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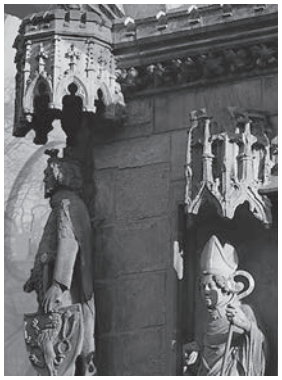

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Heritage

Andrzej Białkiewicz*

The role and influence of Pauline architecture on non-architects

Sacral architecture constitutes a particular sign of presence in culture. Its forms as well as places of location have changed throughout the centuries. Each of the historical époques marked its character by presenting the church structure. These structures were very differentiated but they always stood out in their surroundings. Their locations as well as aesthetic and prestige values distinguish this architecture in a unique way in man's awareness. It rarely happened that a sacral structure was designed concurrently with towns or settlements for which it was built. Most often the churches were incorporated into the existing context as new elements. Sometimes certain complexes of buildings are different from others and they are characterised by the distinctness which is given to them by their inventors like, for instance, Paulines. Their forms are very appealing to the recipients' tastes and they are admired by more people than it is the case with other investors. It is so because Paulines treat their religious mission diligently, which allows them to last for ages. The Superior General of Pauline Order wrote: *On the one hand, the fact of lasting for such a long time gives us real satisfaction; however, on the other hand, the future, with this type of foundation, gives rise to the awareness of great responsibility. In such moments we refer to the spiritual and cultural heritage of the Order. It left a special stamp in the Central Europe history of church and particularly in the history of two countries: Hungary and Poland.* (…) *…The Paulines' contribution to the Polish history and culture is invaluable and is not to be overestimated* [4, pp. 4, 5].

The origins of the Pauline Order date back to the 13th century. It was established from hermitic communities united on Hungarian Land. In about 1225, Bartholomew the Bishop built St. Jacob cloister on Ũrōg Mountain for hermits from his diocese, where Pécs town is now located. At that time, Ostrzyhom canon Eusebius founded the second monastery in the Pilis Mountains and in about 1250 he built St. Cross Church in Pilisszentkereszt. The canon Eusebius soon connected both monasteries and in the years 1262–1263 he received a temporary authorization of the Order under the name of St. Paul the First Hermit [5, pp. 7, 8].

The development of architecture of the Pauline order is strongly linked with the history of the order. The time of the first centuries of the Pauline architecture and culture in Hungary has been thoroughly studied by researchers. T. Guzik and R. Á. Fehérváry divided that period of time into three stages in their research [3]. They called the first period 'architecture out of necessity' and dated it from the beginnings of the order (1225) till the year 1340, i.e. the time when the Pauline Fathers had great privileges and considerable independence. At that time, the Paulines were a typical hermit order which was isolated from the world. There are some similarities in the ways in which the monasteries were founded then. They were isolated from inhabited places and located in the distance of 20–30 km from each other. These monasteries were often situated on river islands or in the mountains, in the woods [3, pp. 308, 309]. At that time, their architecture was really diverse, which resulted, first of all, from a lack of organization and the fact that communities were dispersed on a large area. The particular monasteries significantly differed with regard to their size and equipment. Generally, we can say

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Fig. 1. Wieruszów,
Holy Spirit church
Photo by A. Białkiewicz

that the monasteries were very poor; the churches were small and usually with one nave and without towers. In this architecture no repeatable scheme can be seen, the one would characterize the Pauline buildings of those times. The second period of the architecture development took place in the years 1340–1419 and it was defined as 'representative architecture, royal, nobles and church foundations'. At that time the Paulines were not a typical hermit order. Monasteries were built in the vicinity of towns or on the land of founders. This was the time when first germ of the Pauline development typical arrangement appeared. It consisted of a big usually one-nave church

Fig. 2. Częstochowa,
St. Barbara church
Photo by A. Białkiewicz

which was connected with a monastery from the northern side. The church was connected with a house-chapel, the so called choir where night psalmodies were sung [5, pp. 11–17, 51]. Utility buildings adjoined the monastery or they were situated within a short distance from it. The third period took place in the 15th and 16th centuries and it is called 'golden period of the monastery development'. During this period there were new foundations and the monasteries that were taken over from other orders were rebuilt. Therefore, the Paulines became a significant part of the social life. The monastery complex still consisted of a church, order building and utility buildings. Gradually it became a place of pilgrimages in which huge numbers of pilgrims participated as well as church and state officials. This situation brought about a necessity to introduce new functions and develop the next monastery complexes.

Buildings of Jasna Góra were rebuilt and modernised. The oldest fragment, which comes from the foundation times, is the Gothic chapel presbytery where there is the picture of Black Madonna of Częstochowa. After the fire in 1690 on the place of the old Gothic chapel, which was built in the years 1430–1463, the present basilica was built. Other foundations of Prince Władysław Opolczyk were cloisters in Mochów near Głogówek and in Wieluń. The next foundation by Bernard Wierusz took place in 1401 and referred to the cloister in Wieruszów. In 1421 the Cracow bishop Wojciech Jastrzębiec brought Pauline Fathers to Beszowa and gave them a parish. The bishop W. Jastrzębiec foundation of the Pauline monastery was the fifth one in Poland. In Beszowa Paulines also ran the parish school and hospital for the poor [2, p. 468]. It should be emphasized that so far Paulines had no pastoral duties. The bishop Jastrzębiec *imposed on Paulines a new model of monastery buildings which – after the original church was pulled down – stood in some distance from the great basilica. According to the documentation, one part of the monastery was situated above the right nave of the church and the basic monastery was built as a separate two-storey structure connected with the church by means of an over-ground porch* [5, p. 61]. Since the time of this foundation, a quite expressive model of the Pauline architecture was established, which was later copied. As examples, we can mention the monasteries in Brdów, Pińczów, Cracow, Włodawa, St. Barbara Monastery in Częstochowa and many others.

Fig. 3. Wlodawa,
St. Ludwig church
Photo by A. Białkiewicz

In spite of the fact that generally architects are responsible for their works of art, the Pauline architecture in Poland depended to a large extent also on a founder and investor. The first Pauline monastery in Poland was Jasna Góra Monastery. In 1393 Jasna Góra became a royal foundation. Under the influence of Queen Jadwiga, king Władysław Jagiełło legalized prince Władysław Opolczyk foundation. In Jasna Góra Monastery soon a sort of evolution took place, i.e. the way of life changed from the almost hermit one to the kind of life which made Pauline Fathers involve in social issues. The reason for this situation was a great number of pilgrims coming to Jasna Góra. The Paulines built a drug store for pilgrims. It had its own laboratory and medical library, hospital, pilgrim house and printing house. In the years 1620–1631 J. Zywerth the builder started to built a fortress. A master builder I. Neigebauer and a general and engineer Ch. Dahlke who was sent by Great Hetman of the Crown Potocki in 1745, managed the development of the fortress.

Thanks to the activities of superior generals, provincials and priors, the Pauline order was in the impingement reach of the most remarkable Polish and European architects and artists. An outstanding example of such an activity is Father Andrzej Gołdonowski (1596–1660) who performed the role of a provincial in the years 1641–1644. He contributed to the erection of many new churches,

chapels and monasteries. Also later in the 18th, 20th and 21st centuries there were many prominent examples of such 'monastery patronage'. We can mention here Father Konstantyn Moszyński PhD, the provincial in the years 1706–1728 with a break in the years 1719–1722, who contributed to the erection of several churches and cloister houses. We cannot fail to mention Father Euzebiusz Rejman – the prior of Jasna Góra Monastery in the years 1895–1910 and the superior general of the Monastery in the years 1903–1010. With regard to architectural aspects, we can see many common features in the Pauline architecture. These forms of architecture, which had been shaped thorough centuries, survived till modern times and they are at present used in new churches and monasteries as well as in the cloister and church in Łukęcin, which were completed some years ago, and also a structure in Toruń which is under development. At the moment, there are twenty Pauline monasteries in Poland.

The Pauline architecture was created both in big cities and in small villages. However, this is the architecture which performs a significant role in culture in each place and constitutes a distinguishing feature of the place in which it appears. This architecture sometimes surprises with its excellent quality and flourish in small villages outside big cities in less urbanized areas. Undoubtedly, an intellectual contact with the architecture of churches and Pauline monasteries had its emotional impact on both inhabitants and pilgrims. *The ideals that Pauline Fathers had in the Middle Ages and modern times are still of the same significance today. Wherever it is possible and where the spirit of modern times so requires, we have to do with a direct continuation. There, where that past already seems to be irrevocably closed, researches are conducted, which maintain the memory of the old achievements. It is thanks to these domains of Pauline science and culture that the esteemed monasteries with 'white monks' have not become mere dead museums of the old art and culture* [1, p. 21].

References

[1] Golonka J., Żmudziński J., *Mecenat kulturalny i artystyczny paulinów polskich. Jubileusz 700-lecia Zakonu Paulinów,* Jasna Góra w Częstochowie, 2008, p. 21.

[2] Grzelak M., *Kościół i klasztor popauliński w Beszowej,* [in:] Studia Claromontana 10, Jasna Góra, 1989, pp. 454–478.

[3] Guzik T., Fehérváry R.Á., *A. magyar pálos rendi Építészet kialakulása, elsō periódusa*, [in:] *Kūlōnlenyomat az épitetz es épitészttudomány,* X, Budapest 1980, pp. 193–228; translation: father Á. Bolyós zp and priest M. Józefowicz, [in:] Studia Claromontana 25, Warszawa 2007, pp. 289–328.

[4] Matuszewski I., *Wstęp Generała Zakonu Paulinów*, [in:] Golonka J., Żmudziński J., *Mecenat kulturalny i artystyczny paulinów polskich. Jubileusz 700-lecia Zakonu Paulinów,* Jasna Góra w Częstochowie, 2008, pp. 4–5.

[5] Zbudniewek J., *Paulini wczoraj i dzisiaj*, [in:] Studia Claromontana 25, Warszawa 2007, pp. 7–288.

Rola i oddziaływanie architektury paulińskiej na nie-architektów

Architektura sakralna jest szczególnym znakiem obecności w kulturze. Każda z epok historycznych zaznacza swe oblicze, prezentując odmienną sylwetę kościoła. Zdarza się, iż pewne zespoły budowli wyróżniają się spośród innych, charakteryzują się odmiennością nadaną im przez inwestorów, jak np. paulinów. Ich realizacje trafiają w gusta odbiorców, mają więcej zwolenników niż inni inwestorzy. Paulini bowiem starannie traktują swą religijną misję i to pozwala im trwać przez wieki.

Key words: Pauline architecture

Słowa kluczowe: architektura paulińska

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Monika Bogdanowska*

The drawn landscape – a permanent record of the historic cultural landscape on the impermanent carrier – the Sketchbooks by Janusz Bogdanowski

How durable can a pencil sketch often made in a hurry be? As it was only a note on the sheet of paper from a sketchbook which was kept in a rucksack, hidden under the raincoat during the rain and finally, it was put on the shelf between other papers where beams of light destroyed the poor material in the process of irreversible changes. How important can a drawing documentation of a non-existing mechanism of the mill, a cottage plan or the view of a wooden shepherd shelter be? Can such a drawing be compared with a good photography, analytic thesis or precise inventory? A sketch often has some content as well: a description of the road in the fields, which leads to the wayside shrine; a story told by an old man met near the wayside shrine. Isn't it the most real record of the society history, which emanates with cultural landscape? The landscape irreversibly lost, which disappeared in silence with indulgent acceptance of passing of time. Nowadays, sketchbooks are becoming the shocking evidence of hecatomb which swept away from our planet and blotted out the memory of something which generations had built for hundreds of years creating in this way a new cultural identity. Let us take several sketches by Janusz Bogdanowski. As the life's work of one man – it is a giant job but as regards destruction – hardly a readable after-image of something that has already gone by.

The need of recording phenomena of the surrounding world is very strong for many architects. It results from the ability to observe, which is often exercised in the process of drawing because this is the drawing that teaches not only manual fluency but first of all empathy towards the encountered world, which in turn releases the impulse to record this world. Therefore, there appears the need to record everything that is seen in form of photography, sketch or painting. And like an architect develops his passion, similarly the passion influences the development of his technique and design experiences.

Janusz Bogdanowski, Professor of architecture, had a drawing passion which accompanied him for the whole life. The need to create the first sketchbook appeared during the studies at the Department of Architecture of Cracow University of Technology in 1952. Soon it turned out that the sheets had to be placed in the next sketchbook and it was continued until the year 2001 when the last – 68th sketchbook was made. Every year, for almost fifty years, at least one sketchbook was created in which, apart from pencil sketches and sketches made with a thin marker in the next years, notes were taken as well. All sketchbooks were made by the author and they consist of sheets in A5 format, which are connected by means of a metal clip. Almost three thousand sheets were collected during these years. It would be difficult to assess the total number of sketches because on many sheets there are more sketches than only one. Thanks to unusual sensitivity and a good theoretical preparation in the scope of architecture and construction the author easily 'snatched' objects which were worth recording. Thus, we can observe cottages with the equipment of everyday use, complicated machinery, sketches of villages and farms, panoramas, parks and palaces, churches and fortresses, paintings discovered in wayside shrines – the index comprises over 600 places from different regions of Poland (in the later period, they were first of all the records of foreign expeditions). The sketchbooks constitute a rich source of the material for varied analyses [2–11], [14].

The review of sketches, which were created within such a long period, allows following the changes in the author's interests starting from fascinations with regional architecture and the process of inventory, analyses of garden constructions and ending in military architecture. The

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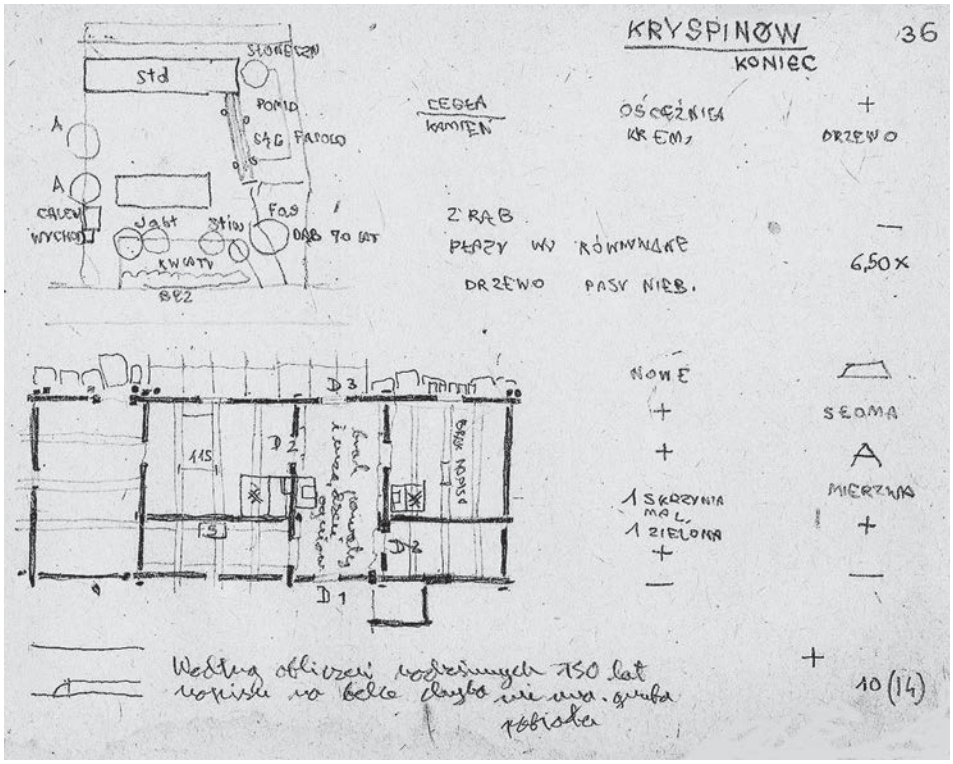

Fig. 1. Kryspinów-Koniec. Inventory drawing, hut No. 36. J. Bogdanowski, 1955

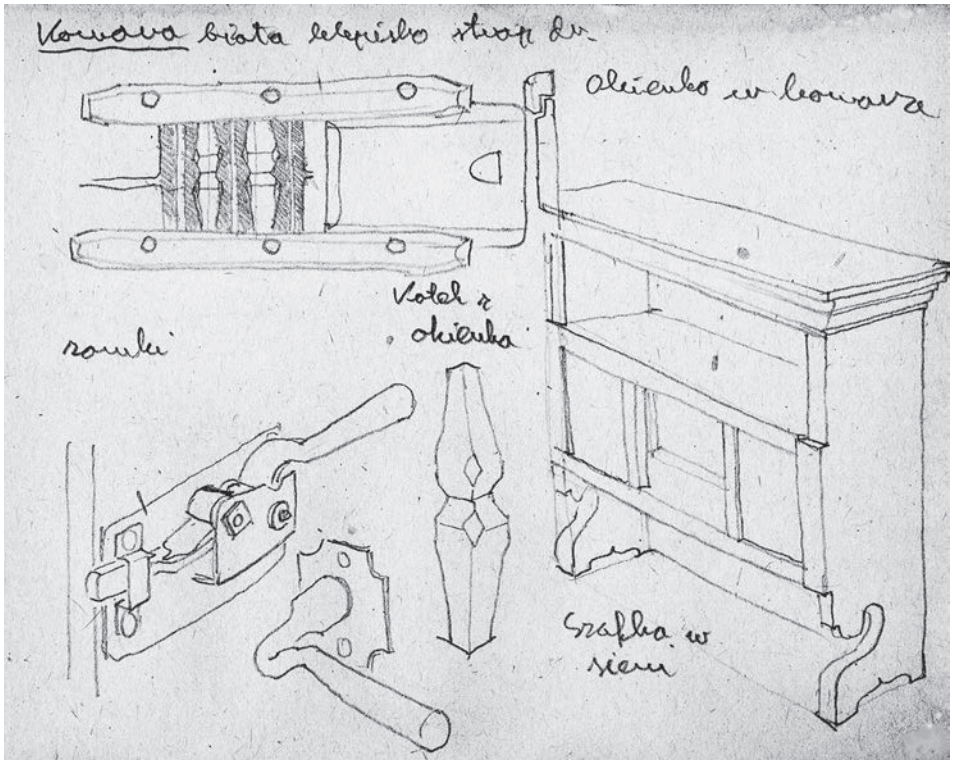

Fig. 2. Domestic equipment of the Kryspinów hut: widow wooden grating, cupboard, door handle. J. Bogdanowski, 1955

review also makes it possible to observe the scientist's work and the appearance of concepts which later determined new directions and research methods (for example, JARK WAK method). In the sketchbooks, it is also possible to follow the development of the author's drawing skills: from the first awkward attempts through technical inventories, landscape studies which were drawn with one line, axonometric drawings of architectural complexes – because a 'normal' view was not inspiring enough – and finally several-second sketches of the gothic cathedrals. Janusz Bogdanowski put his drawing skills into practice by illustrating, among others, his own publications. The drawing documentation, contained in the sketchbooks made in the 1950s, is the most precious in assessing the changes of cultural landscape. It was also the period of the greatest activity of the author because from 1952 till

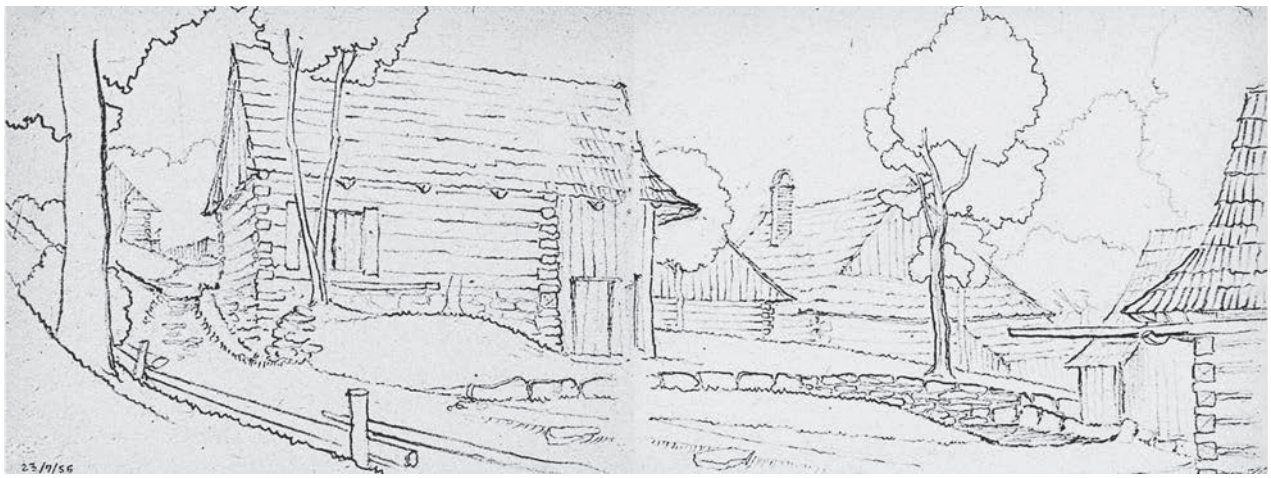

Fig. 3. Oleksowa Rola, view of the hamlet. J. Bogdanowski, 1956

the end of 1959, 27 sketchbooks were created and many of them contain more than 200 pages. It is worth noticing that the world recorded in the sketchbooks was not the world which was described in guidebooks or catalogues of monuments in a simple way. These were rather places off the beaten track and lost somewhere in the fields and whose discovering required great perseverance. Let us analyse several sketches. The can be an inspiration for considering the changes of the Polish cultural landscape of the last 50 years.

In the sketchbooks there are inventories of several villages. In order to accelerate work, the author invented the following system: in the thin cardboard of the sketchbook sheet's size he cut out several openings and then described each of them. When the cardboard was put on the sheet, it was possible to write appropriate data in the openings and in this way to fill in the table (Fig. 1). Thanks to this method, all the building elements of the described structure were recorded quickly and the author had time to draw some other interesting pieces: a wooden door leading to the little barn, inherited-from-grandmother baby cradle or a staple designed in a clever way.

Thanks to the drawings and descriptions it is easy to observe 'yesterday and today' of these villages. In 1955 an inventory of Kryspinów, situated near Cracow, was made. In the past, it was a destination point of bicycle trips along the road at the feet of Srebrna Góra – with a white figure of the Congregation of Monk Hermits of Camaldoli Church – in the direction of pine wood coppice on sand slopes/scarps. The number of thatched cottages with colourful walls allowed Janusz Bogdanowski to try to define the forms typical of villages situated near Cracow [3]. However, already at that time the author saw an architectural structure in its landscape context, which can be proved beautiful, painted with watercolours panoramas of villages, which open the sketchbook; then the analysis of the urban system, description of plant types, list of plants grown in gardens adjoining to the houses. As we can see in the sketches, Kryspinów-like farmsteads were full of clever carpenter's elements as well as the equipment – in more or less decorative forms – painted with different colours (Fig. 2), while wooden ceiling beams of houses were decorated with inscriptions and dates which proved their 19th century origin.

A very interesting is also a written down history of the chapel, which is hidden in the forest growing on the hill and brings to mind pagan rituals, thus a proof of sacredness of the place: *At Easter, pretzels were put in front of the chapel and children came to collect them* (…) *The chapel is already on the cadastre, therefore it certainly is over 120 years old, perhaps from the 18th century situated on the place of the old castle* (…)*; thus, is the village really the old borough?*[1] A choleric cemetery was also situated at the feet of the hill separated with a quadrilateral stone wall and the Immaculate Mother of Jesus figure on the stone column.

The sketchbook, which is devoted to the small hamlet Juszczyna, i.e. Oleksowa Rola (suski district), looks slightly different – this is a place where the author of sketchbooks spent the summer of 1956. Thanks to the plan of the village with marked directions of the drawn views, it is possible so stand exactly in the same places and compare 'yesterday and tomorrow' of the hamlet. It also one of the best sketchbooks – the joy of the author resulting from the discovery of his own style can be seen in his mastership of the line (Fig. 3).

The places described in the sketchbook, which are so familiar, appear to be fabulous. Here is the excerpt of the description from a trip to Zdów (Silesian voivodship, Zawiercie district), which led along the Biała River bank in 1959: *the road still at the feet of the mountain, one more brook and then the exit to a small meadow from where you can see a beautiful view of Kroczyckie Rocks – first from among the trees and then from the small meadow. Farther, the Biała River forks near the willows and flows to Jędruszek mill – a settlement consisting of two houses, the mill, basement and several barns, which are all situated near the beech-trees and rocks. From the northern side – only empty and huge meadows* (…) *Suddenly, the path*

[1] All quotations contain the original spelling.

