumentality. Despite the fact that the main axis of the church runs diagonally, the main entrance is placed in the side facade. This facade was designed differently than the others – its wall waves in a very expressive way and there grows out a slender belfry in the shape of a cylinder (Fig.4).

Shapes of squares (on the ceiling) and circles (holes in the railing of the choir) appear in the interior. It is worth recalling that these basic geometric figures and solids (such as cube and cylinder) are the elements which Louis Kahn applied favourably in his brutalist buildings. Another aspect characteristic of the brutalism is treating the building as a concrete sculpture and highlighting the circulation elements. The Church of Saint Jadwiga the Queen stands on a large pedestal like an exhibit in a museum and monumental stairs and ramps lead to it. A homogeneous texture of the facades bonds the fragmented form of the building. It is *beton brut* in a pure form. Concrete surfaces were formed in

Fig. 4

Romuald Loegler, Jacek
Czekaj, the Church of
Saint Jadwiga the Queen
in Krakow, 1979–1988 –
front view [Photo:
W. Niebrzydowski]



the moulds of narrow and short boards which were set vertically. Wood grains and joints of the boards are clearly visible. The texture gives raw and clumsy impression and it was contrasted with the smoothness and high-tech of glazing and skylights. Two side wings of low buildings with a rectory, catechetical rooms, a cultural centre, a sport club and facilities of Sisters of Nazareth are adjacent to the cube of the church. Between the church and the side buildings, the courtyard was designed. It has become an important gathering place for people.

## 47

#### The Forum hotel

The last example of brutalist architecture in Krakow is the Forum hotel, which construction was very long and extended from 1974 to 1988 (Fig. 5). It was designed by the team led by Janusz Ingarden. The Forum hotel was for the authorities of Krakow a prestigious building. It was supposed to be the largest of its kind and also the most modern in the city. Brutalist style was considered as the most appropriate to emphasize the individuality and importance of the



Fig. 5
Janusz Ingarden, the
Forum hotel in Krakow,
1974–1988 – view from
the south [Photo:
W. Niebrzydowski]

building which should become a modern landmark of the city. The selection of the hotel's location wasn't accidental. It was built in a prominent place at the Vistula River, in a short distance from the Wawel Royal Castle. The building is a kind of megastructure – 110 meters long and about 40 meters high. Its form is bent according to the shoreline of the river. The main block is raised high above the ground on several vertical service towers (concrete pillars are hidden in the structure of the towers). The construction of a hanging platform (massive reinforced concrete beams and slabs), on which other floors are set, is exposed. The northern facade, from the side of the river, is less expressive due to the horizontal composition (strips of windows and walls). Whereas, the southern side of the building is extremely expressive and dynamic. Three towers divide the main block. The middle one is the most massive and has a distinctive, convex window. The facade is three-dimensional – composed of repeating units (hotel rooms). These rectangular modules are twisted and overhung. The articulation of overhanging elements is one of the attributes of brutalism. On the roof there is a cafe pavilion, which form additionally diversifies the silhouette of the building. Under the main block, there are pavilions with an entrance hall, restaurants and shops. Their walls of glass are in contrast with grey rough plaster on the building.

The Forum hotel resembles Japanese metabolism and buildings of architects such as Kenzo Tange, Kiyonori Kikutake and Kisho Kurokawa. In the 1970s a slogan "we are building the second Japan" was popular in Poland, which was trying to catch up economically developed countries. Probably, that is why the influences of architecture from Asia are so clear in Forum. The hotel was used only for 14 years (that is as long as its construction lasted) and was closed in 2002.

On the basis of analyses of Krakow buildings' forms the key features and elements connecting them with brutalism can be distinguished.

Referring to Banham 's definition of New Brutalism, it can be concluded that the analysed buildings meet all three conditions. First, they expose their construction – pillars, beams, bearing walls, slabs. Second, they utilize materials in accordance with the principle of "as found" showing raw surfaces of concrete or brick. The Biprocemwap building and the Forum hotel are the exceptions, where an aesthetic role of rough concrete plays grey, coarse plaster. Third, every building is distinctive and memorable – is an unified visual image.

In the forms of the buildings, not only the load bearing structure but also the internal, functional structure is seen. In Biprocemwap the system of offices reflects the rhythm of *brise soleil*, in the Forum hotel rooms are in the form of overhanging rectangular modules, and staircases are placed in the towers. There are staircases in vertical solids at the Polonia College building, and the rooms are accented by reinforced concrete bay windows. The importance of a presbytery and an altar in the Church of Saint Jadwiga the Queen was highlighted by making the form higher.