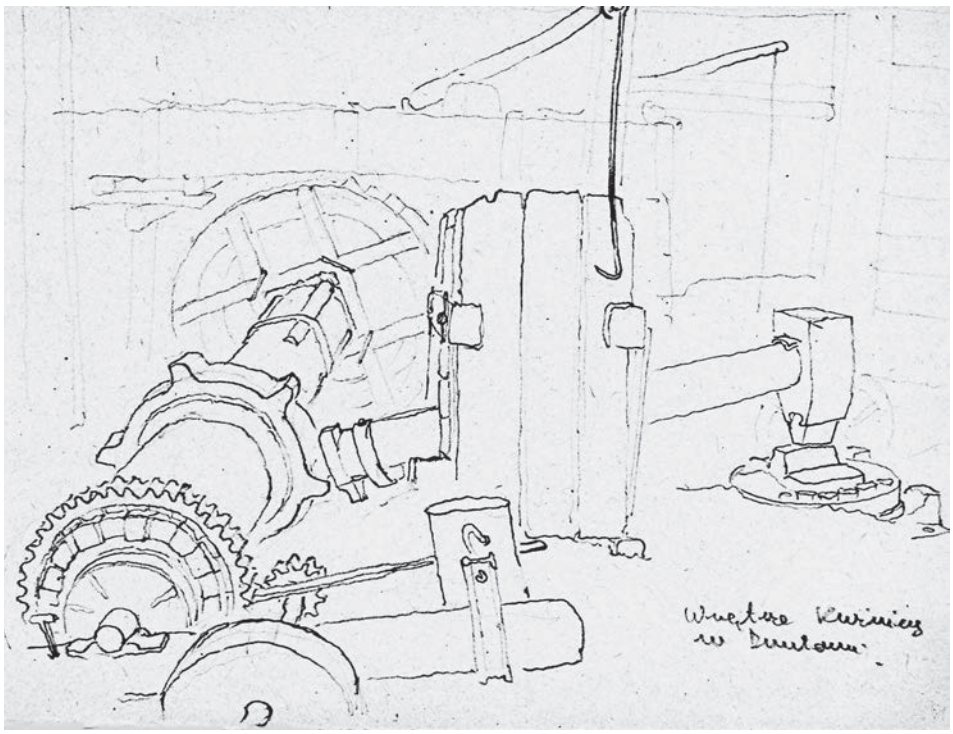

Fig. 4. Drutarnia, interior of the smithy. J. Bogdanowski, 1956

changes into a sand road along the river and then a thin forest – to the right, while to the left – a green valley, the river flows in its full width and the weir towards Piła. The settlement Piła, which is situated on the island in the fork of the river Biała, is one of the most unusual places immortalised in the sketchbooks. It only consisted of three houses and the mill plus several barns and gardens adjoining to the houses.

Another unusual place was situated in the region of Mstowa (Silesian voivodship, Częstochowa district). Janusz Bogdanowski arrived at this place in 1958 during the journey to the Mstowa cloister. In the nearby, on top of Kamionka hill surrounded by fields, the author found a complex of a few dozen barns. The ordinary farm houses, which are presented in the drawing, stand next to each other along slightly curved streets and form a picturesque complex which – blended in with the silhouette of the hill – creates the view complement of the surroundings with a dominating figure of the cloister and the baroque cupolas of the church towers. 'Barns Mountain' is an extraordinary landmark in the landscape of Mstowa surroundings.

The acquaintance with devices of the old technology presented in the sketchbook is also fascinating. In the past, those devices determined the economic existence of the village community and constituted a germ of the local industry. A lot of such buildings were drawn in the sketchbook from 1955, for instance, the ones in Juszczyna (suski district) where the following buildings were situated along the river: *a small farm mill, a picturesque big sawmill, a grinder, a shingle house, a bit bigger mill, a smokehouse.* According to the tradition, the above mentioned shingle house *was built by a self-taught cartwright who calculated everything on his own and built it without any special purpose but he was afraid of making any mistake; if he did, people would laugh at him.* On the next pages of the sketchbook we can find an excellent mill from Lachowice (suski district). The inventory of this building is opened by a view of a wooden structure with a huge roof, and then a mechanism and numerous woodcarving details were described precisely, for example, the ending of the flour chute in form of a goat head which *probably moved during the work.*

Drutarnia – another village in konecki district (świętokrzyskie voivodship). In the sketchbook from 1956, we can find views of the blacksmith's shop interior with a precisely drawn mechanism of the forging hammer. This is probably the only existing record of this 'industrial' interior appearance: gloomy and blackened with smoke, which is full of huge items of equipment. What a noise must have been there when massive turbines started the work of the huge forging hammer (Fig. 4).

The novel written down next to the drawing presenting the interior of Fugiel oil mill in Dąbrowa Szlachecka (Cracow district) shows how important for the village residents was building of a new structure of technology: *A special 'huge oak' was brought to the building site (everybody remembers that). This cut oak gave poles to the piston of the oil mill, which were sunk into the ground at the same height as they stood out above the ground. It was a great sensation – all the time the people (especially children) were coming and staring.* (…) *Here, the oil was pressed, often nights and days. People stood in a queue like at the mill.*

The analysis of the sketchbooks is really moving because the following question inevitably appears: how many of those places, buildings and equipment survived? The answer is also shocking and obvious: nearly none of them did! The hand-made wooden elements of houses

Fig. 5. Kryspinów, column with the figure of Our Lady on the former choleric cemetery. Photo by M. Bogdanowska, 2010

were most probably burnt just before the move to a new brick house where new furniture in form of wall units made of veneered flax board and PVC elements were waiting for new residents. Huge hinges, door handles, door locks, which were forged in the local blacksmith's shop, were replaced by mass produced trash. Unfortunately, the memory of the people who lived and the sense of cultural identity disappeared along with the houses and their equipment.

When we look at the forms of the drawn objects, it becomes clear that they were made on the basis of patterns which were handed down from one generation to another. Therefore, we can see carpenter's daps in the donkey's back, simplicity and functionality, balanced ornaments and strong colours, whose prototypes we can already find in… the Gothic style.

This also makes us think about the process in which generations of home craftsmen participated working in carpenter's and blacksmith's shops; about potters, wicker workers, stove fitters, woodcarvers, women embroiderers, workers of fullers and oil mills.

Thus, within a short period of fifty years only, man – an inventive creator of his own surroundings – became a passive recipient of the mass production. He does not need either the knowledge of the place where clay is the best to make the threshing floor or the knowledge of how to dry wood to make a robust table. He does not observe the older carpenter in order to learn how to cut lintels; he does not learn how to mix lime in order to paint the house. Our knowledge in the range of creation of our own place of living is limited to the shop location and a product price, which in fact does not differ from the one that is sold thousands kilometres away from our place and the boundaries of creativity are determined by the choice of patterns from colourful magazines. Thus, what kind of cultural landscape does Poland of modern times create? Or in a simpler way: what cultural landscape do we create? What does this creation say about us and our attitude to the surrounding world? Because: *Observing the way in which we transform our natural environment, it is easy to conclude that we use our senses in completely different ways* [15].

Nowadays, there are no longer cottages in Kryspinów, however, the chapels survived. Perhaps, nobody remembers the story about the hill where there is an old reconstructed chapel decorated with colourful reproductions in plastic frames. Today, Kryspinów represents the so called unidentified area [4], suburbs of the city in which representative detached houses and catalogue houses are built. A present, the figure on the column, which took care of peace of the dead people during the period of plague, constitutes the artefact of the gardens adjoining to the houses (Fig. 5).

The example of Oleksowa Rola perfectly illustrates the changes of the Polish village. Wooden cottages disappeared gradually and were replaced by brick houses which were built at the same locations. Instead of trees which give the shade and shelter for birds, instead of gardens full of flowers, these new houses are surrounded by smoothly mowed lawns decorated with sad conifers. Nevertheless, the residents remember the village from the past very well and they recognise the interiors of their houses even with the equipment, which were preserved in the drawings. They look at them with some kind of nostalgia and seem to miss something which determined the identity of this small hamlet: they miss a small mill behind the creek, a wicker hedge, a wooden stool or an old apple tree in the garden.

The everyday life of the Polish village disappeared – the repository of the national identity which was created

through centuries and considered to be the essence of our culture by many people. The objects stored in the museum storerooms lost their context and in this way their reliability. Hundreds of mills were replaced by concrete berths of regulated rivers and the useless devices of the old technology fell into ruin.

The drawings and descriptions contained in the sketchbooks take us for short but sensually intensive walks to the old Polish landscape which is not only seen but takes us to the so called sound landscape [17]; apart from eye impressions, every walk delivers other additional sensual stimuli: we can feel the temperature, smells and we can hear sounds [1].

This wandering in hot summer becomes unusually familiar; hiking along the road shaded with the mountain massif and accompanied by the brook humming and the warmth of sand, a cool breath of the wind from green meadows and a distant noise of the river. And what about Mstowa barns? There must have been great commotion during the harvest time when hayracks and running people appeared on the maidan. Their calls and laughter must have been heard far away along with ringing of the bells coming from the cloister direction.

Fifty years ago man recognized his own place on earth not only due to landscapes but also due to sounds and smells. It had to be different from other places because it was shaped individually and the basis of its shape was the original landscape and things offered by nature: a river giving a drive to the water-wheel, the rise with farmlands and natural resources of the forest. Today, the landscape values undergo gradual unification and sensor experiences become simplified in the world dominated by the highway hum, the smell of fumes and 'twittering' of cell phones. It is obvious that cultural globalization caused the change of man-creator into man-recipient also called a consumer. Potentially, each of us has become a precious market target for the 'tourist product' – the name used for the landscape in some programs [16]. The landscape value becomes the trade value and the reason for its existence becomes dangerously dependent on economy. But when we browse through the sketchbooks, we can see that new fashionable definitions, for example 4H, are not in fact so contemporary at all[2]. Fifty years ago, it was quite obvious that a cottage in the landscape was not only the carpenter's structure but people's will to settle in a specific place as well as the record of somebody's life, thinking and practised values.

This is another proof of the fact that the author of sketchbooks created things which are ahead of his time. In the 1960s a chimneyless hut was nothing else but a symbol of Polish backwardness, brick bastions built by occupants – a symbol of the decline of Polish statehood, while the defence against demolition of them in order to obtain bricks for the reconstruction the capital city – simply an attack on the Polish raison d'état. Fifty years ago, almost nobody sentimentalised about old objects, products of folk craftsmanship or devices of country technology. On the contrary – all this was just the echo of the times about which the supporters of modernity would like to forget once and forever.

These are only some of the considerations which appear while reviewing sketches drawn many years ago. The sketches were created out of pure love, passion of cognition and recording. And what is really interesting: here, not only sketches on yellowed pages but also their author became the element of the Polish cultural landscape history in some strange process. The landscape of the past, but recorded – perhaps on the poor carrier, however, still vital.

[2] *The essence of the countryside tourism is based on 4H rule: habitat, heritage, history and handcraft*. J. Środulska-Wielgus, Z. Błachut, K. Wielgus, *Eksploracja przestrzeni historycznej Gorców dla potrzeb turystyki kulturowej*, [in:] *Polskie krajobrazy dawne i współczesne*, Prace Komisji Krajobrazu Kulturowego, No. 12, Komisja Krajobrazu Kulturowego PTG, Sosnowiec 2009, p. 243.

References

[1] Bernat S., *Krajobraz dźwiękowy doliny Bugu*, Annales Universitatis Mariae Curie-Skłodowska, T. LIV, 15 Sectio B, Lublin 1999, pp. 297–309.

[2] Bogdanowska M., *Szkicowniki Janusza Bogdanowskiego*, „Aura", 2007, No. 10, p. 13.

[3] Bogdanowska M., *Kryspinów, sierpień 1955*, „Aura" 2007, No. 10, pp. 14–15.

[4] Bogdanowska M., *Juszczyn, lipiec 1956*, „Aura" 2007, No. 11, pp. 32–33.

[5] Bogdanowska M., *Szkicownik XVI Pomorze Zachodnie, wrzesień 1956*, „Aura", 2007, No. 12, pp. 22–23.

[6] Bogdanowska M., *Miasteczka polskie w latach 50. XX wieku*, „Aura", 2008 No. 1, pp. 22–24.

[7] Bogdanowska M., *Urządzenia dawnej techniki – młyny, tartaki, olejarnie*, „Aura", 2008, No. 2, pp. 26–29.

[8] Bogdanowska M., *Szkicowniki: IX 1955, XVI 1958, II 1959 Świat utracony*, „Aura", 2008, No. 3, pp. 20–23.

[9] Bogdanowska M., *Parki i ogrody*, „Aura", 2008, No. 4, pp. 29–32.

[10] Bogdanowska M., *Militaria*, „Aura", 2008, No. 5, pp. 24–27.

[11] Bogdanowska M., *Rysunek*, „Aura" 2008, No. 6, pp. 26–29.

[12] Bogdanowski J., *Malowane chałupy w architekturze krajobrazu podkrakowskich wsi. Ich formy i postępujący zanik*, [in:] Teka Komisji Urbanistyki i Architektury, T. IV, PAN, Kraków 1970, pp. 103–115.

[13] Gonda-Soroczyńska E., *Czy to jeszcze wieś?*, [in:] *Polskie krajobrazy dawne i współczesne*, Prace Komisji Krajobrazu Kulturowego, No. 12, Komisja Krajobrazu Kulturowego PTG, Sosnowiec 2009, pp. 178–190.

[14] *Góra Zborów i okolice*, Czylok A., Ślusarczyk M., Tyc A., Waga J.M. (eds.), Towarzystwo Miłośników Ziemi Zawierciańskiej, Wydział Nauk o Ziemi Uniwersytetu Śląskiego, Zawiercie 2008.

[15] Hall, E.T., *Ukryty wymiar*, Warszawskie Wydawnictwo Literackie MUZA SA, Warszawa 2003, p. 11.

[16] Latocha A., *Zmiany krajobrazu wiejskiego w Sudetach w okresie powojennym*, [in:] *Polskie krajobrazy dawne i współczesne*, Prace Komisji Krajobrazu Kulturowego, No. 12, Komisja Krajobrazu Kulturowego PTG, Sosnowiec 2009, pp. 130–139.

[17] Schafer R.M., *The New Soundscape*, Toronto 1969.

[18] Środulska-Wielgus J., Błachut Z., Wielgus K., *Eksploracja przestrzeni historycznej Gorców dla potrzeb turystyki kulturowej*, [in:] *Polskie krajobrazy dawne i współczesne*, Prace Komisji Krajobrazu Kulturowego, No. 12, Komisja Krajobrazu Kulturowego PTG, Sosnowiec 2009, pp. 233–247.

Krajobraz narysowany czyli trwały zapis historycznego krajobrazu kulturowego na nietrwałym nośniku – szkicowniki Janusza Bogdanowskiego

Kultura z architekturą bodaj najpełniej łączą się w krajobrazie kulturowym, który to stanowi widoczną emanację życia społeczeństwa, jego przekonań, sposobu funkcjonowania i wyznawanych wartości. Stąd też jego granice zaczynają się tam, gdzie następuje przekształcanie krajobrazu naturalnego, a kończą się na drobnostkach, takich jak formy małej architektury, detali, czy elementy domowego wyposażenia. Gdy zmienia się styl życia społeczeństwa zmienia się i wygląd krajobrazu kulturowego. Tworzone przez ponad pięćdziesiąt lat szkicowniki architekta – Janusza Bogdanowskiego są znakomitym źródłem danych na temat tych przemian. Dzięki szczegółowym opisom, przekraczającym granice suchej inwentaryzacji, pozwalają odtworzyć nieodwracalnie utracone dziedzictwo polskiego krajobrazu kulturowego, więcej, pozwalają na porównywanie przemian, jakim był on poddawany. Świetny warsztat rysunkowy i wiedza autora, które pozwoliły na stworzenie tak wyjątkowego rejestru, sprawiły, że i same szkicowniki stały się już dobrem kulturowym.

Key words: historic landscape, sketchbook

Słowa kluczowe: krajobraz historyczny, szkicownik

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Monastic architecture in culture – monastic design as a specific type of ecclesiastical architecture exemplified by the monasteries of the order of the Canons Regular of St. Augustine in Silesia

Specific spiritual ideal and the aim of perfection as a way of life[1]

Order is a special environment whose character and form of life is also connected with special architecture exclusively typical of order. In the Middle Ages, however, in Europe and of course in Poland too, monks and monasteries, despite their specific character, were rather common in social life. Today they still exist but what is left of their everyday activities is only an imposing memory in the form of old abbey churches taken over and redefined by new celebrants and huge convents which were liquidated by revolutionary laws and adapted for other purposes [1, p. 53]. Apart from their use and function, their architecture also changed over the centuries; usually there are no remains of the original form or what is preserved is only its fragments in the fabric which was added later. Despite the passage of time and changes in monastic architecture, its significance in culture is still great.

Research conducted in the years 2003–2007 by the author on monastic architecture of the Canons Regular of St. Augustine in Silesia and its findings enabled the formulation of a few conclusions. One of them regards the location of Silesian canonry, the other regards architectural form – layout and construction of the church and the monastery, third regards architectural elements.

As regards the location of the canonry, the shortest monastic rule providing principles of the monastic life did not directly indicate the place of location of the abbey of that order. We know, however, that while writing the canonical rule St. Augustine prepared it for clerics living in towns close to bishop who had to somehow combine their community life with ministry, preaching and organization outside the walls of the monastery. Such activities to a large extent determine the way of its functioning as well as the scope of activities of the monks and the frequency of contacts with the world outside [See 6, p. 50].

The selection of the place for construction of monasteries of the Canons Regular was quite important. The analyzed abbeys of the Canons Regular in Silesia were at first founded away from larger settlements. Then, however, they were moved to bigger towns which later became city centers. The reason of that translocation could be both low rate of settlements and the lack of prospects for growth of the order as well as the scope of activities carried out by the canons, including not only canonical but also liturgical and ministerial tasks and later even charity. This kind of operations made sense in larger populations. After moving to Wrocław the monks were located close to bishop, duke and the trading center. This provided better conditions for the order to function and grow. In Żagań, they settled to the south-east close to the market square, in the place of original stronghold.

The order started to operate in Silesia when an abbey was founded. At first the monks lived rather austere life; it was the case with the canonry on Ślęża Mt. and in Wrocław as well as with already existing parish churches in Nowogród Bobrzański (St. Bartholomew parish church) and in Żagań (Holy Virgin Mary church). The reasons behind the selection of the location of the order of the Canons Regular of St. Augustine on top of Ślęża Mt. were ideological. They wanted to develop an important cultural center

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[1] This is how the Belgian researcher Ludo Millis defines monasticism, especially of the Canons Regular [6].

Parts

Ecclesiastical

9 – tower of St. Gabriel
10 – porch
11 – tower of St. Michael
14 – western altar of St. Peter, ambulatory with gallery first floor
19 – reception room for monastery guests
26 – church
33 – stairs above crypt
34 – tomb of St. Gall
35 – chancel above crypt with high altar of the Virgin Mary
32 – sacristy, library, scriptorium
36 – sacristy, vestriary first floor
37 – preparation of the Holy Bread and Oil

Monastic community

20 – storage of vine and ale, pantry first floor
21 – kitchen
22 – monastic kitchen, bakery, brewery
27 – cloister with arcades
28 – dining hall - refectory, wardrobe above
30 – abbot's house
31 – dining hall, cellar, kitchen
38 – dormitory
39 – bathroom
40 – privy

Farming

1 – main entrance, coach house
2 – servants' lodging
3 – pigsty
4 – stable for horses
5 – sheep pen and shepherds' lodging
6 – goat pen
7 – stable for cows
8 – bakery and brewery for visitors
12 – stable for horses and cattle
13 – house for visitors, servants' quarters, boxes for horses
15 – house for pilgrims, bedrooms, bathrooms, servants, brewery, kitchen, bakery
16 – coopery, joinery, malt granary
17 – lime kiln
18 – lodging for visiting monks, lodging of day school masters, lodging of guest masters
29 – workrooms for craftsmen, stores
41 – granaries
42 – house for blood-letting
43 – kitchen and lavatorium, lavabo
44 – novitiate kitchen and bathroom
45 – gardener's house
46 – poultry yard
47 – medical quarters and chemist
48 – hospital with cloister
49 – patients' chapel, hospital chapel
50 – novitiate church
51 – novitiate with cloister
52 – cemetery and orchard
53 – monks' vegetable garden
54 – poultryman's lodging
55 – medical herbs
56 – geese and pigeons

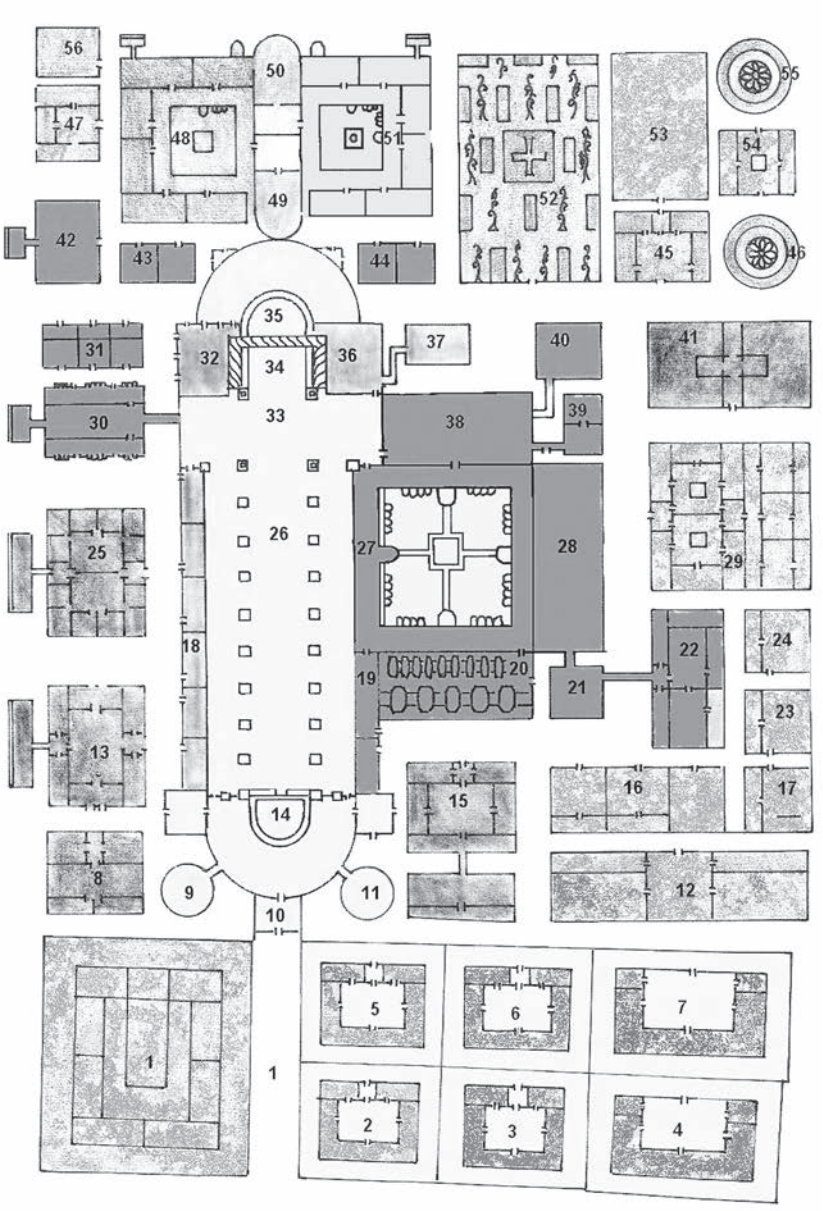

Fig. 1. Diagram of the Abbey of Saint Gall

in the place of former pagan center whose traditions in the first half of the 12th century must have been still very strong in Silesia [15, pp. 12–13]. In regards of the foundation of the canonry in Nowogród Bobrzański, it was connected with colonization conducted in this area by Henryk the Bearded. The canons were supposed to fulfill specific tasks in developing new areas [14, p. 45].

Little is known about the pattern of architecture followed by the Canons Regular of St. Augustine because, unlike the Benedictine Rule, the Augustinian Rule does not provide any guidelines as to how the architecture of the canonical monastic abbey should be organized and look like; more can be learned from such normative sources as principles regulating monastic life in specific abbeys and monastic traditions collected in chronicles. Due to the lack of such guidelines in its rule the order of the Canons Regular of St. Augustine probably followed the generally known plan of the Abbey of Saint Gall (Fig. 1), which was used as a template for the abbeys which were created; the plan did not, however, determine but only indicated what

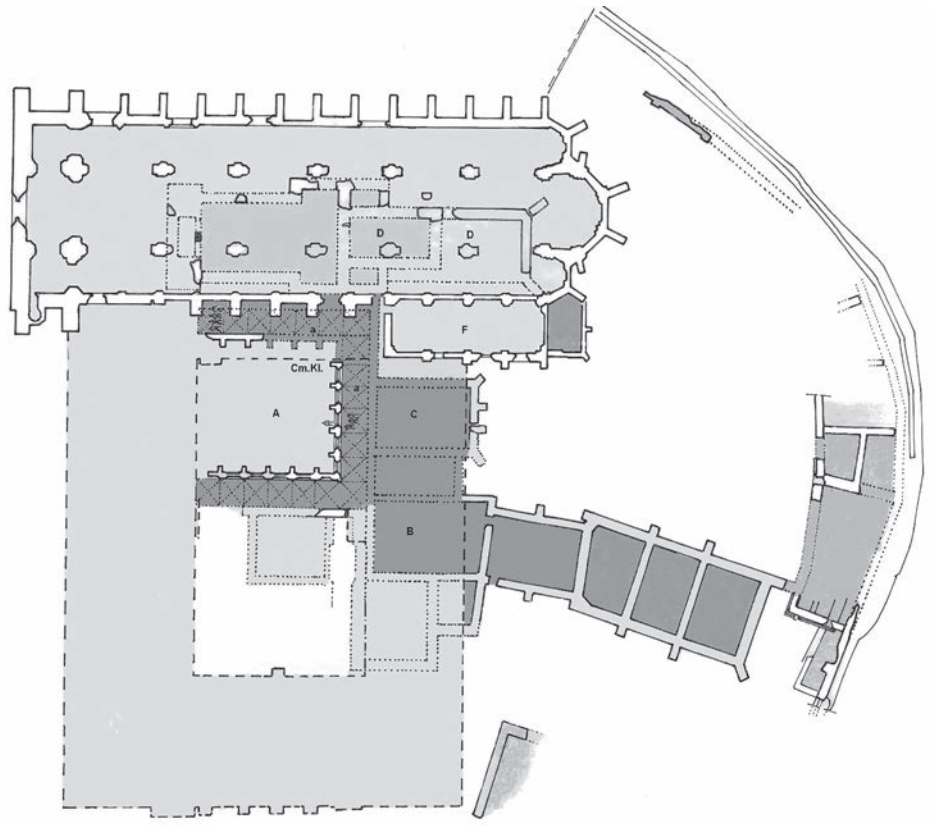

Fig. 2. Plan of the Abbey in Wrocław on Sand Island: ecclesiastical part – D (church, choir) and F (sacristy), residential part – A (garth, cloister), B (refectory) and C (chapter-house) and farming part

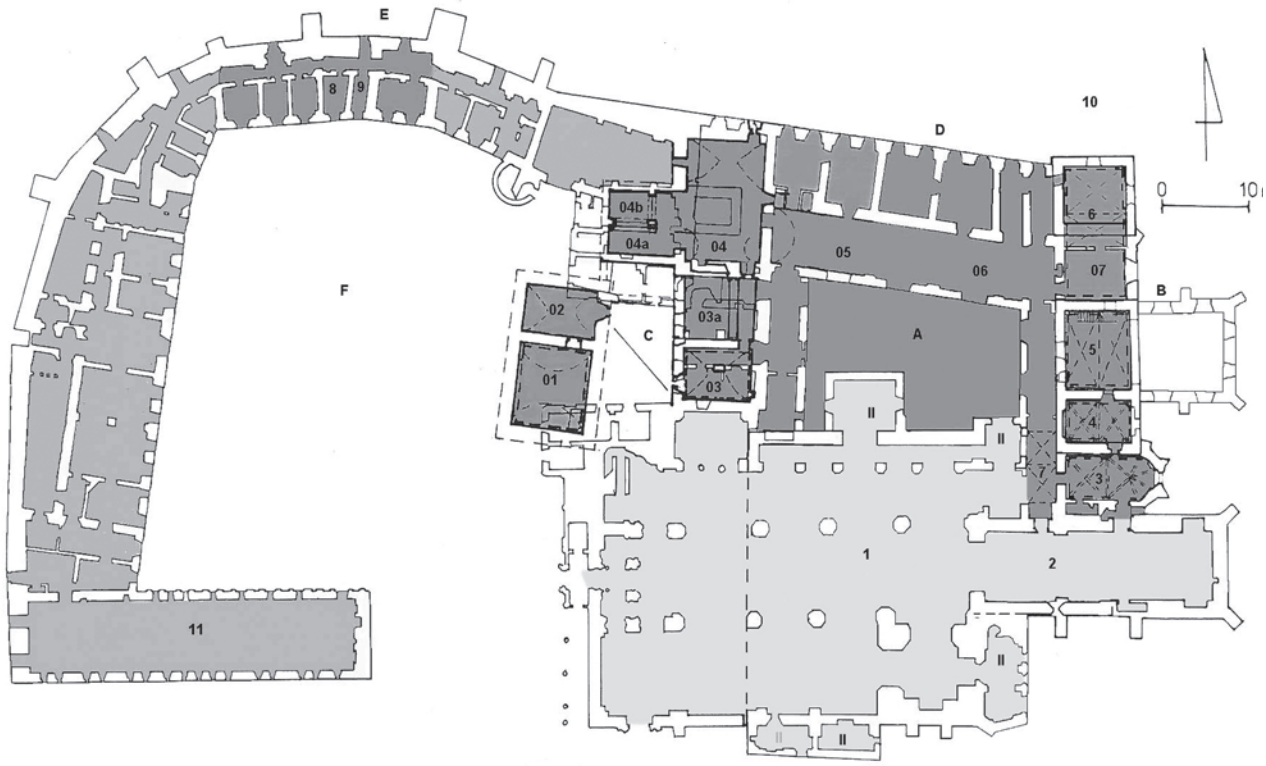

Fig. 3. Plan of the Abbey in Żagań: ecclesiastical part – 1, 2 (church, chancel) and II (chapels), residential part – A (garth), B (east wing: 7 – cloister, 3 – chapel with dormitory upstairs, 4 – sacristy, 5 – chapter-house; 07 – workshops (brethren chamber 10 – privy-bathroom)), C (west wing: 01 and 02 – house and later palace of the abbot, 03 – not defined function (?), 03a – summer refectory, 04 – winter refectory) and D (north wing: 05 and 06 – cellarium), E – monastery school: 8 – cells, 9 – solitary, F – internal courtyard and farming. Clausura: 04 – kitchen with hearth and stove: 04a – hearth, 04b – kitchen. Within the walls: 11 – granary

an ideal monastic design should look like. The order followed the model plan in respect of the general layout of the design development and – with the exception of the basic spaces – it adapted the layout for its needs. So, just like the plan of the Abbey of Saint Gall, the monastery of the canons was supposed to respect the provisions of the monastic rule, liturgical order and management of the monastic holdings. A few zones (at least three) can be distinguished within the whole monastic layout on the basis of their symbolic and subjective significance, Figs. 1–3.

The most exquisite examples of the analyzed monastic buildings included churches, which have been preserved in the best condition, and clausura buildings of which only remains have survived.

Layout and construction

The church with the organization of its interior was an important place for the Order of the Canons Regular of St. Augustine that, as a community, devoted themselves to spiritual life. Soon, in order to develop the proper monastic community, monks began to build their temples which in the 11th–12th/13th centuries were exclusively monastic. Is seems that they intended to build huge structures. An extraordinary program was approved to build an abbey of the Canons Regular of St. Augustine on Ślęża Mt. It is believed on the basis of numerous sculptures of lions that it was planned to build either a few separate chapels or a large-size temple with a different form; for unknown reason this plan was not executed.

The surveyed churches were built in different ways. The least is known about the original buildings which we know only from remnants which were replaced with other elements which have survived until today. Around the middle of the 12th century, first a small temple, but with rich functional program, was built on Sand Island in Wrocław for the monks who were moved from Ślęża. The Romanesque church, built from stone slabs, had a chancel with a couple of chapels or aisle annexes, a transept, a three-aisled main body of the building and two towers from the west, Fig. 4. Unfortunately, the building has not survived until our times, however, the fragments of stonework and sculptures which have been preserved testify to the great scale and artistic skills of these designs [2, pp. 195–198]; [4, pp. 360–376]; [8, pp. 34, 277]. In regards of the monastery, no original monastic buildings, which must have been constructed mainly of wood, have been preserved until today [11], [12], [7, pp. 81–84].

In the second half of the 12th century, stone Romanesque buildings were also erected in Górka. A small-size structure built from granite slabs from Sobótka had a square choir, adjoining an elongated rectangular, residential section from the east, Fig. 4; the material used can testify not so much of the time when the structure was built as of the same construction workshop as in the case of Wrocław. In the following century, the structure was completely adapted for ecclesiastical purposes, its residential section was converted into the main body of the building which was connected through a rood arch opening with choir. It was possible as a residential section with a tower and a porch was added from the west. At that time in the 13th century, the church was also extended by adding a sacristy, and north aisle in the following medieval stage, in the 15th century, Fig. 5 [7, pp. 171–179].

In the 13th and 14th centuries, in connection with the change of the function of the church and the role of liturgy, the necessity of opening of the temple of the Order of the Canons Regular of St. Augustine to the city and laymen, and consequently in connection with the need

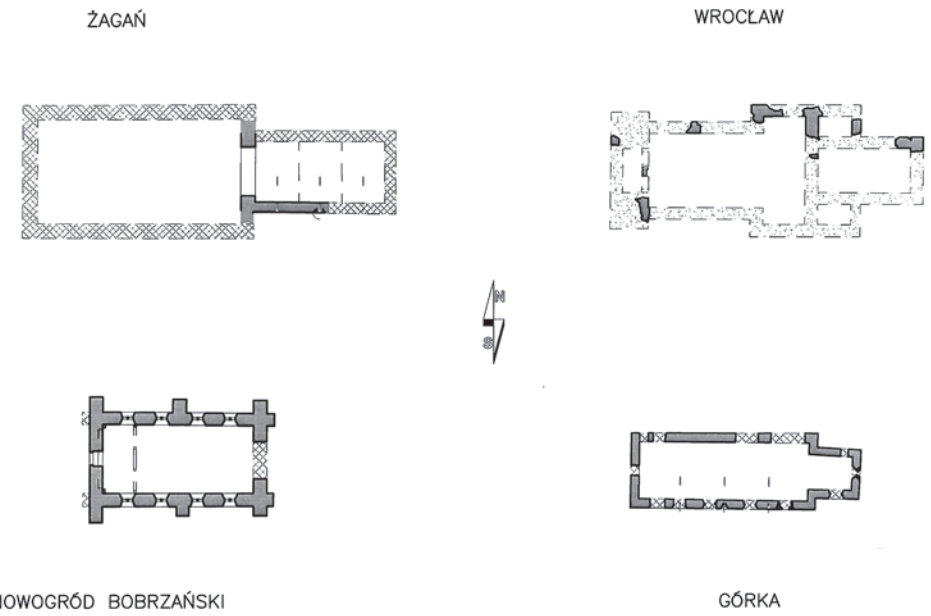

Fig. 4. Original form of monastic churches (by the author on the basis of research)

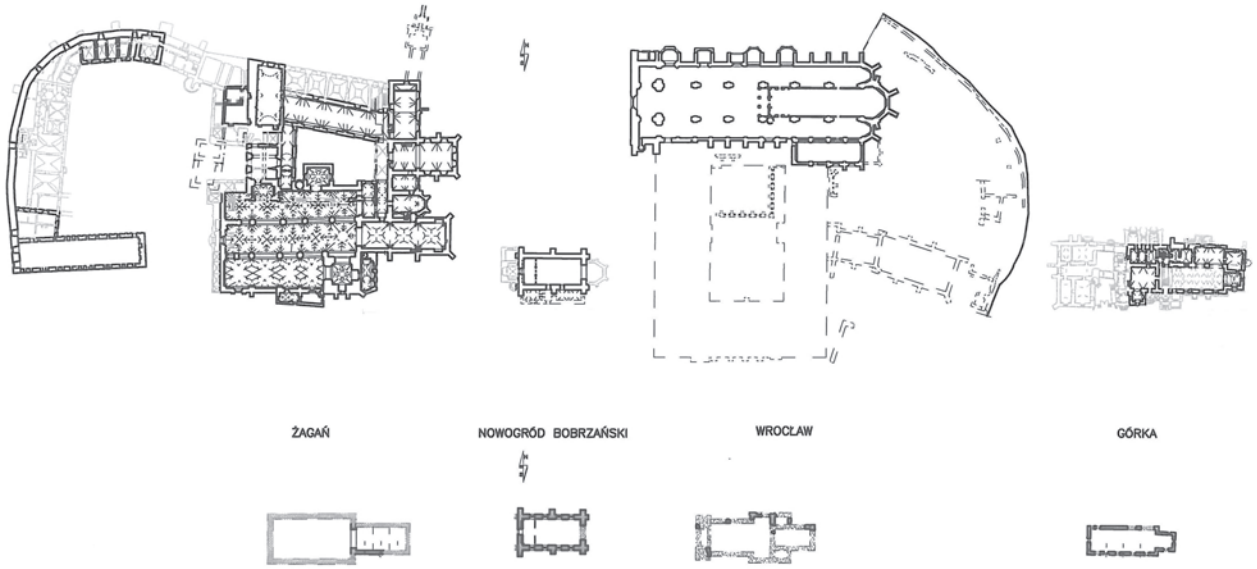

Fig. 5. Developments of medieval architecture of monastic buildings: reconstruction and preserved elements (by the author on the basis of research)

for more space, around the middle of the 13th century, at the latest in its second quarter, an extension of the monastic church in Wrocław began. It was an early Gothic extension built with bricks which were already used at the beginning of the 13th century in Silesia. The bricks of unified size were laid in the same characteristic Flemish double stretcher bond (monk bond). The rectangular chancel with a diagonal buttress was added then from the east; its remnants suggest that the chancel of the original church was extended to the east by about 10 m in the clear of the wall, Fig. 5 [7, pp. 76, 85–86], [4, pp. 360–376], [2, pp. 195–198, Fig. 3]; [1, p. 274].

In the first half of the 13th century, the monastic church in Nowogród Bobrzański was built also from bricks laid in Flemish double stretcher bond. This building could originally be a single-aisled church or a bigger monastic church was planned. Probably, out of the planned three-aisled basilica with chancel, only the choir was built on an elongated rectangular plan, which since the Middle Ages was used as a nave. Its interior had vertical windows with slightly pointed arches, Fig. 4 [7, pp. 241–244].

In the 1330s, in the place of the original church in Wrocław, the construction of a new ecclesiastical structure began, however, its main body was not completed. The building was also supposed to be a three-aisled structure but originally there was an idea to erect piers between aisles exclusively with circular cross sections, spaced from one another half the distance between existing pillars. The works began from the west, from the porch, next from the north-west side wall of north elevation and pillars between aisles with at least five bays, with the idea of connecting them with the remains of the Romanesque church [1, pp. 276–278], [7, pp. 89–90].

The works continued. However, around the middle of the 14th century the plans to build a Gothic temple changed a little. The spatial layout was changed by removing every second pier, changing the remaining ones from columns to pillars on an elongated octagon plan in the direction of the east-west and by introducing a three support vault with nine cells in the aisles, and stellar vault in the nave. This is how the Gothic ecclesiastical structure, which is twice bigger than the Romanesque one and with richer functional program, was constructed. This is a three-aisled brick hall basilica – both the main body of the church and the chancel. Its east part comprises three apses, and the facade from the west has two towers, Fig. 5 [7, pp. 90–94].

At the beginning of the 15th century, during the construction of the new temple in Wrocław or after construction of the church, the sacristy was built by the two east bays of the south aisle. Probably a structure with five bays on an elongated rectangular plan was built from bricks laid in Flemish bond. In the second half of the 15th century, inside the 14th-century temple, the choir was built from the middle of the hall of the Gothic church. A rood screen could have been built in the place of earlier east choir from the 3rd quarter of the 14th century. Most probably the parapets additionally separating the monastic choir and the nave from the aisles come from that time too; surely there were Gothic stalls along them. Since the end of the 14th century chapels were added to the church between buttresses from the north.

In the first half of the 16th century, the extension of the parish church in Żagań began. Like in Wrocław the original church in Żagań was replaced with a bigger ecclesiastical structure. The construction of the temple continued over a few stages in the Middle Ages. Works began from the east, extending first the stone chancel, partly adapting the walls of the original choir or extending the original stone design. A bigger main body of the building, already made from bricks, originally with a hall structure, was added to the chancel from the west. The construction of the nave, in the place of former one, began from the north. As a result an aisle and a nave with pointed arch windows and buttresses with offsets were built. A tower, whose original height is unknown, was built in the south-

east corner. Construction work connected with the chancel, the main body of the building and the tower continued still in the second half of the 14th century, Fig. 5 [7, pp. 294–296].

At the turn of the 14th and 15th centuries, the construction of the church stopped; at that time three Gothic chapels were added to the ecclesiastical structure, two from the north side of the church and one – porch from the south to the tower at ground level.

After 1439, the tower, which had collapsed, was rebuilt – at least from the level of the aisles of the main body of the building upwards, in its present form of Gothic style.

The construction of the main body of the building continued over the following medieval stage. In the 16th century, the main body of the building was extended and the hall structure of basilica was replaced in two stages. During the first stage two bays of south aisle were built, in the second stage – the construction continued with building west facade and then two bays of the three-aisled main body of the building from the east adding them to the part which was already constructed. The new part was built with a taller nave, and the nave in the existing main body of the building was lifted, creating a pseudo-basilica interior [7, pp. 296–301].

The constructions of the surveyed ecclesiastical structures were completed at different times. The Gothic temple in Wrocław was built in the 14th century and its construction was completed already at the beginning of the 14th century, whereas the temple in Żagań was built in stages – from the 14th until the 16th century.

After construction of the temple, which is the axis and the main element of Silesian monasteries, the monastic space assigned for the members of the order was developed.

The Canons who were at first located in temporary residential buildings e.g. rectory, like other orders, in order to create a monastic community began the construction of proper monastery. The construction of monastic buildings would begin after or during the construction of the temple. Adjoining one of the longer sides of the temple, the buildings, enclosed in a tetragon on a plan resembling a rectangle, were constructed gradually. First, the east wing, connected with the chancel of the church, was built to the south (Wrocław) or to the north (Żagań), then, parallel to the temple's axis – north or south and west wing, closing the sides of the garth.

As a rule, the basic monastic buildings were built first – such as chapter-house and dormitory, comprising the east wing and refectory – in the south (Wrocław) or west wing (Żagań). The chapter-house was built close to the chancel, right behind the chapel – both in the original monastery in Wrocław and in Żagań. The dormitory was located upstairs in the east wing, a.o. above the chapter-house. In time the abbot would move to separate quarters or a separate building; such an abbot house was surely constructed in Żagań, in the west wing. Later the monks were also assigned separate cells which were located in the annexed monastic buildings. In Wrocław, around the 14th/15th century, the monastery was extended to include a part where dormitory was located, whereas in Żagań the extension took place first at the end of the 14th century and then in the 15th century. Another important room was refectory which was usually located in the south or north wing, depending on the location of the monastic buildings in relation to the church; in Wrocław the refectory was located in from south-east and it was extended; in Żagań Abbey, at first there was only a winter refectory from north-west, later also winter refectory – in west wing, in the 14th and 16th centuries.

Important rooms shared by the Canons in the monastery also include the places where the monks worked such as scriptorium and the library located near it. Both functions had their rooms both in Wrocław Abbey and in Żagań, in east wings. They were built in the first stages of construction of the monasteries and extended in the following ones.

Furthermore, on the area of the clausura there was a little monastic hospital – infirmary and internal school connected with the activities conducted by the order; other rooms included parlatory - locutory, workshops, treasury, solitary, etc.

In Wrocław, most probably during the construction of the church in the second half of the 12th century, some monastic buildings were built from the south. However, their specific form or layout is unknown; most probably, they were made of wood.

The masonry part of the monastery was most probably constructed in the first half of the 13th century, in early Gothic stage. A cloister with buttresses was built from bricks – first laid in Flemish double stretcher bond – most probably together with other buildings comprising the wings around the garth; thus that brick bond was in the lower sections of the cloister walls. At that time the south wing building was constructed, which is evident by the remnant of the wall – a section of north wall of the structure located there whose function has not been determined.

It is believed that the destroyed monastic buildings were rebuilt in the second half of the 13th century and in the first half of the following century. The rebuilding included the cloisters of the monastic garth; the walls of the cloister in their upper section were rebuilt with bricks laid in Flemish bond.

The rebuilding was connected with extension of the monastic buildings which was conducted during the construction of the Gothic temple as well as after its completion, in the following stages of that medieval stage. At that time probably two structures comprising east wing were built from bricks laid in Flemish bond. The preserved part of that structure has a diagonal buttress in its north-east corner and two straight buttresses by east wall. As regards the function of that structure, its location in the monastery layout and its architecture, most probably it was a chapter-house.

South of the chapter-house another huge structure was constructed; its west segment had basements and its east single space segment which was the basements, whose side walls have single straight buttresses and east wall has diagonal buttresses in the corners; the structures were built from bricks laid in Flemish bond. The function of

the building, due to its prominent location and rich details, including traceries, is believed to be the monastic refectory.

At the end of the 14th and in the 15th century, the monastic complex was extended east to include facilities accommodating the needs of the order. These building activities were connected with the construction of a structure that most probably housed a dormitory; that building was constructed at the latest right after construction of the church. During the same Gothic stage, a curtain-wall was built to the north from the north-east buttress and the Gothic river bank wall. The space between the curtain-wall and the river bank wall is believed to have been developed in the following Gothic stage: this included construction of transverse walls with arches filled with Gothic bricks with a frog made with fingers laid in Flemish bond. It appears that these could have been utility rooms necessary for the monastery to function.

It is believed that the structure housing bakeries and the monastic brewery was built during the extension of the monastery in the beginning of the 15th century. The structure, located at the south-east corner of the Baroque monastery, was built from Gothic bricks with a frog made with fingers laid in Flemish bond. The brick headers in the external face of the structure are glazed.

In Żagań, the following were built by the middle of the 14th century: chapel, sacristy, chapter-house and dormitory above these rooms, comprising east wing and the abbot house from the west as well as winter and summer refectories. Sacristy and chapter-house were located in the structure of the preserved original stone stronghold, whereas the new ones were built from bricks. It is also known that around the middle of the 14th century a monastery school and library with scriptorium operated by the monastery. Their locations are, however, unknown; most probably they were located, like later ones, in the east wing.

In the second half of the 14th century, at the end of east wing, a structure was built for workshops, with basement underneath used as a utility room, and upstairs bedrooms for the monks which were connected with the existing ones. Privy was located to the north of the monastic complex by the moat. That structure, located in some distance, was connected with east wing. At this construction stage a kitchen with hearth was built in west wing of the monastery; a brick granary was also built to the west of the church. A little later, most probably at the end of the second half of the 14th century, north wing, enclosing the four-sided garth in the form of a narrow south passage of present north wing was constructed. In the second half of the 14th century, the complex also had an operating physician room, bathroom and vestiary that might have been located by the granary, in the place of present monastery school wing.

In the first half of the 15th century, the room in east wing where chapter-house was previously located was enlarged by addition from the east of a structure on a square-like plan. A larger ground level room assumed the function of St. Ann Chapel that still exists today. Above St. Ann Chapel, upstairs a library was organized.

Most probably at the beginning of the 15th century or later at the turn of the 15th and 16th centuries, the area west of the complex was leveled. After the area was leveled a new structure was erected there or building with chapter-house was adapted for the Canons. The brick structure could have at least two or three stories and rich architecture, which is indicated by the preserved Gothic gable wall.

In the second half of the 15th century, the rebuilding of the destroyed monastery continued. The vaults in St. Ann Chapel and in the library were repaired and during the rebuilding of the destroyed south part of east wing its upstairs was rebuilt as taller in the form of a gallery open to the chancel.

The structure which is preserved in the walls of earlier monastery school, where probably the dormitory for the monks was moved, is dated from the first half of the 15th century: made of brick, annexed to the stone defensive wall. Maybe that structure was built in two stages during the medieval construction stage. At the turn of the 15th and 16th centuries, the interiors of common bedrooms were divided into smaller separate cells. A school for novices was built and the old bathroom was converted into a new palace of bishop or a new structure was built in the place of former bathroom; its location was most probably in the middle section of the monastery school. Most probably at the beginning of the 16th century, another leveling of the area was conducted to the west of the complex. Consequently, previous ground level became basements. The summer refectory, located by the chapter-house, was probably moved to today's ground level. Between the two refectories there was a corridor with a deep well. Furthermore, the leveling of the area enabled the consolidation of all earlier structures with new ones to create west wing connected at the level of today's ground level of the cloister. An enclosed internal monastic courtyard was designed then too from the west.

Elements of architecture

From the middle of the 13th century, ribbed vaults were used in the monastic buildings of the Canons Regular. Probably such a vault was introduced in the 13th-century cloisters in Wrocław monastery and it was used in the cloister of the 14th-century monastery in Żagań. In Żagań, the 14th-century vault has pointed arches and its ribs have a single scotia molding. They were supported on corbels with geometric or even organic form (heads). The vault had bosses (Żagań). It is unknown what kind of roofing material was used in the Romanesque church on Sand Island or in the original structure in Górka.

In the 14th and 15th centuries, along with the change in form of churches to Gothic style, new vaults were introduced. In the second half of the 14th century, vaults which

were used included asymmetric vaults with three piers (Wrocław) which comprised three bays with three ribs in each bay, stellar vaults with diagonal ribs (Wrocław) as well as, at the turn of the 15th and 16th centuries, net ribbed vaults with three sections divided by ribs (Żagań). A little later – stellar and net vaults based on a dome and lunette construction was also used (Żagań).

The ribs in vaults with three piers are made of brick segments going from stone bases, supported on sculptured bosses (Wrocław).

The stellar vault has stone ribs supported on floral and figural (Wrocław) or geometric corbels (Żagań). The bosses on the vaults were circular: church (Wrocław) and monastery (Żagań).

The ribs used in the analyzed examples of vaults in the 14th century had double ogee molds (Wrocław), in the following centuries and single or double scotia mold (Żagań).

Basically two materials were used to build monastic complexes: stone and brick, depending on the region and time of construction. However, in regards of architectural details, they were usually made of stone; in the 12th XII century, granite – lions from Ślęża Mt. (Górka), sandstone – Romanesque tympanum or granite – twin base (Wrocław). Also in the 14th century, all architectural elements of decoration on elevations were made of stone, like inside church (Wrocław), e.g. molded cornice of the pedestal or buttress gablets.

The walls of the 12th and 13th century churches were divided by windows: one window on the axis of east wall of the chancel and windows on side elevations of the main body of the building (Górka, Nowogród Bobrzański). Later churches had a much more extensive division of the walls. Both inside and outside in the 14th, and later in the 15th century, the plane of the walls was divided by vertical windows; outside this vertical articulation of the solid was emphasized by buttresses. In the 13th century, the buttresses braced around the main body of the structures, were rectangular (Nowogród Bobrzański) but already in the second half of that century diagonal buttresses appeared (Wrocław, Żagań). The buttresses had one or two offsets and they terminated above half of the height of the elevations, below the roof line (Nowogród Bobrzański) as well as with three offsets (Żagań). In the 14th century, the buttresses had four offsets and shaped stone caps and triangular gablets (Wrocław). The buttresses from the end of the 15th century were also crowned with triangular gablets but their form was already simple band projection of the wall of the same thickness (Żagań). They had some architectural detail in the form of horizontal division by a small offset, made of bricks arranged as headers. Furthermore, two of the buttresses feature blanks with pointed arches, framed with shaped ceramic sections; one of the buttresses – first from the west – does not have those details.