### Discussion

Brutalists particularly emphasized the role of circulation and movement of people. It can be seen in the forms of buildings and their surroundings. "Through walkways, plazas, terraces, and useable rooftops, which were frequently characteristic of brutalist buildings and were often paved in the same concrete or brick material as the buildings themselves, architects believed they were shaping engaging environments that would revive public life." (Sroat 2005) The same happens in the buildings in Krakow – there are useable roofs in Biprocemwap and Forum, courtyards in Polonia College and the church, bridges in Bunker of Art and Polonia College. Forms of the buildings are complex, expressive and sculptural. They are shaped in a way that encourages people to watch them from different points, forcing curious observers to move around them. They look interestingly, even from a distance, due to the dynamic shapes.

The facades of the buildings are three-dimensional, shaped by coming forward and backward solids, overhanging elements and rhythmically repeated modules. Such sculptural solutions of the facades provide expressive *chiaroscuro* effects. The play of light and shadow is also visible in the micro scale on rough textures of the walls, especially on the concrete relief of Bunker of Art, *beton brut* of the church and brick surfaces of Polonia College. Not all textures are rough – smooth concrete or glass is in contrast with them. The aesthetic principle of contrast is not only seen in the way of combining materials but also in the general approach in shaping the architectural form. It is worth noticing that in Bunker of Art and the church, architects opposed the dominant, rectilinear geometry to curvilinear geometry, just to accentuate entrances to the buildings. Furthermore, all buildings in Krakow present the basic aesthetic features attributed to the brutalist architecture: heaviness, massiveness, severity, monumentality. Their designers were trying to take into account the context in which they were designing, and were aspiring to an individual, unique solution.

### Conclusions

Some of the discussed buildings have brutalist features as well as elements of other styles, what is in general characteristic of Polish architecture. World architectural ideas flowed to the socialist Poland with a delay and with more or less difficulties. Typically, they were not adopted in the pure form but mixed with other doctrines or changed due to local conditions. In Poland, the brutalist style did not develop as much as in the West and the number of buildings completed here is not too large. The most interesting of them should be preserved due to their architectural values and testimony of a bygone era. The problem is the negative public perception of such buildings and the resistance of the authorities and some architects in considering their value. Nowadays, brutalist buildings are threatened by various actions changing their form or by demolitions. Paradoxically, less expressive structures which are more neutral, not thumping over stamp-solutions, have more chances to survive. In the case of brutalist architecture in Krakow, there can be distinguished several ways of devaluation of noticeable buildings, from relatively "mild" to the totally devastating:

In recent years, covering the facades of buildings with commercials, including large format banners, has become notorious. It leads to a total illegibility of architectural forms. The disused Forum hotel has become the biggest advertising board in Poland. Huge billboards cover its entire northern facade and side walls.

Buildings, which were closing major view axes or were clearly exposed in the urban landscape, have been hidden behind new structures, often presenting much lower architectural values. The Biprocemwap building was obscured by a new hotel built in front of its facade. "From the Vistula River and Kosciuszko Street deflection of the office building, its modernist yet articulated facade, butterfly roof of the pavilion are no longer visible, ... hello sadness." (Urbanska 2003) Bunker of Art has become obscured by the structure of new coffee bar which does not fit into brutalist style of the building.

3 The rebuilding often changes and distorts the original form of the buildings. Sometimes relatively small changes, such as replacement of windows or plastering the concrete

surfaces affect the character of architecture. Sacral buildings are generally kept in a state close to the original one but there are also changes – raw concrete of the Church of Saint Jadwiga the Queen disappeared under layers of paint.

Often, the final step before the demolition of the building is its negligence leading to ruin. The Forum hotel is practically disused and decaying. For several years there has been a discussion about the possibility of its demolition.

Fortunately, the demolitions have not affected brutalist buildings in Krakow, but in nearby  $\cup$  Katowice, the perfect example of Polish brutalism – the railway station (designed by J. Mokrzynski, W. Klyszewski, W. Wierzbicki, built in the years 1969-1973) was demolished, despite many protests of architects and historians.

Nowadays, not many Polish buildings from the second half of the twentieth century are listed as historical monuments. However, architects and authorities, have a chance to identify buildings that should be protected as so called "goods of contemporary culture". The era of brutalism passed away, but it is expected that the most of interesting buildings demonstrating the presence of this style in architecture will survive.

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