The composition of the temple interior can be described only on the basis of those Gothic structures which have survived until today. The nave of the church opens to the aisles with molded pointed arches by arcades on pillars (Wrocław, Żagań), in Wrocław with flat lesenes with concave edges from the aisles. The 'archaic' division (into two) of side bays by lesenes can be seen in south aisle, whereas in north aisle, where there are no lesenes, the division was made by repetition of colors and texture of bricks. Apart from the vertical division there is also a horizontal division into two sections introduced by geometric corbels (Żagań – chancel), or figural and floral with full figural sculptures of apostles and prophets (Wrocław); these sculptures were placed in the upper half of the pillars from the side of the nave; from the side of the aisles they are placed on consoles.

The most exquisite elements of the buildings include church portals. The oldest portals in Silesian temples of the Canons, these from the 12th century, had simple forms (Górka), but the main entrance portal with simple closure was crowned with the foundation tympanum (Wrocław). Later portals from the 14th and 15th centuries have pointed arches with richly molded jambs and sculptural decorations (Wrocław, Żagań). The elongated openings have jambs with roll moldings, double ogees and scotias (Wrocław). The main portal is crowned with a tall Gothic ornate gable with crockets and filials; the field of the Gothic ornate gable is filled with a bland tracery with motifs of mouchettes and quatrefoils; the portal also features sculptural decorations.

The south portal, framing former passage from the church to the monastic cloisters from south aisle is a little less exquisite. The roll moldings, double ogees and scotias, going from the offset pedestal, have a section of figural and floral low reliefs on the impost frieze, between which there are small figures of prophets with long robes and banderols, two on each side.

The side, north entrance, Gothic portal is simpler than the main and south portals. Like west and south portals, this portal has no sculptured decorations. Two portals crowned with pointed arches connected with the construction of sacristy are a little younger; one of them connects south aisle with sacristy, the other connects sacristy with east wing of the monastery. First of them is framed with a molded jamb made of stone slabs placed on low rectangular pedestal. The mold consists of a double ogee, scotias and cuts emerging from an interesting 'organic' form.

Few original windows have survived until today. The 12th-century Romanesque windows include two remnants, both with stone framing made of granite slabs and crowned with a semicircular arch, splayed on both sides (Górka) and a remnant of a semicircularly crowned brick window, (Żagań).

The only original fragments of Gothic windows include the shape of pointed arches in Nowogród Bobrzańsk and traces of windows crowned with pointed arches on the wall in Żagań. There is only one small window crowned with pointed arch and tracery in the passage between chancel and chapel in the monastery and a rich Gothic brick detail in the gable wall, in the attic space of west wing (Żagań).

Most medieval windows with the 14th century mostly original tracery decorations have survived in Wrocław. The two and three light windows with pointed arches, splayed on both sides have rich tracery decorations made

of stone. The traceries have four forms: qarterfoil, trefoil, mouchettes and a combination of trefoils and mouchettes. The tracery mullions divide the window vertically into three lights or two lights in the chancel.

In general very few architectural details have been preserved in the monastic complexes, but their existing remains demonstrate that their form was elaborate. Apart from the above-mentioned portal, connecting the church with original cloisters, the portal connecting sacristy with the rooms in east wing of the monastery was connected with the monastery in Wrocław. The portal is crowned with a pointed arch, has more elaborate jambs placed on pedestals, interwoven in corners and a keystone. Furthermore, the details included a fragment of the column uncovered in the south-east corner of the garth, that is the wall column base and shaft drum made of sandstone; the detail is believed to have been made in the early-Gothic stage. The column with hexagonal sandstone base and green serpentinite shaft, which was found in the modern excavation made during research within east cloister, probably comes from the same time or the following Gothic period. Between the buttresses in the garth walls there are cavities below windows splayed from the side of the cloister, also from the side of the garth. Furthermore, one of the monastic buildings, whose remains were discovered on the island, features double walled-up window openings with splayed reveals on both sides and low parapets, with some remains of sandstone traceries.

In Żagań, a portal with pointed arch, or actually its remnant, has been preserved in the passage between the chancel and the chapel. Above the door opening, an old walled-up passage with pointed arch was uncovered. A well preserved detail of exceptionally rich Gothic gable in the attic space comes most probably from medieval times. The Flemish brick bond wall is crowned with a triangular gable with numerous window openings, molded brick framing and decorated traceries. In the same place, in north-east corner, a decorated brick chimney has been preserved in the form of a rounded shaft with pilasters crowned with volutes with a molded cap.

General notes

The preserved monastic buildings are the creation of humankind and they develop the cultural landscape that preserves the achievements of people who lived there in the past. The monastic complexes that have survived for centuries, as material legacy of the society, are the landmarks of a given region and have been listed in the register of monuments and are protected by the City or Province Conservator of Listed Monuments in order to assure their proper protection. On the commission of the Conservator of Listed Monuments, or within the scope of the authors own research, the monastic complexes and their fragments are surveyed and their drawings are made in order to document the various condition of the buildings of their remains. The detailed measurements and drawings made during research of the history of monastic complexes e.g. of architectural details and their dating are the basis of analyses of other buildings. Furthermore, the measurement documentation is sometimes the only trace of the construction elements which are discovered after many years and, unlike reconstructions which sometimes change original designs, is permanent scientific research. The surveys which have been conducted can also in the future become basis of conservation projects and any renovation work conducted on the area of monasteries.

On the basis of research conducted by the author of monastic complexes of the Canons Regular of St. Augustine in Silesia, described in the doctoral dissertation [7], a few polemical comments to the publications by researchers of the complexes covered in the dissertation can be presented; the comments regard primarily the dating of the structures.

In regards to the monastic complex in Górka, researchers distinguish only one medieval construction stage, the following activities supposedly took place in modern times [14, p. 62], [16, pp. 694–695], [9].

Research conducted by the author indicates that between the first Romanesque stage and the next one, which is described in the literature on the subject [7, pp. 161–168] to have taken place only in the 16th century, there were at least two, or possibly three, more medieval construction stages. Dated back to the first half of the 13th century, the complex could be built already in the second half of the 12th century. In the 13th century, sacristy was annexed to the chancel; in the 15th century, an aisle was annexed to the main body of the building. Still in late Gothic, at the latest at the beginning of the 16th century, the complex was extended to include basements, also under the former porch.

In regards to the monastic complex in Wrocław, there are no common construction stages of the church and the monastery. Olgierd Czerner researching the complex [4, p. 360–366]; [2, pp. 195–198, Fig. 3]; [1, p. 274] dates the church separately, whereas Jerzy Romanow on the basis of this research dates the monastery separately [11], [12]. Research conducted by the author enabled the formulation of a hypothesis that the monastic complex was built in three medieval construction stages, further divided into separate stages. Apart from the original, Romanesque stage of the church construction, Czerner put forward a hypothesis of an early-Gothic stage and two Gothic stages of the construction of that temple. It was possible then to distinguish, after the Romanesque stage, an early Gothic, and after that a Gothic stage, further divided into three stages of the extension of the monastic complex.

In regards to the monastic complex in Nowogród Bobrzański, the literature on the subject presents contradictory hypotheses as to the original shape and changes in the architecture of the complex. The author distinguished two medieval construction stages. It is possible that in the first half of the 13th century a small, single space monas-

tic church was build on a rectangular plan from bricks laid in monk bond but it is also possible, as suggested by Stanisław Kowalski, that originally only part of its three-aisled design was executed, namely the chancel which is located within the walls of present main body of the building [10, pp. 11–19]. There is, however, no research or hypotheses regarding the monastery. The author supposes that in the Middle Ages an addition, which is known from the 19th-century survey drawings, was annexed from the south. Apart from that other monastic buildings must have been constructed then too. It is possible that the structure adjoining the temple in the Middle Ages was built in the place of present rectory. Archival sources indicate that at the turn of the 15th and 16th centuries an abbot house was built in Nowogród Bobrzański.

Researchers date the construction of the Gothic church in Żagań back to three Gothic stages, taking into account the construction of the main body of the building only in two stages. North aisle and south aisle with its east part and the tower which greatly differ are believed to have been built in the same stage. The chapels, which were built in different periods, were supposedly built in those stages too. Research conducted *in situ* demonstrated that the church was built in at least four Gothic construction stages, its main body in three. The medieval monastic structures were built along with the church. Individual parts, whose number, as demonstrated in research, was greater than that presented in the literature on the subject, were added in the following construction stages, over a few centuries – 14th–16th.

References

[1] Czerner O., *Znalazłem tylko dwa kręgi. O starszej fazie budowy gotyckiego kościoła Najświętszej Marii Panny na Piasku we Wrocławiu*, [in:] *Nie tylko zamki – szkice ofiarowane Profesorowi Jerzemu Rozpędowskiemu w siedemdziesiątą piątą rocznicę urodzin*, Wrocław 2005, pp. 273–278.

[2] Czerner O., *Resztki romańskiego kościoła pw. Panny Marii we Wrocławiu*, [in:] Śląsk około roku 1000, Wrocław 2000, pp. 195–198.

[3] Czerner O., *Chór kapłański i lektorium kościoła NP. Marii na Piasku we Wrocławiu w X i XIX wieku,* [in:] Kwartalnik Architektury i Urbanistyki 1965, z. 3–4, pp. 181–205.

[4] Czerner O., *Studia nad romańską i gotycką architekturą kościoła Najświętszej Marii Panny na Piasku we Wrocławiu*, [in:] Biuletyn Historii Sztuki 1962, R. 24, z. 3–4, pp. 360–376.

[5] *Człowiek średniowiecza*, edited by Le Goff Jacques, translated by M. Radożycka-Padelti, Warsaw 1996, p. 53.

[6] Derwich M., *Monastycyzm w dawnych społeczeństwach europejskich, Zarys problematyki*, [in:] *Klasztor w społeczeństwie średniowiecznym i nowożytnym*, M. Derwich, A. Pobóg-Lenartowicz (eds.), Opole 1996, pp. 43–53.

[7] Doroz-Turek M., *Średniowieczna architektura klasztorna kanoników regularnych św. Augustyna na Śląsku*, doctoral dissertation, Wrocław University of Technology, Faculty of Architecture, Wrocław 2009.

[8] Małachowicz E., *Wrocław na wyspach. Rozwój urbanistyczny i architektoniczny*, Wrocław 1992, pp. 34, 277.

[9] *Karta Ewidencyjna Zabytków Architektury i Budownictwa: Zespół Klasztoru Augustianów, Sobótka–Górka*. The card was made by B. Adamska in July 2000.

[10] *Klasztor Augustianów w Żaganiu, zarys dziejów*, S. Kowalski (ed.), Żary 1999.

[11] Romanow J., Romanow M., *Opactwo kanoników regularnych św. Augustyna na Piasku we Wrocławiu w świetle badań archeologicznych*, [in:] *Średniowieczne i nowożytne nekropolie Wrocławia*, R. Wachowski (ed.), Wrocław 2008.

[12] Romanow J., *Klasztor NM Panny na Piasku we Wrocławiu*, Badania archeologiczne w latach 1982–1986, Wrocław. Maszynopis w archiwum PSOZ we Wrocławiu, 1987.

[13] Pobóg-Lenartowicz A., *A czyny ich były liczne i godne pamięci: konwent klasztoru kanoników regularnych NMP we Wrocławiu do początku XVI w.,* University of Opole, Faculty of Theology, Series: From the History of Christian Culture in Silesia, No. 40, Opole 2007.

[14] Pobóg-Lenartowicz A., *Kanonicy regularni na Śląsku: życie konwentów w śląskich klasztorach kanoników regularnych w średniowieczu*, University of Opole, Opole 1999, pp. 45, 62.

[15] Świechowski Z., *Architektura do połowy XIII wieku na Śląsku*, Warsaw 1955, Figs. 472–534, pp. 12–13, 62–63, 78–79, 80–87.

[16] *Sztuka polska, przedromańska i romańska do schyłku XIII w.*, M. Walicki (ed.), PWN, 1971, pp. 694–695.

Architektura monastyczna w kulturze – zespół klasztorny jako specyficzny typ architektury sakralnej na przykładzie klasztorów zakonu kanoników regularnych św. Augustyna na Śląsku

W artykule przedstawiono znaczenie architektury monastycznej w kulturze na podstawie części zamykającej pracę doktorską pt. *Średniowieczna architektura klasztorna kanoników regularnych św. Augustyna na Śląsku*, napisanej na Wydziale Architektury Politechniki Wrocławskiej (pod kierunkiem prof. Ewy Łużynieckiej). Świadectwo dorobku kulturowego ukazano na tle zespołów klasztornych kanoników regularnych św. Augustyna na Śląsku i wyników badań architektonicznych spisanych w oparciu o wyniki prac badawczych w latach 2003–2008 na czterech założeniach.

Zachowane założenia klasztorne są wytworem ludzkim składającym się na krajobraz kulturowy, który **przechowuje świadectwo działalności jego dawnych mieszkańców**. Obiekty klasztorne które przetrwały wieki, jako materialny dorobek społeczeństwa będący znakiem tożsamości danego regionu, zostały wpisane do rejestru zabytków i są pod opieką Miejskiego albo Wojewódzkiego konserwatora zabytków w celu zapewnienia im odpowiedniej ochrony. Na zlecenie konserwatora zabytków bądź w ramach autorskich prac są wykonywane badania wraz z inwentaryzacyjnymi rysunkami budowli i ich fragmentów, mające na celu udokumentowanie znajdujących się w różnej kondycji obiektów czy pozostałości po nich. Wykonywane podczas badania historii założeń architektonicznych, drobiazgowe pomiary i rysunki, np. detali architektonicznych i ich datowanie są podstawą do analiz innych obiektów. Oprócz tego dokumentacja pomiarowa jest czasami po wielu latach jedyną pozostałością odkrywanych elementów i w odróżnieniu od zmienianych niekiedy rekonstrukcji jest elementem stałym opracowania naukowego. Wykonane inwentaryzacje mogą być także w przyszłości podstawą projektów konserwatorskich oraz wszelkich prac rewaloryzacyjnych prowadzonych na terenie klasztorów.

Key words: Silesia, monastic architecture, order of the Canon Regular of St. Augustine

Słowa kluczowe: Śląsk, architektura monastyczna, kanonicy regularni św. Augustyna

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Towers – the element of Jutrosin's spatial composition (Greater Poland Province)

Introduction

Dwelling and farm buildings along with greenery are the elements that for centuries to a large extent have formed and arranged space. The tallest or the biggest of them dominate the whole composition. These include primarily town halls and churches with their spacious interiors and distinctive functions as well as high towers which are the main architectural landmarks. These buildings also often have exquisitely rich architectural forms as well as sculptural and painting decorations which greatly affect the perception of landscapes or skylines of selected settlements. The town halls and temples create specific architectural landmarks of the cities and thus diversify their spatial composition.

It is worth emphasizing that it was the buildings and spatial composition that significantly influenced the diversity and architectural design of a town; those factors determined the harmonious adjustment to the neighboring landscape. As a rule the closer to the center (market square), the buildings are higher and higher. The architectural landmarks, which would be vertical elements, located over a larger area significantly influence the architectural diversity of a town. The fundamental element in the process of architectural development of settlements and their landscape was their geographical location. Making the most of the landscape features enhances and facilitates the artistic perception of town skylines [8].

The issues indicated above will be exemplified by Jutrosin – a town in Greater Poland. Although it is not a huge and popular center, its historical and urban growth is as interesting and fascinating as that of its selected historical buildings.

Jutrosin[1] is a small town located in Greater Poland Lowland whose characteristic features include significantly undulating landscape, absence of lakes, gravel and sand hills as well as two wide-bottomed valleys of small rivers: Orla and Radęca. This is because of dangerous and regular overflows of Orla river and its tributaries that Jutrosin was located on a little hill, which makes its skyline clearly visible from anywhere around it [4].

[1] The town is located 25 km in a straight line to the east of the main national road between Wrocław and Poznań; from an administrative point of view it belongs to Greater Poland Province. It is located in the center of district (*gmina*) that in the south borders on Lower Silesia Province.

History of Jutrosin

The first mention of Jutrosin comes from 1281, however, it is believed that the town was founded much earlier. At that time Poland was divided into regions. The town certainly belonged to Greater Poland and it was part of Dubin Castellany [10]. The first written mention of the town comes from 1395 and the church in Jutrosin was first mentioned in 1420 [6].

It is known that in the 16th century Jutrosin had the privilege of organizing general assemblies[2] and it is repeated in written accounts that there was a castle whose

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[2] This privilege was granted to such cities as Warsaw, Malbork or Bydgoszcz.

Fig. 1. The layout of Jutrosin (by Janusz Gubański): A – town hall, B – St. Elizabeth's Church, C – former Evangelical Church, D – Holy Cross Church, E – belfry; 1 – rectory, 2 – former Catholic school, 3 – restaurant, 4 – post office, 5 – former pastor's house and Evangelical school, 6 – cemetery, 7 – Sacred Heart Statue, 8 – kindergarten, 9 – St. Hedwig nuns' house

location has not been determined so far (it is believed that so called „Górzysko" it the place where it that castle stood) [4].

In 1532, one of the biggest fires broke out in the town and it destroyed the oldest documents, including those regarding its incorporation[3] and providing the obligations as well as privileges of the townsmen. Already in 1533, the town's owners issued a new document with the rights and obligations granted to the inhabitants of Jutrosin. The first mention of the Holy Cross Church comes from 1557 and of the Evangelical school from 1573. The settlement grew dynamically in the 16th century as it was located on the trade route leading from Poland to Silesia and to Saxony [2].

In 1642, the then owner of Jutrosin – Prokop Stanisław Kołaczkowski granted a privilege to the immigrants from Silesia which guaranteed the newcomers their own authorities and freedom to practice religion. It is known that in the first half of the 17th century, apart from Polish and German religious communities there was also a Jewish community in Jutrosin. Crafts developed more and more in the town too. Already in the second half of the 17th century, selected guilds were granted charters. During that period there was a growing unrest between individual religious groups (and consequently – national). In the 18th century, these relations grew much worse. In the second half of the 18th century, the political situation improved and crafts as well as trade continued to flourish and that contributed to further beneficial changes in the development of the town [4].

Over the centuries Jutrosin has had numerous owners until 1841 when Duke Adam Czartoryski purchased

[3] Presumably, Jutrosin was granted a charter before 1281 (after: [10]).

the holdings from Count Potulicki from Wielki Bór [10]. The Czartoryski family managed the holdings until World War II.

After liberation of Jutrosin in 1945, the German origin population left the town. During the years immediately after the war there was a slight revival of trade and culture. When in June 1945 Leszno Province was established, the town and district (*gmina*) belonged to that province [4].

In general it can be said that until the 1990s the town declined and its economic, social as well as cultural life fell into stagnation. Only after 1990, after implementation of some necessary organizational and financial changes in local authorities, did the town grow. It was evident in the area of construction (a new district of single-family houses), necessary investments (e.g. water supply or sewer systems), and first of all improvement of the town general beauty (new sidewalks, repair or in some cases even conversion of public utility buildings to serve new functions, renovation of elevations of most residential buildings). Due to efforts of both local authorities and the residents themselves the image of this Greater Poland town improved considerably over the last few years.

Spatial development [4]

At present it is very difficult to unambiguously determine the course of history of the oldest settlement in Jutrosin because so far no source materials have been found. It is believed that Jutrosin developed from an old early medieval settlement. July 15, 1281 is the officially recognized date of the town location. For centuries the town was always owned by private people and it was a knight's town.

The plan of Jutrosin (Fig. 1) indicates that Dworcowa Street is the oldest street in town as its location diagonally disturbs its regular medieval layout. One can risk a statement that it dates from before the town location and the market square of the original settlement was probably within the boundaries of the present Market.

The medieval layout of the town is relatively well visible in the development of its spatial composition[5]. The trapezoid market is in its center. Its irregular line, with the main road (Wrocław – Krotoszyn) going along it, is from the west. Perpendicular streets go from each of the corners of the square (with the exception of the corner from which Dworcowa Street goes[6]). Around the market there are residential quarters with rather irregular shape. At the end of the street going off the south-east corner of the square there is a Catholic parish church. The Holy Cross Church was built for the immigrants from Silesia by the road going in the direction of Wrocław. The location of this small church on the axis of that street indicates the first deliberate attempts at urban planning. The life of the settlement intensified after 1642 when the then squire of Jutrosin granted privileges to the immigrants from Silesia. Those newcomers settled along present Wrocławska Street (so called Silesian Route). The present Garncarska Street is the old 17th century potters' outskirts.

One of the characteristic features of the town was so called trade roads located on the fields' side along which the townsmen–farmers built numerous barns. The buildings were constructed as timber-framed structures which gave the town a special character and appearance.

In 1859, after the most disastrous fire in the history of Jutrosin the rebuilding of the town began. Among others two new schools were built: Evangelical one at Wrocławska Street and Catholic one at Szkolna Street. In the first half of the 19th century, a new town hall was built on the market. In the years 1862–1863, on one of the parcels at Wrocławska Street, in the place of earlier Evangelical church, a new Evangelical church was built in the immediate neighborhood of the school of the same denomination.

For dozens of years, Jutrosin was a multinational town. The abandoned cemeteries: Evangelical one at Ogrodowa Street and Jewish one by the road leading to the village of Nadstawem are the remains of that religious diversity[7].

The contemporary plan of Jutrosin Market resembles a square (150×150m), although five streets still go off of it[8]. The Market is a location of a bank and offices as well as numerous stores; there is a restaurant at the corner of the Market and Wrocławska Street. In the very center of the square there is the town hall building from the middle of the 19th century. At present most buildings around the Market as well as beyond it are historical buildings. The houses around the Market are mainly two-storied buildings, whereas those beyond it are usually single-storied buildings with their roof ridges parallel to the street.

Near the Market, close to its south-east corner, there is a great Neo-Romanesque St. Elizabeth's Church with a rectory and elementary school[9].

The main and at the same time most representative street of the town is the old Silesian Road – at present Wrocławska Street. The most important buildings such as former Evangelical church with adjacent pastor's house and former Evangelical school[10], post office, culture cent-

[4] The spatial development of Jutrosin was described on the basis of the following publications: [3], [4], [5], [10].

[5] It is important that the town in question has never had defensive walls or any other kind of fortifications.

[6] As the name suggests the street led to the railroad station about 2 km away (to the north) from the town buildings.

[7] Almost impossible to find in the contemporary spatial structure of the town.

[8] They include: Wrocławska, Dworcowa, Chłodna, Dolna and Kościuszki Streets.

[9] The building of former Catholic school; over the last few years extended and modernized.

[10] At present these buildings belong to the Elementary School in Jutrosin.

er, Holy Cross Church, belfry and parish cemetery are located by that street. The buildings of vocational and secondary schools are located at the corner of Wrocławska and Mickiewicza Streets. The kindergarten, St. Hedwig nuns' house, Sacred Heart Statue, outpatient clinic as well as police station are located at Mickiewicza Street which is an exit road from the town in the direction of Wrocław. At the end of that street, in the place where once there was an impressive wooden trestle type windmill, there is a relatively new development of single-family houses. The main industrial facilities in the town are located along Polna Street, parallel to Wrocławska Street (on the opposite side of the cemetery)[11]. The old dairy and the butcher's shop are located by the town's north border.

To the south of the town, beyond its borders, there are areas for mining natural aggregate. As a result there are numerous post-mining gravel pits there. One of them was filled with water and developed as a recreational area to accommodate summer holidaymakers.

[11] For instance sawmill, concrete products manufacturer, Christmas decorations factory, power facility.

Towers in Jutrosin

Fig. 2. Town Hall.
Photo by R. Gubańska, 2005

One does need to be an observant visitor to notice, when approaching Jutrosin, from far away four prominent towers: one – of the town hall and three others – of the churches. These vertical elements of the town absolutely dominate the skyline of both residential and farm buildings as well as the green belt. The town is well visible due to its exceptional location – on a small hill.

One of the four main landmarks is the tower of the town hall in Jutrosin (Fig. 2). The town hall dates back to the middle of the 19th century and it is located in the center of the Market, which is in compliance with the town composition principles applied in the Middle Ages [1, 9]. The building was built on a square plan. Its three-storied, cubic building is covered by a pyramid hip roof. Two extensions and a facilities building were annexed to the town hall main building from the east. The main entrance to the building is on the opposite side – from the west. A kind of gravity and grandeur of the building was emphasized by the rhytmicality of its elevations and excellent application of architectural details.

It should be emphasized that the octagonal tower with a clock on top of the town hall is especially worth noting[12]. There is a beautiful balustrade above the clock. The proper tower is covered by a lantern with a spire. That tower with a metal rooster weathervane[13] [4] is one of the major landmarks of that town.

As mentioned earlier, at the end of the scenic axis of the street going off the south-east corner of the Market, a quarter was assigned for building of a Catholic church. Probably the first church was built of wood; later it was replaced by a masonry structure which burned down at the beginning of the 19th century. This way the town did not have a parish church for almost 100 years[14]. Only in

[12] The date *1882* is visible on the clock as well as the words: *A. Winkler Breslau* (name of the company, after: [4]).

[13] The rooster is the only preserved element of former town hall (after: [4]).

[14] During that time the small Holy Cross Church located at the outskirts of the town served as a parish church (after: [4]).

Fig. 3. St. Elizabeth's Church – view from Kościuszki Street.
Photo by R. Gubańska, 2005

Fig. 4. Former Evangelical Church, Wrocławska Street.
Photo by R. Gubańska, 2005

the years 1900–1902, on the initiative of Duke Zdzisław Czartoryski, was the present church built. Its main architect was Tomasz Pajzderski whose architectural design of the building referred directly to the Romanesque cathedrals in Speyer and Mainz [4].

St. Elizabeth's Church (Fig. 3), as a free-standing building, was built on the assigned square which was surrounded by a decorative brick wall. The church combines simplicity and moderation and it has a high gable roof. Its facades, which are made of ceramic bricks, are covered with plaster from the outside. The architectural brick details have exquisite forms and proportions. The 47 m tall tower which is also a belfry adds to the building's austerity and grandeur. The bell tower, which is a component element of the west elevation of the parish church, utterly dominates the whole structure. Just like in the case of the main body of the building, the tower's decorative details are moderate and simple. Its brick elevations are not covered with plaster. The only exception is a group of windows with brick frames located in a relatively 'shallow recess' which is covered with plaster. In the corners of upper section – lesenes connected by an arcade frieze at each stage. The elevation walls are crowned with triangular gables decorated with a staircase frieze, eaves-cornice and centrally located small blank window in the form of a clover leaf. The whole helm is covered with picturesque rhomboid roof planes. It should be remembered that the tower of Jutrosin church is not only a great architectural landmark but also, or maybe first of all, an interesting scenic closure of both streets located on the extension of the main axis of the church.

From the east, there are two small towers with a semicircular altar apse between them. In the immediate neighborhood, from the south, there is a rectory and the former Catholic school. At present the rectory buildings are surrounded by a beautiful garden with select plants which is cared for with utter meticulousness.

It should be stressed that the church building with a dominating tower creates an interesting closure not only of the street but also a scenic axis of both Kościuszki Street (going directly from the Market) and Garncarska Street (former potters' outskirts).

The building of the former Evangelical church dating from the years 1862–1863, that was built in the place of an earlier church, which had burned down [4, 10], is equally interesting. The free-standing building is located in some distance from the Market (about 200 m) at Wrocławska Street (old Silesian Road). It was built on a square plan which from the side of the main road is separated by a historical brick wall; from the north it adjoins the buildings of former pastor's house and the Evangelical school (Fig. 4).

The former Evangelical church is designed on the plan of an elongated rectangular. The single-storied main body of the building has no basement. On the west side there are three polygonal apses. The whole structure is covered with a tall gable roof. The base walls look like *rough rubble walls*, whereas the upper sections were built from solid ceramic bricks and they were not covered with plaster on the outside.

The five-stage tower, which is an interesting landmark of the street as well as of the town, clearly stands out

Fig. 5. Holy Cross Church and belfry. Photo by R. Gubańska, 2005

against the east elevation of the church. The three-axis elevation of that tower can be divided into three stages: ground level with the front door with a semicircular lintel; upper levels with rectangular semicircular-headed windows and the third level which is the fourth stage with paired windows. The brick walls of the tower have triangular gables with varied architectural details: ornamented staircase frieze, eaves-cornice, centrally located round blank window. The tower is covered with a brick helm roof. On the sides of the main elevation there are pinnacles. The architecture of the church is a combination of styles with references to the Middle Ages that is Neo-Romanesque and Neo-Gothic [4].

After World War II, due to political and economic situation, nobody needed the Evangelical church so the building was neglected. For dozens of years it was abandoned and unused which resulted in its gradual fall into ruin. A few years ago the conversion and repair works were completed. The interior of the former Evangelical church was converted into a hall for sports and other events mainly for children and youth. Although the decision to change the function of the building from a church to a gym was and still is a little controversial, it seems rational and above all beneficial for the building itself as well as for the whole town because that church building – which is one of the town's architectural landmarks – maintained its position in the spatial layout of the town. Its five-stage tower with a high helm roof built in the form of a pyramid dominates not only the main body of the building but it also stands out against the skyline of the town and it is one of four characteristic architectural features of the town which is being renovated.

The last tower which dominates the town's skyline is a small cupola of the Holy Cross church (Fig. 5). That church is located about 500 m to the south of the Market (at the end of Wrocławska Street) on the cemetery. The lot of the cemetery, which is trapezoid, is surrounded by a plastered brick wall with prominent posts. Originally the building had a beautiful timber-framed construction[15] on the Greek cruciform plan. Its central part is covered with a pyramid hip roof crowned with a lantern and an onion dome and each arm of the cross with a gable roof. The roof planes are covered with wood shingles. The cupola which is located on top in the middle section of the roof is made of wood and it is covered with zinc sheets. On the very top of the picturesque late Baroque onion dome there is a metal ball and a cross [4, 10]. This interesting structure is a great closure of the scenic axis of the main street of the town. The beauty of that small architectural landmark is especially well visible on sunny days when the sunrays reflecting in the surface of the cupola emerging from the green belt can be seen from as far away as a dozen or so kilometers.

From the north, in the direct neighborhood of the church cemetery, there is a wooden belfry with two bells. Its pyramid hip roof, which is also covered with wood shingles, is crowned with a simple tower covered with a small pyramid hip roof with a metal ball and a cross. That belfry is not only a picturesque structure beautifully integrated into the town skyline but at present also one of the most interesting examples of wooden architecture in Greater Poland.

The four towers described above – which are characteristic architectural landmarks of Jutrosin landscape – undoubtedly affect its dynamics and attractiveness. Figure 6 shows a typical view of Jutrosin (regardless of geographical direction, in this case from direction of Sielec

[15] A dozen or so years ago some repair works were conducted in the building during which the historical timber-framed construction was replaced by brick walls with wooden boards nailed to them only imitating the timbers on elevations.

Fig. 6. Panorama of the town viewed from Sielec Stary. Photo by J. Gubański, 2005

Fig. 7. Panorama of the town viewed from Pawłowo. Photo by R. Gubańska, 2010

Stary). In the foreground there are arable fields and the shimmering surface of the river. Only in some distance can one notice the residential and farm buildings with outstanding towers: on the left – the one a little shorter of the town hall and on the right – the other three ones of the local churches: from the left – the parish St. Elizabeth's church, in the middle – former Evangelical church, and a little further to the right – the Holy Cross church. The blue sky is the landscape's closure and at the same time its background. It is a perfect example of towers being both architectural and urban landmarks.

Figure 7 shows the totally opposite sequence of the towers set in the urban design of the town, namely from the left there is the former Evangelical church or actually its tower, then the tower of the parish church and finally the tower of the town hall. Unfortunately, the view of the Holy Cross church – both its building and its tower – is totally blocked by the trees surrounding it. The other buildings in the town create a consistent kind of background of Jutrosin skyline because the foreground is still filled with arable fields which surround the town from all sides.

It should be remembered that it is the very towers being vertical elements that in fact define landscape, which is indeed one of the most fundamental elements of the environment around us. Landscape is a material asset inherited from our ancestors. Due to the respect for past generations and events we should preserve the cultural heritage left for us [7].

Conclusions

The above indicates that there are some relations between buildings which are determined by their form, shapes and spatial composition. They are especially evident when we are dealing directly with buildings dominating by their height and size as well as function. Towers, which are the vertical elements shaping landscape, not only serve as architectural landmarks because of their height; often they are integral parts of buildings which are functional landmarks, obviously due to the way in which they are used, for instance churches, squares, town halls.

It should be remembered that towers were first noticed and deliberately used to shape landscape already in the 16th century [8, 9]. This type of landmarks became the foundation for landscape composition, a kind of urban factor which is perfectly exemplified by Jutrosin. The towers in Jutrosin not only form a very interesting skyline, which makes the town much more attractive, but they also are perfect streets' closures (or more specifically – their scenic axes). Those vertical elements are clearly visible from far away and virtually from anywhere around the town, which is the result of its location on a hill.

There is one more function of the tower that needs to be mentioned – the symbolic one – that of a sign-post. When approaching a place one can correctly guess from far away that it is a town; the emerging shapes of the towers perfectly specify the buildings' character of a small town.

References

[1] Böhm A., *Planowanie przestrzenne dla architektów krajobrazu. O czynniku kompozycji*, Cracow University of Technology Publishing House, Cracow 2006.
[2] Callier E., *Powiat pyzdrski w XVI stuleciu. Szkic geograficzno-historyczny*, Poznań 1888.
[3] *Dzieje Wielkopolski* edited by J. Topolski, Poznań Publishing House, Poznań 1969.
[4] Jędraś St., *Miasto i Gmina Jutrosin*, Leszno 1999.
[5] Krygowski B., *Krajobraz Wielkopolski i jego dzieje*, Polish Scientific Publishers PWN, Poznań 1958.
[6] Łukaszewicz J., *Krótki opis historyczny kościołów parochialnych, kościółków, kaplic, klasztorów, szkółek parochialnych, szpitali i innych zakładów dobroczynnych w dawnej dyecezji poznańskiej*, Vol. 2, Poznań 1859.
[7] Małachowicz E., *Konserwacja i rewaloryzacja architektury w środowisku kulturowym,* Oficyna Wydawnicza Politechniki Wrocławskiej, Wrocław 2007.
[8] Przyłęcki M., *Zarys dziejów budowy miast i wsi*, Wroclaw University of Environmental and Life Sciences Publishing House, Wrocław 2004, p. 1.
[9] Rylke J., *Kompozycja krajobrazu kulturowego*, Architektura Krajobrazu, 1–2, 2006, pp. 24–31.
[10] Sobisiak W., *Dzieje Ziemi Rawickiej*, Polish Scientific Publishers PWN, Poznań 1967.

Wieże elementem kompozycji przestrzennej Jutrosina (woj. wielkopolskie)

Od wieków elementami kształtującymi i porządkującymi przestrzeń były i są nadal zabudowania mieszkalne, gospodarcze oraz towarzysząca im zieleń. Bardzo często jednak pojawiają się akcenty wertykalne, które nie tylko wpływają na zróżnicowanie kompozycji przestrzennej, ale także tworzą malownicze zespoły widokowe. To przede wszystkim kościoły wraz z wysokimi wieżami stanowiły główne dominanty architektoniczne. Podobnie wyróżniającymi się elementami były ratusze, nierzadko konkurujące z kościołami. Należy podkreślić, że na różnorodność i interesujący kształt sylwety miasta duży wpływ miała kompozycja przestrzenna oraz układ zabudowy.

Zasygnalizowane zagadnienia zostaną przedstawione na przykładzie Jutrosina, miasteczka zlokalizowanego na Nizinie Wielkopolskiej. Jutrosińskie wieże nie tylko w interesujący sposób kształtują panoramę miasta, czyniąc tym samym jego sylwetę znacznie ciekawszą, stanowią również wspaniałe zamknięcia ulic, a uściślając – ich osi widokowych.

Na podkreślenie zasługuje jeszcze jedna funkcja wieży – symboliczna, a mianowicie drogowskazu. Zbliżając się do wybranej miejscowości, już z daleka możemy określić, czy mamy do czynienia ze wsią czy miastem. Zarysowujące się sylwety występujących tam wież doskonale określały i określają nadal charakter zabudowy.

Key words: Jutrosin, towers, spatial composition

Słowa kluczowe: Jutrosin, wieże, kompozycja przestrzenna

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Sculptural décor of façades of Lviv tenement houses of the Renaissance period (on the example of Scholtz-Wolfowitz tenement house No. 23 in Market Square in the city of Lviv)

The medieval Lviv, located in the crossroads of trade routes, was open to the influence of the new traditions. The Renaissance period comes to the city, lying in the ruins of destructive fire of 1527. Gothic Lviv suddenly passes away in the past, and the Renaissance in its bright understanding of this word comes to the city. New forms were brought to the architecture of Lviv by Italian craftsmen, educated in the Renaissance traditions of their country. These are mostly the natives of northern Italian regions. Ordinary artisans-architects have quickly assimilated in the new conditions, being affected by the local traditions. Those among them who were non-ordinary personalities left their inimitable monuments of Renaissance architecture to us. Buildings, constructed at that period, attract us by harmony of shapes and by refinement of stone carvings. Sculptural décor, which acquires expressive exemplariness and which is vested a certain symbolic and philosophical content during the Renaissance epoch, plays a special role in the formation of a peculiar architectural image of the buildings.

The present article is dedicated to revealing a symbolic and philosophical meaning of sculptural décor on the façades of Lviv Renaissance houses on the example of Scholtz-Wolfowitz tenement stone No. 23 in Market Square in Lviv.

It should be noted there was late Renaissance, which came to Lviv. Its chronological frames for the monuments of Lviv may be conventionally limited by the second half of the 16th century and one third of the 17th century [1, p. 43]. Arriving at the local ground, this style is affected by certain autochthonous influences. The distinguished order system of the Italian Renaissance is often combined with the traditions of the local national culture. The ensemble of Assumption Church is a bright example of such a combination (Fig. 1). Pavlo Rymlyanyn (Paolo Dominici Romanus), a well-known creator of numerous Lviv monuments of Renaissance, combines the west basilica plan with the local architectural traditions in this monument. He puts three cupolas, the most significant element of Ukrainian sacral architecture, on the longitudinal axis of the building (Fig. 2). This technique was obviously ap-

Fig. 1. Façade of Assumption Church

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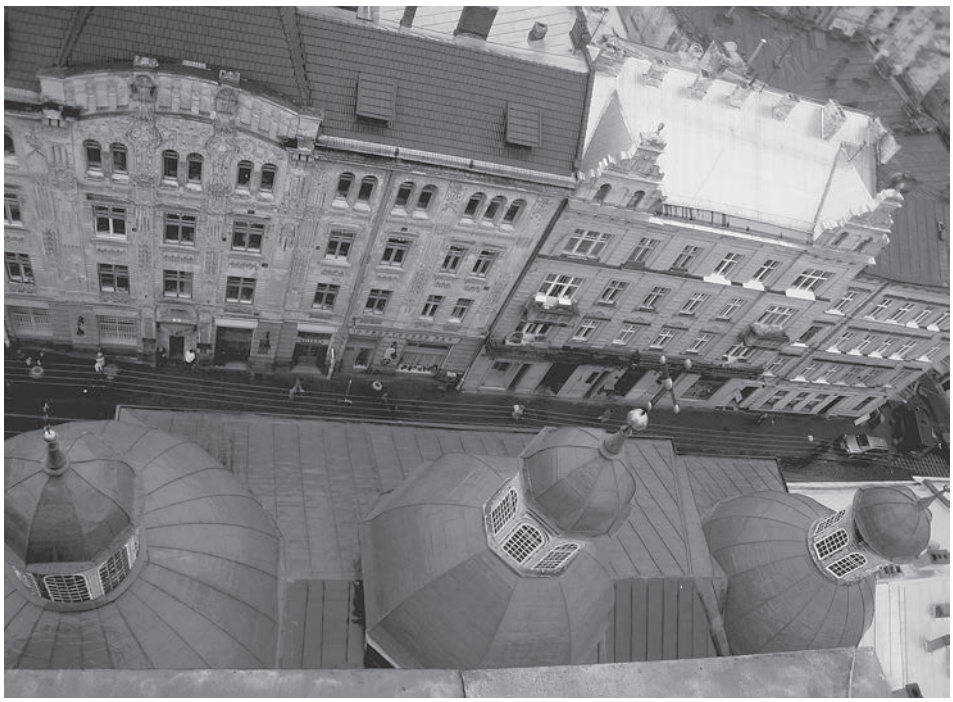

Fig. 2. Cupolas of Assumption Church

Fig. 3. Bandinelli Palace, Market Square No. 2

Fig. 4. Black house, Market Square No. 4

plied in order to please the customer, because the church was built at the expense of the Assumption Brotherhood of the Ukrainian community of the city. Such influences can be traced not only at the level of architect's creative design, but in the process of performance of decorative works as well. Local craftsmen have obviously perceived classical shapes of order patterns, brought from the West, in their own way, they often performed them not quite exactly, in their own manner, or added traditional national motives, which used to be more clear for them. Such details can be seen among the wealth of stone carvings on the façades of the Assumption Church and the Chapel of

Fig. 5. Scholtz-Wolfowitz house, Market Square No. 23

Fig. 6. Hepner house, Market Square No. 28

Three Saints from the same ensemble. Thus, the reliefs of saints on the church frieze are carved in the style of the eastern icons, and the branches of viburnum, being the national symbol of the Ukrainians which can be seen in the floral ornaments. Many other sacral structures are built at that period apart from the Assumption Church, Church of the Bernardine (project by Bernardine architect Avelides, architects Pavlo Rymlyanyn, Amvrosiy Prykhylnyy, Andriy Bemer from Wroclaw), Church of Poor Clares (Pavlo Rymlyanyn (?), Benedictine Church and Monastery (Pavlo Rymlyanyn), hospital and Church of Lazarus (Pavlo Rymlyanyn, Amvrosiy Prykhylnyy), Boim Chapel (Andriy Bemer) and Campiano Chapel (Pavlo Rymlyanyn?), near the Latin Cathedral, are among them. In the composition of the said structures the influences of the national traditions are not so evident, because they were built mainly for monastic communities, which came from the west.

Besides sacral buildings, many residential houses were constructed in the city, ruined by the fire. If the development of Market Square along with the City Hall structure had not changed after the first third of the 17th century, today we would see one more integral ensemble of the Renaissance architecture. Residential houses, however, are exposed to greater changes than sacral ones due to frequent reconstructions and adjustments, connected with change of residents and a new vogue of decoration of the interiors or façades. Among numerous Renaissance houses, built in the medieval city at the end of the 16th – beginning of the 17th centuries, only several houses in Market Square have survived without any essential changes, which marks the traits of the style. Their façades attract us by their composition perfection and craftsmanship of décor performance. These are house No. 2, known as Bandinelli palace (Fig. 3) and the Black house (No. 4) (Fig. 4) on the east side of the square. Scholtz - Wolfowitz house (No. 23) (Fig. 5) and Hepner house (No. 28), (Fig. 6) located on the west side. Façade of the house No. 14, faced with rusticated stone, which architects were Pavlo Rymlyanyn and Pavlo Shchaslyvyy [2, s. 32], working on the order of Venetian Consul Antonio Massari, is distinguished among the buildings on the southern side. The façade, however, has been reconstructed several times, and there are only rusticated stones and the sculpture of a winged lion above the main entrance, which tell us about its original character. The remaining houses were either built in a later time period, or reconstructed in a manner which reminds us of only some elements of the style.

From the point of view of composition, the façades of all the houses are interpreted differently, though they belong to one style. The Black house and house No. 14 are entirely faced with rusticated stone, door portals and window frames distinguishing between them. Façades of the houses No. 2 and No. 28 have a pronounced horizontal division of the façade and well-developed window frames, which are ended by pediments. In the compositional decoration of the house No. 23, horizontal division, traditional for the Renaissance style, is supplemented by an order system with application of pillars of the Ionic and the Corinthian orders.

Fig. 7. Scholtz-Wolfowitz house.
Aedicula which sculptural group "Baptism"

Fig. 8. Scholtz-Wolfowitz house.
Cartouche under the second floor windows

With this free interpretation of antique order in compositional solution of the façades, the Renaissance buildings of Lviv still have some common traits, expressed in a wealth of stone carving, decoration with stone sculpture and subjection of sculptural décor to a greater or lesser extent to a certain philosophical idea. If in the Assumption Church we see the effect of cultural and national traditions upon the style, than the worldview and aesthetic taste of an owner have a greater influence on the character of residential houses.

Market Square façade of Scholtz-Wolfowitz house (No. 23) is the most interesting from this point of view. The house has a construction of the pit and attic, lost as a result of numerous reconstructions, but the decoration at the level of the second and the third floors survived almost unchanged. The façade impresses by a great wealth of sculptural décor and the craftsmanship of its performance. In order to understand better the philosophical idea of pattern of the façade, one should know something about the house owner, because it was he, who, being an educated and creative person of the Renaissance day, determined this image of the house.

Scholtz-Wolfowitz is known to be the native of Silesia. In the second half of the 16th century he comes to Lviv, then gets married with a daughter of Lviv patrician Melchior Gase. The bride gets as a dowry an angular house in Market Square, which side façade faces the Latin Cathdral. In 1570 Jan Scholtz-Wolfowitz buys the entire

Fig. 9. Scholtz-Wolfowitz house.
Mascaron of lion in the second floor pilasters' pedestals

Fig. 10. Scholtz-Wolfowitz house.
Sculptural portrait in the right corner of the aedicule

Fig. 11. Scholtz-Wolfowitz house.
Portrait of a young lady in the third floor pilasters' pedestals

Fig. 12. Scholtz-Wolfowitz house. Portrait of a young man in the third floor pilasters' pedestals

Fig. 13. Scholtz-Wolfowitz house. Young man in a beret in the left corner of the aedicule

house, located on the partsel, and commences its reconstruction and decoration of the façades, which has lasted until his death in 1605. Jan Zaremba, student of Herman Van Gute, sculptor of Dutch origin, for whom the Scholtz-Wolfowitz family was the patron of arts, is considered to be the author of sculptural Renaissance décor. The historical sources testify that after the craftsman's death (1596) there were no more orders for sculptural studio on part of Jan Scholtz-Wolfowitz. In 1595 the Scholtz-Wolfowitz family was granted baronage title de Wolfowitz from the emperor Rudolf II [3]. After this event, the owners, probably, could afford to decorate the façades of the house with sculptural portaits of their family representatives.

Aedicula, arranged on the third floor level, is a sculptural dominant. (Fig. 7) Sculptural group "Baptism" is placed in its niche. Such subjects of sculptural composition are not accidental, because the house owner's name was Jan (Johann). Therefore, it is natural, that the plot of the most significant event in his patron's life is chosen by the owner to decorate his house corner. The base with Jesus and John standing is decorated on one side by the Gase family coat of arms and on the other – by the Scholtz-Wolfowitz family coat of arms. Underneath, on the base ledge, there is a reclining statue of a woman with the attributes of Belief. The sculptural group is well perceived from both, the Market Square and Halytska Street, which once led from Halytska gateway to the city. The house owner makes it clear with the help of the sculptural décor, that his family has a strong protection, and he confirms his belief in the patronage of his patron. The entire sculptural décor of the façade is subjected to a certain philosophical meaning. (It should be defined more precisely that here we speak of the façade from the market square side because in the 16–17th centuries the house was not decorated from the Cathedral square.)

On the level of the second floor, under the windows, cartouches are built into the masonry of the walls with inscriptions carved in the stone in Latin: "THE NAME OF THE LORD IS A STRONG TOWER" (Proverbs, 18) (Fig. 8); "WHOEVER TRUSTS IN THE LORD IS KEPT SAFE" (Proverbs, 29); "A WISE MAN FEARS THE LORD AND SHUNS EVIL", (Proverbs, 14) [4, pp. 53–57]. Stern lions near the cartouches look menacingly onto the square from the pilasters' pedestals (Fig. 9). Such decor symbolically protects tenants of the house from evil intentions and actions from outside.

Fig. 14. Scholtz-Wolfowitz house. Sculpture of God the Father on the pediments above outermost windows of the third floor

On the level of the third floor mascarons are mounted to the pilasters' pedestals. The sculptural portraits impress with the depth of representation of character of each figure, perfect execution and detailed finishing of details of the garments. A portrait of Lviv patrician, probably Melchior Gase, is placed on the aedicule pedestal on the right from the family coat of arms (Fig. 10) and further on a portrait of a young lady (Fig. 11), probably his daughter, spouse of Jan Scholz-Wolfowitz. Next portrait – a portrait of a young man; it is, probably, one of the representatives of the patrician family (Fig. 12). The outermost portrait

Fig. 15. Scholtz-Wolfowitz house. Façade on the Cathedral Square

mask was lost due to the leaking drainpipe and restored, evidently, in 1890; it has not preserved its characteristic portrait features. Of some interest is the mask placed in the left corner of the aedicule (Fig. 13). This is a perfect portrait of a young man in a beret. Is it not the owner of the house himself (?), an educated, vigorous and creative man. On pediments above outermost windows of the third floor there are high reliefs of the angels, half-length sculpture of God the Father (Fig. 14) who stretches arms over the façade as if protecting and blessing all residents of the house and, probably, those who walks in the square by the façade. There are two more mascarons placed high above under the eaves. They take up the field on the right and left of the console on the corner of the house. These are faces of a man and a woman that have no portrait features. What do they symbolize, almost indistinguishable at such height, those masks ? May be just a man and a woman, yin and yang, the two fundamental energies of the universe from which life on earth begins… The frozen in stone façade tells us in the language of symbols expressed in sculpture that residents of this house are merited people who live by the Lord's laws, who can defend themselves from envy and encroachment of outside world and rest in the Lord's mercy. Unfortunately, the Scholz-Wolfowitz's house has lost completely the initial pattern of the ground floor, the entrance to the house, whose decoration was of a considerable importance in forming philosophical and aesthetic image of the house, has not been preserved either. To form the idea of the characteristic features of decoration of the ground floors of buildings of this period it shall be necessary to examine other buildings in the market square. Only the Black house (1588–1589) has completely retained its character, while the rest of the façades have only fragments of the initial pattern; these are predominantly the entrance stone portals. The doors and the windows of the Black house have lavishly decorated with stone carving portals. Cartouche with the owner's coat of arms is affixed above the entrance arch and further above there is the sculpture of Virgin Mary with the Child Jesus, above the windows and corbels of the pilasters of the first floor there are sculptures of the patron saints. The façade acquired its sculptural decor in 1675–1677, but it does not spoil its general character.

The central portal of the house No. 28 is decorated with figures of angels that embrace the entrance arch with their wings with the pediment above it supported by lions-mascarons. The figure of the winged lion with an opened book – the symbol of Venice – is placed above the stone portal of the house No. 14 that belonged to the Venetian consul and merchant Antonio Massari.

These examples show that the decor of Renaissance façades on the level of the first floor often carried direct information about the house owner, his social status or origin. The portals were ornately decorated and the decor combined symbols of earthly and heavenly protection.

Proceeding from the analysis carried out, a certain pattern emerges after which the decor is located on the façade of Scholz-Wolfowitz's house:

1 – (ground floor level) lost. It could symbolize wealth of the owner, combine symbols of earthly and heavenly protection.

2 – (second floor level) – decor shows attitude of the house owner to earthly life, symbolizes his self-reliance.

3 – (third floor level) – decor symbolizes hopes of the house owner for the Lord's protection of himself and his family.

It should be noted that such a pattern is not established or mandatory as the sculptural decor, similarly to the rest of adornment, is formed freely on every façade observing general style features and a certain philosophical idea only.

Façade of the house is of interest also because of the fact that it underwent substantial restoration works in the

end of the 19th century. David Schwarzwald bought the house in 1888 and immediately began its reconstruction. A row of shop windows in the ground floor with the mezzanine over some of the first floor rooms appeared and reconstruction works were carried out on the outbuilding. Two balconies on the second floor level from the Cathedral square side were added as well. The pushing owner wanted to dismantle the aedicule with the sculptures and offered it to the city. But, instead, he was forced to restore the façade on the Market square side preserving its authentic decor, while the façade on the Cathedral square side received stucco molding of braces and pilasters similar to those on the Market square side (Fig. 15) on the decision of the city council and the conservatives lodge commission. To preserve the character of the façade, lion-mascarons were attached to the molded bases of pilasters of the second floor, but their material and the manner of execution differed from their analogs on the Market square side. These are molded masks cast in molds. The cartouches under the windows also differ, for they are molded too and not as delicately as the rest. The letters of the text are embedded in the convex surface, while letters of the front façade cartouches are embossed. The inscriptions are different, and although these are also proverbs, there is no reference to the source in the lower right corner. To avoid repetition of the inscriptions on the main façade, they were borrowed from the house No. 28 whose façade was also decorated with aphorisms. Also interesting is the extension of the portrait row located on the pilasters' pedestals on the level of the third floor. The mascarons there are also molded pieces. One face is a copy of the alabaster portrait located on the same façade under the aedicule. The other face (Fig. 16) is of interest because it has evident portrait features but does not look like any of the other existing mascarons and by its features the face of the person differs considerably from the other portraits of members of the patrician family. It is possible that restorers of the 19th century made a portrait of one of their colleagues, for Lviv has never been short of people with a good sense of humor. Some molded pediments wit angels are located under the windows.

Returning to the main façade, it should be noted that this is the only market place building where aside from such traditional material for the stone decor as limestone alabaster is used as well [6]. The cartouches with proverbs and portrait mascarons are made of alabaster. The entire stone decor of the façade was painted as it was the custom of that time [7]. Even now one can discern remnants of polychromy on the limestone figures with a naked eye.

Unfortunately, the sculpture had not been restored at the time of the façade restoration. The sculptural composition "Epiphany" that is the connoting and architectural

Fig. 16. Scholtz-Wolfowitz house. Sculptural portrait in the façade on the Cathedral Square

accentuation of the façade, lost a part of Jesus' leg and has a look that does not decorate the restored façade. The reclining figure of "Faith" located under the pediment is open to snow and rain and has already lost its once refined features. Now it reminds of a chunk of stone of an indefinite shape washed by the rain and is out of tune with the façade. Comparing the present day state of the sculpture with its photograph in the book by V.S. Wujcyk "State historical-architectural preserve in Lviv", published in 1991, it is easy to understand, that because of the irreversible processes it will soon become impossible to restore it. The delicate alabaster portraits that stayed on the façade for over 400 years and are in a dangerous state, continue to be ruined by the adverse atmospheric elements. The problem lies not only in methods of their restoration. The question arises whether it is necessary to let the originals stay on the façade. Portraits of such delicate workmanship should give aesthetic delight to the museum visitors. Nobody can see their fine features on the level of the third floor of the façade. It will probably be absolutely justified to install on the façade their finely made copies and display the originals in the museum after their restoration.

The Renaissance period left for us in inheritance the monuments whose façades are valuable not only for their artistic decor, but filled with philosophical content which gives us an opportunity to understand better the epoch, its world outlook, cultural and moral values. Opening of this stratum of national cultural heritage requires further detailed studies and well-balanced steps for their restoration and preservation.

References

[1] Вуйцик В., *Зодчий Павло Римлянин, Володимир Вуйцик. Вибрані праці до 70-річчя з дня народження*. Вісник інституту „Укрзахідпроектреставрація", № 14, Львів, 2004.

[2] Вуйцик В., *Державний історико-архітектурний заповідник у Львові*, Видання друге доповнене, Каменяр, Львів, 1991.

[3] Сьомочкін І., Сорокаліт Х., *Пам'ятка архітектури XVI–XIX ст. Кам'яниця Шольц-Вольфовичів. Історична записка*, Інститут „Укрзахідпроектреставрація", Львів, 2008.

[4] Содомора А., Домбровський М., Кісь А., Anno *Domini. Року Божого. Латинські написи Львова*, Піраміда, Львів, 2008.

[5] *Пам'ятка архітектури XVI–XIX ст. Кам'яниця Шольц-Вольфовичів, Хіміко-технологічні дослідження та технологічна схема реставрації скульптур*. – К.: *Державний науково-технологічний центр консервації та реставрації пам'яток ДНТЦ*, КОНРЕСТ, 2008.

[6] *Пам'ятка архітектури XVI–XIX ст. Кам'яниця Шольц-Вольфовичів. Комплексні наукові дослідження: Зондажі, картограми втрат та кольорового вирішення фасадів, узагальнення матеріалів досліджень*, Інститут „Укрзахідпроектреставрація", Львів, 2008.

Wystrój rzeźbiarski fasad lwowskich kamienic doby renesansu (na przykładzie kamienicy Szolc-Wolfowiczów – Rynek 23 we Lwowie)

Warunki rozwoju średniowiecznego Lwowa sprzyjały poszerzeniu tradycji Renesansu w jego kulturze i w budownictwie. Na klasyczne formy i metody, przyniesione przez włoskich architektów, wpływ wywarły miejscowe tradycje. Wskutek tego architektura Lwowa doby odrodzenia nabyła specyficznych cech. Dla wystroju architektonicznego fasad charakterystyczna stała się dość swobodna interpretacja reguł klasycznych, a także nasycenie delikatną rzeźbą i stosowanie polichromii. Jednak szczególnie ciekawe jest traktowanie wystroju rzeźbiarskiego, stosowanie którego często było podporządkowane nie tyko funkcji estetycznej, lecz także idei symbolicznej, oraz nabierało treści filozoficznej. Wystrój plastyczny stał się ilustracyjny i często charakteryzował światopogląd właściciela kamienicy. Rzeźbiarze wyróżniający się wysokim mistrzostwem i kulturą wykonania byli często zatrudniani przez znanych projektantów. Wystrój rzeźbiarski fasad stał się wartością architektoniczną, artystyczną i historyczną i wymaga obecnie szczególnego podejścia do jego badania i ochrony.

Key words: Lviv, tenement houses, renaissance period

Słowa kluczowe: Lwów, kamienice, renesans

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Historicism in the architecture of Lviv: tendency across centuries

Fig. 1. The Bandinelli house in Market Square 2 (around 1593)

Fig. 2. The Black house in Market Square 4

Development of theoretical conceptualization of the phenomena and events in the history of architecture frequently leads to revaluation of their importance, a more precise definition or even their complete transformation. An example of this is the fate of the term "historicism" that relatively recently got implanted in the Ukrainian scientific use. Only in 1990s has it finally "forced out" the traditional eclecticism from our architectural science and outlined the period of development of architecture of the 2nd half of the 19th century. However, formation of the new views on the problem of historicism as the fundamental world outlook category opens up absolutely new perspectives for the research. The term "historicism" used in this article is not the name of a concrete trend in the practice of architecture of a certain period but a tendency that goes through many periods of development of architecture. Historicism is interpreted as a direction of creative thinking fed on historical consciousness. The author relies on the definition of historicism suggested by N. Pevzner:

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Fig. 3. The Boim Chapel in Cathedral Square (A. Boemer, 1609–1616)

Fig. 4. The ensemble of the Assumption Church (1591–1629)

Historicism is a trend in which study and application of history is more important than discovery and development of a new system, new forms of its time [3, p. 271].

It becomes clear in such a context that historicism as a characteristic feature of many architectural epochs for the appeal to historical memory through historical prototypes was the foundation of creative thinking of architects. This article analyzes principal stages of development of architecture of Lviv in the 17–19th centuries from the standpoint of representation of historicism in architecture.

The stage of development of architecture of Lviv for the first time connected with historical thinking began after the tragic event – a great fire of 1527. The city devastated to the foundations was rebuilt in the new style – the Renaissance. The architects invited from Italy, Germany, the Netherlands, France brought to the Ukrainian architecture their experience of the west-European Renaissance – the epoch whose very name demonstrated a desire to synthesize the new values appealing to the heritage of the past. New understanding of history and the new place of man in history as its maker gave rise in the day of the Renaissance to the wave of retrospectives.

Architectural Renaissance arrived in Lviv with some delay, having brought with it the stylized pluralism of the late Italian Renaissance. At that time, the Italian Renaissance has come over the apex of its development in the works of D. Bramante, after which there was nothing else left except trying to modify again and again the familiar themes or disclaim the achieved. The latter alternative allowed to respond to the new aesthetic needs and opened up the way to the development of numerous stylistic tendencies. Two lines among the lines of style creation were clearly defined. One was based on the assumption of the end in itself of art and its own values. The word "manner" became the key notion. The other line suggested a new interpretation of the classical theme in synthesis with the local achievements of architecture of the previous epochs [6, p. 15–18].

The classical order in compositions of mannerists that had acquired a symbolical meaning – a projection on the structure of human measure – had already become an ordinary canonized foundation. However, above all deviation from the standard was filled with important meaningful content, as this signified domination of personal over the ideal, i.e. anthropomorphism of the order acquired individual characteristics as a peculiar analog of individuality of each human [2]. The nearest to its Roman prototypes appeared to be the Bandinelli house in Market Square 2 built in around 1593 (Fig. 1). The architecture of the small building interprets the forms of Farneze palazzo supplementing them with lush decor and sculpture. Composition of the façade includes the anthropomorphic element – order, but in a somewhat reduced form: smooth plastered walls of the three-storied building are divided by belts and decorated Doric friezes, corner rustic joints became the only vertical elements [5, pp. 27, 106].

The Black house in Market Square 4 (Fig. 2) offers a different interpretation of the palazzo theme. The façade is devoid of the order decoration, yet its division upwardly

Fig. 5. The Hausner house in prospect Svobody 1–3
(1810–1811, 1829–1822)

Fig. 6. The Piller house in Vynnychenka street 8
(F. Tomek, 1839)

is subordinate to triplicity that originates from the classical order tradition. Proportions of the façade are reduced to the rational system on the basis of multiple ratios and elemental contours of diamond rustics. The forms of the building are not a direct replica of some classical examples, but bear the spirit of a Florentine palazzo of Quattrocento period [5, pp. 27, 107].

The Boim Chapel in Cathedral Square built, probably, by A. Boemer in 1609–1616 is one of the pearls of Lviv Renaissance, the peak of its mannerist searches (Fig. 3). Historicism in architecture of the chapel definitely departed from representation of the ideal and presented a dynamic, multidimensional sight. The architect built composition of the façade on dramatic effects. Behind their overworked building up, one can trace position of the craftsmen intended not only for understanding the plot and for empathy but also for capturing the viewer with mastery and technical perfection [1, pp. 96–97].

The new interpretation of classical themes in combination with ancient Rus traditions started the tendency that has preserved its topicality till present day: it is the search for the Ukrainian style, its differentiation in the stream of general European styles. This tendency has shown itself most powerfully the in religious architecture, whose typology has always been closely connected with the canon. The apex of the synthesis of the European and national became the ensemble of the Assumption Church (1591–1629) (Fig. 4). Architecture of the church has organically combined the traditional volumetric-spatial type of the Ukrainian three-domed temple and the late-Renaissance aesthetics. The order has retained its importance that connected it with the myth of antiquity. Its proportions and details were rather precise, yet their tectonic content had been changed: the order transformed into a motif of decoration of the plane. Volumetric-spatial design of the Chapel of the Three Saints – the crypt of the Korniakt family in Lviv – reminds of the triple-crib wooden Carpathian churches. The chapel was built in 1578–1591 by A. Pidlisnyy and P. Krasovskyy [5, pp. 27, 91–92].

The new stage of architectural development of the city closely connected with recapitulation of the lessons of history began in the end of the 18th century and was predetermined by political events when Lviv was granted the status of the capital of the newly established province of the Austrian monarchy in 1772 [7]. Historicism was imported to Lviv from Austria in the form of the "second classicism" (or neoclassicism) that developed in Europe in the period between 1760 and 1830. The special feature of the "second classicism" became the keynote appeal to the indigenous local sources that distinguished the national school within the general boundaries of the style system of classicism [6, pp. 63–65; 4].

Adaptation of classical forms to the local context (of both, city planning and creative potential context) had led to the development of the phenomenon – of the type of a Lviv city building squeezed into the ordinary built-up neighborhoods but lavishly decorated. The plane of the front façade on the level of the second and third floors came to be the center of focusing of the order and lavish sculptural decoration. The order compositions were com-

Fig. 7. The Palace of Roman Catholic Archbishops in Vynnychenka street (J. Salzman, 1846–1847)

Fig. 8. The Polytechnical School (J. Zachariewicz, 1872–1876)

bined with forthright combinations of the "Renaissance classicism" and brought in even greater pluralism into rather decanonized classical pattern. The Hausner house in prospect Svobody 1–3 (1810–1811, 1829–1822) (Fig. 5) and the Piller house in Vynnychenka street 8 (F. Tomek, 1839) (Fig. 6) became the best examples of this [4; 10].

Romantic outlook on life reached Lviv in the 1920s: the romantic Neo-Gothic appeared in Lviv to express the ideas of individualism and romanticism. The trend of romantic Neo-Gothic envisaged a free use and synthesizing of the "Gothic" forms for the establishment of the new image that had been characteristic of the early romantic phase of the European Neo-Gothic. Neo-Gothic existed in the outskirts of development of Lviv architecture of the 1930s, though it appeared to be a specific "enzyme" that accelerated the process of collapse of the classical system [10].

The building that demonstrated the final downfall of classicism in architecture of Lviv became the Palace of Roman Catholic Archbishops in Vynnychenka Street (J. Salzman, 1846–1847) (Fig. 7). this is where the Renaissance, Classical and Romanesque motifs were mixed up in a motley collection. The system of classicism was irrevocably shaken, but a new system came to replace it

Fig. 9. The building of the Seym of Galicia (J. Gochberger, 1877–1881)

Fig. 10. The Potocki's Palace (L. d'Overnier, 1888–1890)

whose ideological inspirer appeared to be the romantic outlook on life. Total historicism of thinking that legitimized the appeal to the heritage of all previous architectural periods and infinitely expanded the range of sources for interpretations appeared to be the fundamental characteristic of the new system [1, p. 211].

Decentralization of the Empire in 1867 shifted the reigns of governing Galicia from Vienna to Lviv, and starting from 1869 Lviv became the capital of the autonomous province of the Austrian-Hungarian Empire. One of the most important strategic guidelines of the Polish administration in Galicia was to prove absolute ability of the region to resolve independently any issues without any patronage on the part of Vienna administration. Architecture under such conditions became one of the tools for validation of such policy, and the status of Lviv as the capital city determined the representative character of development of the city [7; 9].

Starting from the 1850s, historicism unstoppably continued to win its positions in the architecture of Lviv, and in 1870-1880s reached its peak in the construction of public buildings that have become symbols of both, the city and the epoch in general. One of such projects was the building of the Polytechnical School (1872–1876) designed by J. Zachariewicz – a graduate of Vienna Polytechnic (Fig. 8). This was the first large-scale implementation of the concepts of the Viennese Neo-Renaissance in Galicia. Spatial composition and decor of the façades rests on the balanced Renaissance-Classical variations [8].

The Seym of Galicia (J. Gochberger, 1877–1881) (Fig. 9) was conceived as the building-symbol. The pretentious architecture of the building formed as a result of

Fig. 11. The building of the City Theater (Z. Gorgolewski, 1897–1900)

a large international contest was to become not just a tribute to fashion, but a metaphor of prosperity and well-being of the autonomous province of Galicia: historicism in the architecture of Seym stepped forward as a part of the official ideology. Its façade is amazing with resplendence and diversity of architectural-compositional and interesting techniques. The central axis is accentuated by the loggia-risalita that develops the theme of "Michelangelian" large order [1, pp. 271–273; 4].

The 2nd half of the 19th century put forward the need for construction in the "splendid and refined" style. The "Second Empire style" associated with the fashion that was formed in France during the rule of Napoleon III corresponded with the need. It was readily used in house-building and, especially, in palace construction. The Potocki's Palace (1888–1890) was erected by J. Cybulski and L.-B. Ramult from the design of the Frenchman (!) L. d'Overnier (Fig. 10). The architect has rationally elaborated volumetric-spatial structure of the building proceeding from the classical experience and the new functional requirements. Façades are decorated with the features of "Frenchness": tall French roofs with lucarne windows that complete the central and side risalitas, massive chimneys, rustic pilasters [1, pp. 362–363].

The apex of the epoch of architecture of choice and the project that has logically completed one of the most brilliant periods of Lviv architecture became the building of the City Theater (Z. Gorgolewski, 1897–1900) (Fig. 11). The theater occupied the key location in the ensemble of the newly created avenue of the city and became the main plastic accent of the promenade boulevard finally determining it as the city center. The author of the project openly followed the type of the Opera in Paris that has become the paradigm of theater building for centuries. However, Z. Gorgolewski managed to find a reasonable accommodation between the ostentatious splendor of the opera building and clarity of the composition pattern reduced to the classical hierarchy and logical subordination of meanings [1, pp. 311–313].

Another form of self-expression of the period of the 2nd half of the 19th century was the variant of medieval architecture, first of all, Gothic architecture. Philosophical-symbolical world outlook of the 2nd half of the 19th century linked the Neo-Gothic architecture with the revival of ideas of Catholicism. The first of the large implementations of the romantic trend was the convent and the Roman-Catholic Church of the Franciscans (1877–1889) designed by J. Zachariewicz (Fig. 12). Modest decor of the façades rests on the design of elements from the style glossary of Early Gothic and Romanesque architecture. Volumetric-spatial and stylistic pattern of this structure became the landmark for further development of Roman-Catholic construction in Lviv and were repeated in various interpretations [1, p. 305; 12].

Aspirations to national consolidation and strengthening of self-consciousness of the nations gained momentum in the 2nd half of the 19th century in many countries. This was associated with the national-romantic versions of historicism in architecture that accentuated the specific character of the national past. The scrappy architecture of the national Industrial exhibition of 1896 visualized for the first time the beginnings of the searches for the Ukrainian style in Galicia. They were declared in the projects designed by J. Zachariewicz: the boykys' church in which exhibits of the ethnographic pavilion were displayed and the Ukrainian pavilion that had the shape of the traditional homestead structure [8].

Under the circumstances of division of Poland by the neighboring states, it was of special importance how to deal with the issue of national singularity of the Polish culture. Awareness of cultural and political revival was connected with re-conceptualization of the heritage of

folk construction and the rise of patriotic sentiments was manifested in architecture through the formation of "Zakopane style" whose ideological inspirer was Stanislaw Witkiewicz. S. Witkiewicz tried to attach to the "Zakopane style" a social meaning: it had to serve the goals of consolidation of the Polish nation, "make possible for the upper classes to return home on the one hand and to merge with common people into a true monolithic nation on the other hand" [11]. Representations of historicism in the 2nd half of the 19th century became exceptionally multidimensional and multilingual.

Thus, architecture that can be defined as historicism manifested through the principle of choice of the prototype for the new creative work and through the principle of synthesis of the elements from different architectural primary sources appeared for the first time in Lviv in the 17th century. An important feature of such architecture is symbolism of the use of a specific prototype. Architectural heritage of Lviv of Renaissance period created a model of use of historical heritage: from precise reproduction of a historical prototype to re-combination and deliberate departure from the canon.

The next stage of representation of historicism in the architecture of Lviv is connected with the "second classicism". Architecture of Lviv of the late 17th – first half of the 19th century represented a typical European variant of the "second classicism" marked by the traits of pluralism and the opportunity of choice: the principle of choice of the style dominated over loyalty to the "epoch's style" opening the road to its undisguised culmination in the 2nd half of the 19th century. This is when historicism for the first time came forward as an effective means of not only cultural (as in the day of Renaissance), but also ideological expansion symbolizing first of all political and administrative appurtenance of Lviv to the Austrian monarchy.

Expansion of historicism in the 2nd half of the 19th century in architecture of Lviv was determined by further political and cultural integration in the European context. Historicism at that time came forward as the means of legitimization of the Habsburg rule, and starting from the 1870s as a part of the official ideology of authorities of the autonomous province. The main feature of the 2nd half of the 19th century was the total historicism of thought that was reflected in architecture in the form of boundless stylistic pluralism. The style of a building was selected depending on the associations it caused which gave an architectural project special meanings. National-romantic idea that facilitated national consolidation became especially remarkable among the various representations of historicism in the 2nd half of the 19th century.

Fig. 12. The convent and the Roman-Catholic Church of the Franciscans (J. Zachariewicz,1877–1889)

Further development of historicism was continued in the architecture of the city in the interwar period, under the totalitarian regime and in the architecture of post-Soviet Lviv.

References

[1] *Архітектура Львова. Час і стилі: XIII–XXI ст*, Упор. і наук. ред. Ю.О. Бірюльов,. Центр Європи, Львів 2008.

[2] Білінська О.М., *Особливості застосування ордерних членувань у порталах споруд Львова кін. XVI – XVII ст*,.Вісник Національного університету "Львівська політехніка", 2004, № 505, pp. 159–163.

[3] Борисова Е.А., *Русская архитектура второй половины XIX века*, М.: Наука, 1979.

[4] Вансца Е., *Огдяд архітектури Відня XIX і першої половини XX ст. Архітектура Галичини XIX–XX ст*, Під редакцією Б. Черкеса, М. Кубеліка, Е. Гофер, Львів 1996, pp. 199–208.

[5] Вуйцик В.С., Липка Р.М., *Зустріч зі Львовом. Путівник,* Каменяр, Львів 1987.

[6] Иконников А. В., *Историзм в архитектуре*, М., Стройиздат, 1997.

[7] Bialynia-Chołodecki J., *Lwów w XIX stuleciu*, nakładem autora, Lwów 1928.

[8] Czerkies B., Danczak I., *Architekt Julian Zachariewicz w ukraińskiej i polskiej kulturze. Ochrona wspólnego dziedzictwa kulturowego.* Stowarzyszenie Konserwatorow Zabytkow, Polski Komitet Narodowy ICOMOS, Warszawa 1993, pp. 72–85.

[9] Grzybowski K., *Galicja 1848–1914. Historia ustroju politycznego na tle historii ustroju Austrii*, Kraków–Wrocław–Warszawa 1959, pp. 86–98, 278–289.

[10] Mańkowski T., *Początki nowożytnego Lwowa w architekturze*, nakładem gminy król. stol. miasta Lwowa, Lwów 1923, p. 51.

[11] Pawlikowski J., *O stylu zakopiańskim*, Wydawnictwo kasy im. Mianowskiego, Warszawa 1931, p. 17.

[12] Zachariewicz J., *Klasztor i kościół oo. Franciszkanek*, Dźwignia, rocznik III – 1879, pp. 43–44.

Historyzm w architekturze Lwowa

W artykule podjęto temat historyzmu w architekturze, który jest traktowany nie jako nazwa konkretnego kierunku w architekturze, ale jako skierowanie myślenia twórczego, które żywi się świadomością historyczną. Na przykładzie architektury Lwowa pokazano, jak system form związanych z wydarzeniami i doświadczaniem historii stale służy do tworzenia nowych języków formalnych, wyrażających treści specyficzne dla swojej epoki. Problem wykorzystania tradycji do rozwiązywania „zadań współczesnych" architektury został prześledzony od epoki Renesansu do początku XXI wieku. W niniejszym kontekście staje się zrozumiałe, że historyzm we Lwowie jest właściwy epokom Renesansu, klasycyzmu; możemy także spostrzec go zarówno w modernizmie, w wariacjach neoklasycystycznych reżimu totalitarnego, jak i we współczesnej architekturze, dlatego że podstawą myślenia twórczego architektów było i jest odwołanie do pamięci historycznej przez prototypy historyczne.

Key words: Lviv, historicism

Słowa kluczowe: Lwów, historyzm

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Architectural heritage protection in Volyn in 1920–1930 as a source of cultural and national identity

Fig. 1. St. Uspenska Lavra in Pochaiv. Overall view

Attitudes to the historical and architectural heritage of the state situated in its territory determine not only the general level of culture, but also a considerable degree of self-awareness of a group of people as a community which is united by the historical background, spiritual and material heritage, requiring constant care and promotion. We know that at this stage of the development of the world civilization, this problem is especially acute in two cases: mainly in the period of strengthening of the state as an independent political union and globalization and similar processes related to the levelling of national cultural characteristics.

After regaining independence by Poland in 1918, this problem became very sharp. Therefore, in our opinion, activities in the field of ancient monuments protection, including architectural and urban heritage were selected as a way to protect the national identity in this period. "Humanity today has deeply looked into the essence of sights and sees in these visual witnesses history of the spirit reflection of people, its culture evidentiary testimony, the arguments of those characteristics that are in the field of art created national individualism, finally, source of motivation for the development of national art. From this point of view of understanding, sights appear in the light of their

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Fig. 2. St. Basil Church in Vladimir in Volyn

true value. Therefore, care about preservation of national works of art from ancient times, arising from a love to the motherland and its great past and no less captivating beauty, fascinated by the sculptural forms in architecture, sculpture and painting, is characteristic for each cultural community. Everywhere we see the principle, put forward to an important place: the efforts of our duty to preserve monuments for the offspring in the least changed, most authentic state" [9, p. 16] – this the basic thesis in the field of cultural heritage preservation was included in one of the Regency Council decrees, issued in late October 1918, in the eve of independence of Poland.

Significant destruction caused by the First World War in Great Poland, especially in its south-eastern part, has been a factor for starting the work in this direction. Numerous facts of destruction of material substance of objects slightly changed the approaches, declared in the document quoted above, in favour of reconstruction and restoration of hundreds of architectural objects across the entire state.

Particular weight was given to the monument-preservation work in the "eastern borderlands" (Kresy) – on the territories of Kholmshchyna, Podlasie, the western part of Volyn, Polissia and Belarus, annexed to Poland by the Treaty of Riga in 1921. These territories needed special efforts of "return" after more than a century of being in the administrative limits of the Russian Empire. Visualisation of the Russian presence was reflected primarily in the architectural image transformations of religious buildings, as well as in open neglecting of these and other buildings that represented preliminary "Polish" period (beginning with the Union of Lublin in 1569) and earlier, "pre-union" times in the history of the region. As the Polish researcher P. Dettloff says, the Imperial Archaeological Commission in St. Petersburg "... engaged exclusively Byzantine monuments of culture, without regard to the historical buildings from the territory of the Kingdom of Poland, which belonged to the works of the Western culture" [10, p. 41].

Modern Polish scientists in their works touched the problems of organization and methods of monument-preserving activities of the Second Polish Republic, considering this area of architectural activity in the national scale. The most fundamental, in particular, is research of J. Levitsky and P. Dettloff [10]. Tangential to our researched topic are publications of M. Tshevik and Y. Zhyvitskyj. However, the motivational aspect of the complex work carried out in Volyn was not investigated separately.

Aim. We pay particular attention to monument-preserving activity in Volyn in 1920–1930 as a means of visualization and consolidation of the national identity.

The range of inventory work which was planned to be carried out in the Second Polish Republic as soon as possible was directly proportional to the desire of fast crystallization of the Polish nation by developing the sense of common ethnic origin, in particular the cultural community, "whose members are joined or united on the basis of common historical memory, some myths, symbols and traditions" [5, p. 16]. Therefore, the proposed article will discuss only one aspect of cultural heritage in Volyn in the interwar period – fixation, preservation, restoration and reconstruction of **individual architectural structures-symbols**, materialized evidence of the historicity of the nation, its high cultural development and belonging to the Western civilization as opposed to the Eastern one which was outside.

A number of actions of the Polish authorities aimed at organizing the monument-preserving work contributed to improving the situation: first of all, issuance of the Minister of Arts and Culture Ordinance dated April 5, 1919 on the establishment of preservation offices. Besides state bodies of Preservation – Restorers Departments established the Council of restorers in 1919. To resolve the monument-preserving tasks in a particular region and on specific buildings, the special institution of the Congress of the Council of Restorers was founded, the first works of which took place in April 1919 [6].

Every citizen who loves his country and its past, has to value historical sites and monuments of the past, which after various historical disasters, and in the last period – after the occupants left and the World War 1 storms ended, now in the revived Polish Republic face complete damage and destruction.

One of the greatest concerns of the revived Polish state was indeed a proper organization of monument protection which was reflected in the Decree of 31.10.1918 on the care of monuments of art and culture. These intentions, planned on a large scale, could not be introduced later in life due to the necessity of economy, dictated by the state.

There is a great concern that while these views in this regard will be crucial, a lot of sites will no longer exist in the absence of proper care and preservation. Only joint efforts of the government, communities and society can save these cultural monuments of the past.

These words, quoted from "okolnyk" of the Interior Minister Sl. Skladkovskiy (Nr. Min. 778/27) from 12.05.27 are extremely important, because they emphasise the value of the highest state official attention to the internal administration of our national cultural heritage in the field of monuments.

First of all, there is a great need to have an accurate list of these monuments in order to take care of them efficiently. Realizing this need, civilized European states have long started the scientific inventory of monuments and have done a lot of work in this field. It is sufficient to say that the inventory works have already been completed in England, France, Italy and Germany (…).

In Poland, works in this area were postponed. Occupying states, realizing the weight of monuments that prove the greatness of our country and people, made it impossible for us to have access to our sites (Russia), or performed an inventory by themselves, giving it favourable political overtones.

A typical example of such work is the inventory of Poznan [principality – O.M.] performed (...) *by Professor of Architecture Juliusz Kohte. This scientist researched all valuable monuments of architecture, sculpture, paintings, decorative arts, construction and related industries with great integrity and ability.*

This work, which lasted 12 years, with a whole army of assistants, is of paramount value and is part of the inventory of the German Reich; it consists of eight volumes, published on good paper, lavishly illustrated and is now the only completed systematic study in the field of inventory in the lands of Poland. However, the prominent scientist was unable to avoid the German chauvinism. This is evident in the list of artists and craftsmen who worked on the lands of Great Poland in the arts. No Polish surnames – German ones only (…).

From the Polish papers in this area we are proud to highlight the publication of Krakow Academy of Sciences, the folder of conservators ancient [Ancient History – O.M.] and reports on research of art history in Poland. The materials collected by Malopolska restorers, especially Professor Marian Sokolovskiy and Professor Stanislav Tomkovych constitute today rich scientific material, which, however, unfortunately in many cases is still awaiting publication, as a result of governmental and social indifference and a general lack of funds.

In connection with inventory work, without which it is not possible to achieve reasonable care and preservation with the most extensive network of companies and sites of care over the government efforts, the Polish government on 31.10.1918 established the network of restores whose number is seven in Poland today.

Their main task is to conduct scientific inventory of monuments in the provinces entrusted to them. I would like to point out that the Lublin district, which should interest us primarily consists of Lublin, Polissia and Volyn

Fig. 3. Jesuit monastery in Kremenets. St. Ignacio Church

provinces. Unfortunately, the large area of the district as well as a lack of permanent professional assistance, forces a restorer to a considerable effort, the results of which from the numeral side are insignificant.

I would like to point out that in one small area of so-called "Prowinz Pozen" Kohte, with the help of the major works of the highest class workers (Dr. Warachauer), performed the assigned work in 12 years.

Lublin restorer in today's situation had to spend about 40 years on the most primitive investigations of his district. Without mentioning in general that the world of processing, systematization and publication of the results of this quadragenarian work would still remain an open problem to be tackled in subsequent years, I would like to emphasize that this particular case is not a question of ambition of a single scholar. It is a matter of life and death of Polish artistic culture (...).

Volyn province, where the XII Congress of Restorers was held in September this year, understands the case and is sincerely concerned about the destiny of their monuments, mute witnesses of ancient Polish greatness on these lands which were Russified with such enthusiasm. They intend to subsidize work in the field of inventory, preservation of monuments of art and culture by means of municipalities [2, pp. 61–64].

In late 1927 Jerzy Siennitskiy (1886–1956) – Restorer of the Lublin district delivered an emotional speech before the headmen of the county town council of Volyn. He placed special emphasis on major challenges, which in this period were experienced by the professionals in daily inventory process both in the state in general and in Volyn.

Fig. 4. Palace in Vyshnivets. Overall view from the courtyard

During the years 1919–1921 and 1923–1930 E. Siennitskiy performed considerable amount of work in the field of monument preservation. In his work he combined the work of architect practitioners and academic researchers. Due to the active search, in the years 1925–1930 the foundation registry monuments located on the territory of historical Volyn was established. In addition, the report materials that are stored in State Archive of Volyn region [2], and the city of Lublin and Lublin province [19] reflect the activities of arts and culture restorers in Lublin, Polissia and Volyn provinces, contain information on the character of preservation activities on specific buildings and permissions to introduce local changes in structure and environment.

The report for the second half of 1927 tackles the problem of the technical condition of the studied monuments of Volyn, where the information is accompanied by brief historical references, stylistic characteristics of buildings, data reconstruction and repairs as well as a description of works of art available in the interior. The list includes the folowing items: architectural complex of the former Franciscan monastery in Mezhyrichi Ostrogski (now in the Rivne region); Mstislav Cathedral (Holy Virgin Uspinya Church) in Vladimir in Volyn (now in the Volyn region); bell tower at the Cathedral Gate Mstislav in Vladimir in Volyn; "Bishop castle" in Vladimir in Volyn; architectural ensemble of the former Carmelite church and monastery in Vyshnivets (now the territory of Ternopil region); Vyshnivets parish church in [2, pp. 45–56].

According to the list, the first group of objects that were carefully studied were the most significant in view of the construction period (Mstislav Cathedral), formation peculiarities (monastery in Mezhyrich Ostrozki) and those that were somehow associated with eminent national history (the building in Vyshnivets).

The Decrees of the President of the Polish Republic on March 6, 1928 "On the care of monuments" [17] and the Minister of religious confessions and public education on July 17 that year "On implementing the registry of the monuments" [16] confirmed the importance of ongoing work, made the concept of monuments more specific, the criteria by which objects can be registered and their structure determined. Detailed instructions provided in these documents were based on substantial, almost a decade-long experiences of the inventory.

Up to 1928 the card catalogue included the objects located in more than eighty towns of Polissia and Volyn province, with the total number reaching almost one hundred seventy [19, pp. 235–242]. The directory arrangement was the first step on the way to include these objects to the aforementioned official national register of monuments. Speaking of the works performed during the decade, the main Restorer of the Volyn district Z. Revskiy noted that at the end of 1937 there were 405 items in the inventory positions, and their number over the past two years doubled [15, p. 224]. It should be noted that apart from the Catholic temples, in the number of inventoried objects there were also included the oldest Orthodox churches, representing groups of traditional wooden architecture.

During the research work in Volyn, some considerable practical solutions were applied. In particular, in the mid 1930's during the repair of St. Basil church in Vladimir in Volyn, where fragments of Roman masonry were cleared of plaster, which, according to the contemporary restorer of Volyn Y. Dutkevich, "will facilitate future reconstruction of the original form-eastern Roman architectural and sculptural decoration of this valuable monument" [11, p. 229]. Moreover, in 1937, experts began the work to remove Russian layers – domes and bell towers. In the Russian Empire the image reconstruction and the volume reconstruction of the temple were dealt with, according to Countess Uvarova, so as to "hurt every eye that is at least a little familiar with the artistic monuments and their style" [4, p. 79]. As for the return of its original to the temple, then in our opinion, such a desire had also the following arguments: "Roman" part of the architectural and constructive solutions made the monument nearer to the Western civilization circle, "Eastern" – was consistent with the promotion of the Polish Orthodox Church, ancient wooden structures of Kyivs'ka Rus in the church building as such, that best meet its canons [8].

In general the demolition of the onion-formed domes became an immediate measure to restore the original

forms of religious buildings, destroying traces of Russian statehood and ideology. In the same way the authentic forms were returned by means of completion of the main tower of the post-Jesuit church facade in Vladimir [14, p. 253], church in Boremel (Rivne region), Bernardynian towers in Dubno, eliminating the Russian restructuring period in the church in the Novy Zagoriv (Volyn region) after repossession of these temples, dismantling typical for Russian architecture roofs over the entrance to the Uspenskiy Cathedral and Lavra monastery in Pochaiv [15, p. 225], reconstructing the "Russian" annex to the former Jesuit monastery in Kremenets [18, p. 351].

The pragmatic goals that urged the Polish government in Volyn and other associated areas to pay attention to the restoration of historic, mostly secular objects should also be noticed. Bodies of public administration, public order, educational institutions and other institutions organized in the provinces, required a large number of buildings and facilities. For this purpose, the ancient castles and palaces were adapted more seldom than the monastery buildings, which in various circumstances were taken over by the state. In the early 1930's column porticos were restored along with some elements of decoration and detail in Vyshnivets palace [15, p. 227]. Large-scale repair and reconstruction began in the early 1920s initiated by the owners of the residence – counts Grokholski; they were continued in the years 1924–1925, when the estate was purchased by the state as the property of Kremenets county municipal union to house various institutions here (hospitals, Crafts School and others.) [20, p. 485; 18, p. 352]. Important place in the plans of the local authorities was taken by the restoration of the palace of kn. Lyubomyrskiy in Rivne for the location of the magistrate here [3, p. 484], Bernadine and Dominican monasteries in Lutsk – as government agencies [13, pp. 2–3], reconstruction of a medieval castle of Czartoryskiy in Klevan and a penitentiary [12, p. 302], rehabilitation and reconstruction of important buildings and building of the Overgate Ostrozki-Lubomirski Castle in Dubno for the location of the county municipality, county local government, official state housing, the office of inspector of schools and police barracks [7].

A special place among the local monuments which were restored in Volyn was occupied by Lubart castle in Lutsk. Back in 1922, a special commission consisting of representatives of local authorities invited from Warsaw and local experts was set up and it worked on the problem of urgent steps to strengthen the castle. Previous studies were based on materials inventory of 1910–1912, made during the expedition led by a renowned architect K. Ivanitskiy of the Imperial Archaeological Commission (measure drawings and photographs) [1, pp. 44, 75]. The state of emergency of solid defence building was twice

Fig. 5. Lubart Castle in Lutsk. Gate Tower

discussed at the congresses of the Restorers in 1921 and 1927, but lack of funds did not allow performance of all the necessary works. At the end of 1920 the tower was strengthened as it was in the worst condition, in the following years the basements were cleaned and some lost walls were restored. In 1939 an authoritative Polish scientist Jan Zahvatovych from the Institute of Polish Architecture of Warsaw Polytechnic was invited to draft the plan of further work to observe the castle. For further accumulation of funds and performance of work, local authorities allowed to make reservations for tour top Lutsk castle ruins and supported the release of special editions of its history. Collected money from sold brochures was directed to the treasury of reconstruction. Constant attention, support and continual promotion of this building, which witnessed a long history and was considered a symbol of the Polish State in Volyn is a telling example of finding a path of the national identity.

In general we can state that in 1920–1930 in Volyn in monument-preserving activities one form of identity was established – traditional, which during the revival of the Polish statehood was based on the restoration of the lost architectural monuments that expressed particularly valuable national and cultural identity.

References

[1] Державний архів Волинської області (ДАВО), ф. 158, оп. 1, р. 49.

[2] Державний архів Волинської області (ДАВО), ф. 46, оп. 1, р. 3354.

[3] Михайлишин О., *Резиденція князів Любомирських в Рівному: до історії розвитку та занепаду*, [in:] Записки Наукового Товариства ім.Т.Г.Шевченка: Праці Комісії архітектури та містобудування, Т. CCXLIX, 2005, pp. 469–484.

[4] Ричков П.А., Луц В.Д., *Сакральне мистецтво Володимира-Волинського*, Техніка, Київ, 2004.
[5] Черкес Б.С., *Національна ідентичність в архітектурі міста*, Видавництво Національного університету „Львівська політехніка", Львів, 2008.
[6] Archiwum Akt Nowych w Warszawie (AAN), MWRiOP, sygn. 7030.
[7] AAN w Warszawie, MSW, sygn. 2517, 2518.
[8] Cerkwie Prawosławne. Wyniki konkursu, Wydawnictwo św. synodu Kościoła Prawosławnego w Polsce, Warszawa 1928.
[9] Dekret Rady Regencyjnej z dn. 31.X.1918 o opiece nad zabytkami, Archive of New Acts (Warsaw) (AAN), MWRiOP, sygn. 179.
[10] Dettloff P., *Odbudowa i restauracja zabytków architektury w Polsce w latach 1918–1930. Teoria i praktyka*, UNIVERSITAS, Kraków 2006.
[11] Dutkiewicz J., *Kronika konserwatorska*, BHSiK, 1935/36, pp. 223–230.
[12] Dutkiewicz J., *Odbudowa zamku w Klewaniu*, BHSiK, 1933/34, No. 4, p. 302.
[13] Prusiewicz A., *Klasztory katolickie w Diecezji Łuckiej*, Łuck 1922.
[14] Rewski Z., *Prace konserwatorskie*, BHSiK, 1937, No. 2, pp. 252–253.
[15] Rewski Z., *Prace konserwatorskie*, Biuletyn Historii Sztuki i Kultury (BHSiK), 1938, No. 2, pp. 224–227.
[16] Rozporządzenie Ministra Wyznań Religijnych i Oświecenia Publicznego, Dziennik Ustaw Rzeczypospolitej Polskiej, 1928, No. 76, item 675.
[17] Rozporządzenie Prezydenta RP z dnia 6 marca 1928 r. o opiece nad zabytkami, Dziennik Ustaw Rzeczypospolitej Polskiej, 1928, No. 29, item 265.
[18] Siennicki J., *Kronika konserwatorska za rok 1929 i 1930*, Ochrona Zabytków Sztuki, 1930/31, cz. 1–4, pp. 351–352.
[19] S1. Archiwum Panstwowe w Lublinie. Wojewodzki Urząd Lubelski. Wydział V Komunikacyjno-Budowlany. Okręgowa Dyrekcja Robót Publicznych. 1919–1939, sygn. 3260.
[20] Wiśniowiec, Sztuki Piękne, 1924/25, No. 10.

Ochrona dziedzictwa architektonicznego Wołynia w latach 1920–1930 jako środek tożsamości kulturowej i narodowej

W okresie odnowienia niepodległości Polski w latach 1920–1930 odbyła się znaczna aktywizacja działalności dotyczącej opieki i konserwacji pamiątek architektury. Na terenie Wołynia, który został dołączony do II Rzeczypospolitej, został zrealizowany duży zakres prac w dziedzinie inwentaryzacji oraz renowacji znakomitych zespołów architektonicznych i oddzielnych budowli. Działalność ta może być rozpatrzona jako jeden z przejawów konstruowania tożsamości narodowej polskiego etosu w warunkach państwa wielonarodowego, jeden ze sposobów budowy moralnych podstaw narodu w tym okresie oraz wizualizacji tych procesów przez środki architektoniczne.

Key words: Volyn, cultural heritage, identity

Słowa kluczowe: Wołyń, dziedzictwo kulturowe, tożsamość

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Blessed Virgin Mary Church in Lübeck as an architectonic expression of Hanseatic culture

The medieval culture of German Baltic Front was determined mainly by a Hanseatic community which was established at the end of the 12th century and which at the beginning associated merchants and later even the whole cities. The Hansa, which represented a sort of a prototype of today's European Union, constituted a unique organisation whose influence on the political, economical and social situation of the discussed region cannot be overestimated. It also performed a culture-producing role and this article attempts to present the influence it had on the architecture of this region on the example of one of the most important building achievements of southern Germany – Blessed Virgin Mary Church in Lübeck.

The Hanseatic League has its origins in the late 12th century when German merchants began their economic expansion in the Baltic Sea basin. Soon, the German merchants who periodically visited Gotland[1] [2] were accompanied by other merchants coming from the newly founded cities on the east coast of the Baltic Sea and together they formed 'universi Mercatorem Imperii Romani Gotlandiam frequentantes'[9][2]. In the course of time, the merchants started trade exploration of other Baltic region countries and of those situated by the Northern Sea [8][3]. Representatives, who were chosen in the particular centres, wielded court power and if necessary they represented merchants before the town authorities where they held their offices. The 13th century brought a gradual transformation of the merchant community into the community of towns. This type of initiatives took place quite often in Medieval Europe, however, no other merchant union or town centre lasted for such a long time or got such a position like the Hansa. For many years, the system, which seemed to be purely commercial, became a serious economic and political partner which had enough power to impose blockades, declare wars, conclude international treaties and to force other contemporary countries to respect its laws and interests. Since the 13th century the Hansa monopolised trade along the big axis Novgorod–Tallinn–Lübeck–Hamburg–London, it conducted trade with southern Germany and Italy and its ships travelled even to France, Spain and Portugal. In the period of the most remarkable development, which took place in the 14th century, about 150 towns belonged to the Hansa. In the context of the position that the Hansa had in medieval Europe, it is really astonishing when we notice that it had no legal status, office workers, it did not posses its own financial means, neither the fleet nor the army and it did not have relative sovereignty as its members came under the law of local feudalists [1][4]. The purpose of establishing the Hansa and its driving force was the need to defend the rights of its merchants abroad and to develop trade. Solidarity of the Hansa's members ensured its existence during the next centuries.

The most important centre of the Hanseatic community was Lübeck whose location took place as a result of the earl of Holstein Adolf II's decision concerning the final pacification of pagan Obotrites[5]. For that purpose, he brought settlers from Holland and Flanders and set

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[1] Dollinger P. *Dzieje Hanzy XII–XVII w.*,Warszawa 1997, p. 35.

[2] Samsonowicz H., *Późne średniowiecze miast nadbałtyckich. Studia nad dziejami hanzy nad Bałtykiem w XIV–XV w.*, Warszawa 1968, p. 20.

[3] Historians connect the trade expansion of German merchants with German colonisation on the East, the so called 'Drang nach Osten'. On the one hand, the reason of colonisation was a desire to subordinate the regions on the east side of the River Elbe, which were still considerably pagan at the beginning of the 12th century and on the other hand, a necessity to annex new terrains caused by overpopulation of western Germany and excessive plotting of lands given by Landlords as well as through the liberation of peasants. This also caused immigration of settlers to the regions of Holstein and Brandenburg, which was accompanied by evangelisation mission and setting up merchant centres. Samsonowicz H., *Hanza władczyni mórz*, Warszawa 1958, p. 13.

[4] Dollinger P., *op. cit.,* p. 11.

[5] Holm W., *Lübeck, die freie und Hanse Stadt,* Leipzig 1900, p. 16.

Fig. 1. Blessed Virgin Mary Church in Lübeck – view from north–west. Photo by author

up a merchant centre near the old settlement of Obotrites called Old Lübeck[6]. The location in 1158 probably included a territory around a big, rectangular market square which was surrounded with stands and cloth halls in the north–east corner where the town hall was supposed to be built soon[7]. In 1160 the seat of the bishop was moved to Lübeck and construction works on two churches were started – a cathedral and Marienkirche. During the next years, Lübeck was granted numerous privileges confirmed by Frederick I Barbarossa and in 1226 Frederick II conferred on the town 'civitas Imperii' dignity[8]. This dignity was not conferred on any other town situated beyond the River Elbe, which increased Lübeck prestige and in connection with its growing material power predestined this town to become a leader of Hanseatic trade which started to develop at that time [4].

In the Baltic Sea area civilisation processes occurred basically in different conditions than it was the case before in Western Europe. These processes started at the time of the crisis of the scholastic philosophy which had formed the model of the Western Europe medieval culture. Also, the flourishing trade contributed to the growth of self-awareness of town communities and led to the creation of the democratic middle-class culture. The educated town communities expressed their claims and ambitions in form of realisations of secular architecture as well as sacral architecture. The second half of the 13th century brings about the need to build new churches adapted for gatherings of a big town community. Traditional forms of a transept basilica did not seem much attractive considering a limited space for the laity and a feudal system of power which was manifested in this type of structures. Because of these reasons, the investors' attention was concentrated on the hall space which was already developed and functioned within smaller churches whose standardised height and integrated naves corresponded with the functional needs of commune councils as well as with the requirements of the appropriate representation.

Rebuilding of the Blessed Virgin Mary Church in Lübeck, as a result of which a traditional vaulted Roman basilica of the feudal phase was transformed into a hall church, became an unusually significant impulse in the development of hall architecture of the Baltic area. At least two hypotheses appear in relation to the genesis of the hall type in the architecture of northern Germany. The hall type was earlier introduced in the south of Germany in Hesse along with St. Elisabeth Church in Magburg and Cistercian Church in Haina. According to Teresa Mroczko, a group of hall churches on the basilica plan, which originates from the church in Haina, shows the way of adaptation of the French classical Gothic forms within a local German building tradition. The Roman combined system was replaced by a Gothic arrangement of bays called traveé (the nave rectangular in form of squares of aisles) and with this division, which originates from France, Hesse builders connected the hall arrangement which was taken from Westphalia traditions (a collegiate church in Herford, the cathedral body in Paderborn) [6][9]. The created hybrid could be transported from the territories of Hesse to the Baltic area. On the other hand, the second concept suggests that in the territory of northern Germany the hall shape was introduced as an independent church space along with a group of churches originating from the nine-field hall in Gadebusch. The other hypothesis seems more probable in the case of the Blessed Virgin Mary Church in Lübeck because the arrangement of bays was not based on the fully produced traveé system (bays of aisles had a plan of the rectangular situated longitudinally to the church axis). Undoubtedly, choosing a new spatial form constituted the way of manifesting political and social aspirations which were expressed in this way on the architectural ground. The development and heightening of the aisles, which used to be too narrow and less functional,

[6] Its location by the River Trava 20 km from the sea and 50 km from Hamburg seemed particularly beneficial. The distance from the coastline protected a newly set up town from pirates' attacks and at the same time the navigable Trava made it possible for ships to sail to the interior of the land. The vicinity of Hamburg enabled to set up a land route thanks to which it was possible to direct trade further to the west with the avoidance of sailing on the River Sund.

[7] The market square was probably situated between the district around the duke's castle in the north and the church district in the south, ibidem, pp. 17–18.

[8] Ibidem, pp. 19–21.

[9] Mroczko T., *Architektura gotycka na ziemi chełmińskiej*, Warszawa 1980, p. 109.

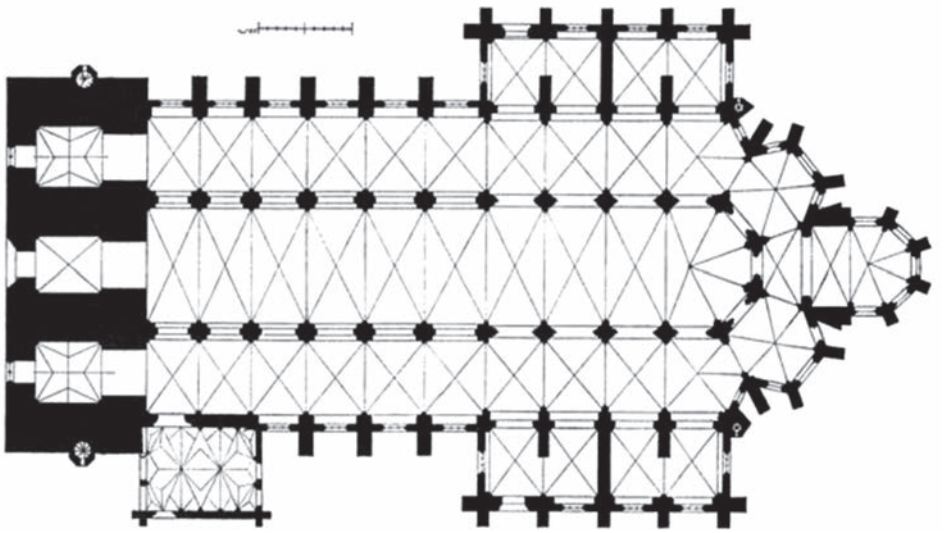

Fig. 2. Blessed Virgin Mary Church in Lübeck – plan, source: http://www.kirchengucker.de /2007/05/13/marienkirche-in--lubeck dated 15.11.2010

Fig. 3. Blessed Virgin Mary Church in Lübeck – view of the choir from south–east. Photo by author

changed the traditional basilica form space adapting it for the needs of the growing congregation [1][10].

We can reconstruct the form of this Gothic hall space of the Lübeck church thanks to first of all architectural relics which are preserved in the area of southern walls. They show that the walls of the pedestal storey were arranged in each bay with two ogival niches and in each of them a big circular window was placed. A little higher, at the height of the upper window sills of the aisles, there was a gallery around the whole church interior. According to Jarzewicz, this system roots date to the Roman Normand architecture, while in Lübeck it appeared thanks to the late-Roman cathedral in Bremen which was the seat of archdiocese – the superior of Lübeck diocese [5][11]. Mroczko, while analyzing the origins of this solution, points out that the two-storey wall arrangement was based on the French ground through reduction or fusion of three-storey solutions consisting in getting rid of the triforium zone or connecting it with the under-window zone [6][12]. The two-storey system with the under-window gallery and a by-pass on the first floor situated in the deep arcade window interiors with ogival passages in wall intra-window pillars was widely used from circa 1225 on the territories of southern and central Germany. It is quite probable that the process of transmitting this form was possible thanks to trade contacts of Hanseatic merchants who, apart from penetration of the Baltic Sea basin, were also interested in the regions of middle and southern Germany using river and land trade routes.

Circular arches of the vault led from wall pillars and they were connected with each other in the space between

[10] Böker H.J., *Die Mittelalterliche Backsteinarchitektur Norddeutschlands*, Darmstadt 1988, p. 93.

[11] Jarzewicz J., *Gotycka architektura Nowej Marchii. Budownictwo sakralne w okresie Askańczyków i Wittelsbachów,* Poznań 2000, p. 140.

[12] Mroczko T., op. cit., pp. 49, 173.

Fig. 4. Blessed Virgin Mary Church in Lübeck – view of the body and choir. Photo by author

pillars forming in this way a graduated arrangement of the wall, which reduced the massive structure of the walls. The hall rebuilding also included the transept as well as the root of the choir gallery. In the place of the demolished southern transept front a porch was built whose construction was completed in 1270, which is confirmed by the date of consecrating the altar and the burial which took place there. Its eastern gable with a three-level form articulated with blind windows was preserved under the roof in the porch of the mayor chapel which was built later at the eastern side. The original porch probably had a crossed and ribbed vault, however, when a new bypass choir gallery with a basilica form was built, the reorganisation of its space and introduction of pillars into the interior, which divided it into two bays, took place. The name of the whole architectural trend – *Viertelstab gotik* – originates from the application of circular shaped stones in the window splayed embrasures and also in the area of the porch vaults. Their sizes, which were in accordance with the size of normal bricks, made it possible to achieve a homogenous course of the pattern in the pillar profiles and window frames which resulted in limiting the number of harmonised shaped stones in pillars. Moreover, their composition was a sign of mature – Gothic stylistic forms which stood in opposition to explicitly separated architectural elements of the Roman buildings.

The hall stage of the church rebuilding can also be seen in the area of the façade. The core of the present two-tower western massif, which comprises the central part of the massif up to the height of the first floor, constitutes the remaining of the original one-tower organisation of the façade with the porch in the basement opened to the interior of the nave. In the 14th century the existing development was already accomplished by means of the gable and in this way it was connected with the system of two towers situated on the sides [1][13]. The tower massif, which was built in the western bay of the body, constitutes a significant distinguishing feature of sacral buildings in the regions of the Baltic area. Its form originates from a feudal residential tower (*kamenate*), from defensive functions which churches performed during the first stage of functioning as well as from transformations which Carolingian westwork underwent. Rectangular massifs (with one or two towers) as well as the massifs founded on the plan similar to the square with a single tower with a basement opened with two or three arcades and a feudal gallery or worship chapel situated on the higher floor appeared as a result of the westwork reduction. The original military functions of the tower massif, with the increase of political autonomy and economic power of towns, were replaced by symbolic functions. The tower dominating over the city, where important town documents were kept and sessions of the city council took place on the upper floor – until town halls were built – was treated as a symbol of independence and power of the middle class [5][14].

Unfortunately, the representative form of the hall church turned out to be insufficient for the manifestation of middle class ideas of independence, autonomy and democracy. The new concept was not realized until the end and already in the course of its implementation – probably in about 1280 – it was again replaced by the basilica plan which referred to the Gothic form of a cathedral basilica. Trade contacts with towns of Flanders, Westphalia and Rhineland allowed familiarization with the concept of the cathedral church which developed since the 12th century in towns of Ile–de–France and later it was accepted in the territories neighbouring France. Lübeck also used this concept; however, this distinguishing form of the French cathedral was used while erecting the city parish church but the whole form was filled with different meaningful elements. Only a pair of pillars situated on the border of the choir and body was left from the Roman basilica, while in the designed hall a part of surrounding walls was used, which determined the proportions of the new church. Generally, the Gothic rebuilding took place in two most important stages. The first stage comprised the choir, while the other referred to the body.

A new form of the choir included three crosswise elongated polygonal chapels with 5/8 closure and surrounded

[13] Böker H.J., op. cit., pp. 94–95.

[14] In the area of southern Germany, Westphalia was the most significant part; a block tower put by the western façade was a very typical solution there. Jarzewicz J., op. cit., pp. 58–61.

Fig. 5. Blessed Virgin Mary Church in Lübeck – view of the choir from the northern side. Photo by author

by ambit and ring. The particular character of the Blessed Virgin Mary Church consists in fixing the ring in three sides beyond the chapels by-pass space – along with the corresponding ambit bays they have cross-ribbed vaults. In this way a sort of standardisation and spatial uniformity were achieved, while a free flow of space differed from a separated series of chapels of French Gothic cathedrals or the Köln cathedral [1][15].

Cathedral – Gothic model of orientation was seen in the interior, particularly in the cross-section of pillars which included a dense series of pear profiles. The pillar core with a square cross-section can only be seen in the corners. Above the high zone of arcades in a thin membrane of walls additionally reduced by blend panels, there is a basilica zone of upper windows which are supported from the outside by open flying buttresses. Resignation from a triforium, determined a two-storey structure of the internal choir walls. Above the arcade floor – thanks to the differentiated width of walls – a surrounding porch was introduced, which led through the internal wall pillars and which is separated from the choir space with a tracery balustrade with articulated pinnacles. It presents an interesting procedure of introducing a motif, which was used in the external structure so far, into the interior of the building. Narrow supporting vault columns (*German: Dienst*), which are placed at the entire height of the pillars, decide about a vertical connection of two storeys situated one above the other.

The Virgin Mary choir naturally transformed the cathedral – Gothic model by converting its complex formal expression into the brick material. A spatial relation of chapels with the by-pass bays can be found in the north French and Dutch architecture in numerous examples dating back to the early Gothic period. The starting point of the series is the choir of Soissons cathedral completed in 1212, with references to the cathedral in Bayonne built in 1213 and Quimper in Brittany built in 1239. Another aspect which proves the inspiration with the Quimper solution is a similar wall organization with a gallery which goes above the triforium around the entire interior. However, there are no similarities to linear profiles of Lübeck choir arcades in Quimper. This suggests referring to a different formal tradition, perhaps to choir arcades of Köln cathedral, whose construction started in 1248, where pear profiles interspersed with grooves and we can observe a tendency for standardization consisting in the connection of a particular system of single or grouped in three or five narrow supporting columns with their vault function. The standardization of the form repertoire constituted a significant factor which made it possible to transfer this system into the brick material without the necessity to use differentiated brick shaped stones. However, in the cathedral choir in Köln there are no similarities to the applied in Lübeck pillar of disk arcs profiles directed downwards and interrupted only by a narrow capital zone band. This still belonged to the phase of experiments and appeared in the sacristy of Köln cathedral in 1277[16]. The cathedral sacristy solution was transferred to the Utrecht cathedral choir which showed a conceptual dependency on the Köln building, which can be seen in the choir closure (7/12). On the other hand, the Lübeck church is connected with Utrecht by the integration of by-pass chapel spaces with its bays. Uniformity of the internal choir in the Lübeck church caused a basic modification of Köln and Utrecht scheme. Connections with Köln were further proved by capitals and narrow supporting columns (*Dienst*) made in lime stone with their naturalistic presentation of leaf forms. However, the window tracery with a simple form

[15] Böker H.J., op. cit., p. 140.

[16] This motif shall be used, in the form deprived of the capital turning point, in the hall space of the ground storey of the cathedral southern tower; its preserved plan dates back to 1290. Ibidem, p. 142.

Fig. 6. Blessed Virgin Mary Church in Lübeck – nave body. Photo by author

of lancet arches originates from the spirit of brick architecture[17].

The confirmed relations between the choir of Blessed Virgin Mary Church in Lübeck and the sacristy of the Köln cathedral consecrated in 1277 indicate that the construction works on the Lübeck choir were started in 1280. In 1277 there was a dispute between the city council and the cathedral chapter concerning the patronage of the parish church, which was ended in 1286 by the decision on the city patronage. This dispute might have been the reason why the church choir was given the form which referred to the architectural tradition of Gothic cathedrals by manifesting the position and claims of the powerful city commune[18]. The connections of the church with the city commune were mentioned explicitly again in circa 1390 when the city council commissioned the construction of a chapel for their own purposes, *Bürgermeisterkapelle*, in the southern part of the city. It was here that the city councilors were officially received into office and in the chapel upper storey a strong room was located where the official city documents were kept: charters, certificates of privileges and contracts. This part of the church is the property of the city until today [3][19].

The trading activity supported by the Hansa concentrated mainly on merchant's entrepreneurship and it introduced democratic social relations at the same time. This contributed to the formation of middle-class self-awareness and a sense of identity of city commune members. The need for manifesting new social ideas was reflected in the employment of the architectonic forms associated with highly artistic types of sacral architecture. The employment of the hall form in order to ensure enough space for the city congregation and the subsequent introduction of the cathedral choir in the basilica concept increased the prestige and dignified the construction of the most important church of the city commune. The fact that the city parish was given cathedral forms illustrates visibly the increasing power of the middle class. Transposition of the architectonic elements from France, Flanders, Rhineland or Westphalia could take place thanks to the wide trading contacts that were already possible at that time.

Trade routes and merchant contacts in the Middle Ages performed the role which went far beyond a given economic zone. The vast majority of the medieval Europe inhabitants were limited in their peregrinations to their immediate surroundings, while religious missions, pilgrimages or diplomatic trips were not sufficient for the purpose of gaining knowledge about other territories. Therefore, the development of trade and financial contacts provided opportunities to cross borders, both those physical and those connected with awareness, as well as it enabled establishing contacts with other centres. Ships and carts carried material goods, people and widely understood civilization ideas, in this way indirectly fulfilling a culture-producing role. Although it was not their main goal, the merchants contributed to shape Europe's face as a 'cultural entirety – not uniform but internally communicative' [7][20]. The efficiency of this method of transfer of architectural concepts is evidenced by the fact that the hall type church first and next the basilica type equipped with the cathedral choir were popularized as a city church model in the areas of the southern Baltic coast. The same transformation as it was in the case of the Blessed Virgin Mary Church in Lübeck were later observed in the case of St James's Church in Stralsund. The hall churches with the forms which were dependent on the Lübeck solution appear not only in the territory of Mecklenburg but also in Old Margraviate of Brandenburg and Western Pomerania, while the cathedral choir dominated the architectural expression of churches in Stralsund, Rostock and Wismar and even a Cistercian church in Doberan. Due to the political and economical position of Lübeck, which resulted first of all from its leading role in the Hanseatic League and obtaining middle-class liberties, the Blessed Virgin Mary Church in Lübeck became a model church solution and it dominated over the architectural landscape of the medieval cities of the Baltic Sea region.

[17] Ibidem, pp. 140–143.

[18] Ibidem, p. 144.

[19] Enns A.B, Stiebeling H., *Lübeck. Ein Führer durch die Bau- und Kunstdenkmäler der Hansestadt*, Lübeck 1999, p. 52.

[20] Myśliwski G., *Wrocław w przestrzeni gospodarczej Europy (XIII –XV w.) – centrum czy peryferie*, Wrocław 2009, pp. 18–19.

References

[1] Böker H.J., *Die Mittelalterliche Backsteinarchitektur Norddeutschlands*, Wissenschaftliche Buchgesellschaft, Darmstadt 1988.
[2] Dollinger P., *Dzieje Hanzy XII–XVII w.,* Oficyna Wydawnicza Volumen, Niezależna Oficyna Wydawnicza, Warszawa 1997.
[3] Enns A.B, Stiebeling H., *Lübeck. Ein Führer durch die Bau- und Kunstdenkmäler der Hansestadt*, Hansisches Verlagskontor H. Scheffler, Lübeck 1999.
[4] Holm W., *Lübeck, die freie und Hanse Stadt,* Verlag von Velhagen & Klasing, Bielefeld 1900.
[5] Jarzewicz J., *Gotycka architektura Nowej Marchii. Budownictwo sakralne w okresie Askańczyków i Wittelsbachów*, Wydawnictwo Poznańskiego Towarzystwa Przyjaciół Nauk, Poznań 2000.
[6] Mroczko T., *Architektura gotycka na ziemi chełmińskiej*, Państwowe Wydawnictwo Naukowe, Warszawa 1980.
[7] Myśliwski G., *Wrocław w przestrzeni gospodarczej Europy (XIII–XV w.) – centrum czy peryferie*, Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław 2009.
[8] Samsonowicz H., *Hanza władczyni mórz*, Książka i Wiedza, Warszawa 1958.
[9] Samsonowicz H., *Późne średniowiecze miast nadbałtyckich. Studia nad dziejami hanzy nad Bałtykiem w XIV–XV w.*, Państwowe Wydawnictwo Naukowe, Warszawa 1968.
[10] http://www.kirchengucker.de/2007/05/13/marienkirche-in-lubeck dated 15.11.2010.

Kościół NMP w Lubece jako architektoniczny wyraz kultury hanzeatyckiej

Artykuł zainspirowany został fenomenem Hanzy, której działalność zdeterminowała oblicze ekonomiczno-polityczne i społeczne średniowiecznych miast niemieckiego Niżu Nadbałtyckiego. Aczkolwiek działalność Hanzy koncentrowała się na sferze wymiany handlowej, dała ona również impuls dla wykształcenia się samoświadomości mieszczańskiej. Tym samym wywarła ona wpływ na architekturę miast płn. Niemiec, która zaczęła stanowić obszar manifestacji roszczeń rosnącego w siłę mieszczaństwa, zarówno w obrębie budowli świeckich, jak i sakralnych. Celem artykułu jest wskazanie na przykładzie kościoła NMP w Lubece do jakich form architektonicznych sięgnięto w celu wyrażenia hanzeatyckich dążeń polityczno-społecznych. W związku z tym kolejne części artykułu poświęcone zostały prezentacji istoty organizacji hanzeatyckiej, wskazaniu uwarunkowań polityczno-społecznych średniowiecznej Lubeki, omówieniu architektury kościoła NMP i analizie jej wyrazu stylistyczno-formalnego w kontekście kultury hanzeatyckiej. W podsumowaniu podjęta została również kwestia na ile rozwiązanie wprowadzone na gruncie kościoła mariackiego w Lubece stało się nośnym i atrakcyjnym wzorcem dla innych miast hanzeatyckich, określając pejzaż architektoniczny terenów niemieckiego Niżu Nadbałtyckiego. Tym samym artykuł podejmuje próbę podjęcia kwestii kontekstu miejsca i czasu jako wyznaczników kultury w architekturze.

Key words: Lübeck, Hanseatic culture

Słowa kluczowe: Lubeka, kultura hanzeatycka

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Inspirations with regional architecture form in the Sudetes landscape

Introduction

The Sudetes Region is one of many European borderline mountain areas with specific and different culture which has been developed through centuries. This specific culture resulted from the fact that this region belonged to different countries during the previous centuries (Poland, Czechs, Austria and Germany) and the important European trade routes, which connected Lower Silesia with the countries of Western and Eastern Europe, crossed this region. The variety of culture was reflected, among other things, in the whole sphere of folk art, including native and wooden architecture.

Native regional culture also appeared in Lower Silesian traditions and legends, which in turn, influenced painting, sculpture and architecture of this region enriching them with new concepts often filled with the spirit of mysticism and symbolism.

Beautiful landscape of the Sudetes with the highest range of the Karkonosze Mountains inspired with its beauty and danger the people living there for ages and the tourists of the 19th century who visited this place more often.

The magic of the Karkonosze Mountains also significantly influenced the life and creative activity of the artists who more willingly settled there and at the end of the 19th century they founded a colony assembled around the writers Carl and Gerhart Hauptmann.

The main personality, who lived in Szklarska Poręba among the members of the artistic colony, was the writer and Nobel Prize winner Gerhart Hauptmann and similarly, the structures built in 1903 were the main buildings in the Seven Houses Valley; the house of the painter Hermann von Hendrich (Hendrich-Haus) and first of all "Hala Baśni" – "Fairy-Tales Valley" ("Sagenhalle") situated nearby became the objects associated with the Karkonosze Mountains symbolism.

Their interior decoration was filled with the atmosphere of Karkonosze-like traditions and legends, which was additionally enriched with paintings and sculptures created by the artists who lived in colonies [6, 16].

Woodcarving, which was quite common in the Sudetes and gave a specific character to the new buildings, developed already in the second half of the 18th century. Woodcarving reached its culmination before the outbreak of World War I and mainly thanks to Woodcarving School in Cieplice Zdrój which was founded in 1902. Native folklore was cultivated in different forms, for example, wooden signposts were used in the mountain tourism, which became a characteristic part of the Sudetes landscape [16].

The interiors of shelters, inns and taverns were decorated with the local artists" woodcarving, who graduated from Cieplice Zdrój School. Unfortunately, after 1945 many of those interiors were devastated or totally destroyed and Cieplice Zdrój School was closed. The new School of Artistic Craftsmanship does not continue artistic creativity of its predecessor.

"Hala Baśni" and the Sudetes villas

"Hala Baśni" was built in 1903 and the author of its design was the Berliner architect Paul Engler. Its construction aroused heated discussions but finally, "Liczyrzepa Castle" was built and it became a place of particular worship of Liczyrzepa – Woltan. "Hala Baśni" often called "Nordic framework temple" was a building simple in form with a framework construction and covered with a steep gable roof. The main entrance, which was situated on the side of the gable wall, was flanked with two

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Fig. 1. "Hala Baśni" in the period before World War I.
Source: http://fotopolska.eu

Fig. 2. House of Gerhard and Carl Hauptmann in Szklarska Poręba Średnia. Photo by author, 2001

high columns on the model of old German clasped spears "Eidring" and decorated with god Thor hammer hanging on chains. Above the entrance, there were dragons and horses" heads stylized in wood [16].

On the outside of "Karkonosze Legends Temple" there were old German external sculptural decorations ("Sagenhalle des Riesengebirges"), whereas the interior was decorated with the symbols based on the legends and fairy-tales connected with the Karkonosze mountain spirit called Liczyrzepa. The themes of the interior paintings by Hermann Hendrich who initiated the building of the "Hala Baśni" were magnificent Karkonosze landscapes and the figure of the spirit of these mountains. The paintings presented in the fairy-tale convention, with specific colours, in specially designed frames, were full of mystery and poetry, thus creating a unique climate which permeated the interior [6]. Shaped in this way, the Fairy-Tales Valley was complemented by the Karkonosze landscape which spread from its entrance – powerfully influencing the imagination by being the source of all inspirations and created by nature itself.

Peculiar magic of these mountains became a 'strong magnet" attracting many artists who often came from different parts of Germany and settled at that place under the influence of the mountains" charm and beauty, which was expressed in their creative activity [16].

The influence of the native type of wooden buildings, which had been shaped in the Sudetes for centuries, on the creative activity of architects who worked in the circle of the artistic colony was emphasized by means of particular villas and pensions. A characteristic escape – made by many members of the artistic colony – from big and

overpopulated cities to this mountainous region and the return to nature, communion with nature, had an influence on the character of new buildings as well as on the choice of old village huts as the place for living. The membership of Wilhelm Bölsch and Brunon Will (the artists who belonged to the artistic colony in Szklarska Poręba) in German Association of Cities-Gardens (Deutsche Gartenstadtgesellschaft – the aim of this association was the popularization of living in detached houses surrounded by gardens and using the models of the local and regional architecture – contributed to strengthening the movement of Heimatschutz Bewegung (Protection of Regional Culture Movement), which existed since 1880 in the Sudetes where many important persons from cultural and artistic circles decided to live in old regional buildings.

Most of them were adapted by new owners according to their needs through changes of the construction and the roof shape, creation of new rooms and other more or less significant alterations [16].

We should also mention, among other things, the houses which belonged to Gerhart and Carl Hauptmann who were first to become the owners of a wooden house in Szklarska Poręba Średnia in 1880, a village house of John Henry Mackay (Siebenhausern), houses belonging to Wilhelm Bölsche and Brunon Wille situated near "Hala Baśni" in Szklarska Poręba Średnia, a house of Hans Fechner also in Szklarska Poręba Średnia or a village house of Alfred Wilm in Zachełmie.

In the group of buildings, which were designed from scratch, the most distinctive are the following ones: the house of the painter Georg Wichmann from the years 1908–1909 in Michałowice, the house with a framework construction of the mayor of Berlin Reicke in Szklarska Poręba Średnia from 1907, the house of the painter Hermann Hendrich from 1905 designed by Paul Engler situated near "Hala Baśni" in Szklarska Poręba Średnia and finally, the house of the historian of art Alfred Koepen built opposite to the Hendrich villa in 1905 and designed by a well-known Berliner architect Bruno Möhring. The "Lukas Mill" ("Lukasmühle"), which was designed by Franz Egbert Scumann and opened to public in the years 1922–1923 in the centre of Szklarska Poręba, certainly deserves our attention as well. The building was the seat

Fig. 3. Hermann Hendrich House (Hendrich-Haus) in Szklarska Poręba Średnia. Photo by author, 2001

Fig. 4. Georg Wichmann House in Michałowice. Photo by author, 2001.

of St. Lukas Artistic Society (Künstlergemeinschaft St. Lukas) with a hotel and restaurant [10, 12, 16].

The architecture of this building was explicitly inspired by the Sudetes regional elements of architecture and it mainly referred in its essence to the principles of St. Lukas Artistic Society, i. e. protecting and propagating the native architecture.

It should be mentioned here that the above mentioned villas – as a result of the native building tradition – were not only more or less successful copies of the Sudetes regional architecture but they also constitute its creative development. Each of these designs had some individual formal solutions which enriched the architecture and made it more charming and sophisticated.

Tourist buildings

The influence of regional elements was particularly emphasized in the architecture of objects which were connected with tourism.

The objects which are directly connected with recreation and active leisure time certainly come to the fore here. These are first of all shelters, mountain hotels, inns (taverns), pensions of different sizes and agro-tourism buildings which were arranged for this purpose in the adapted Sudetes houses.

Most often, their forms were inspired by regional architectural elements both in construction and building details.

The biggest concentration of the buildings of this type is in the highest part of the Sudetes, i.e. the Karkonosze, where tourism developed at the earliest in comparison to other parts of these mountains [12, 13, 14].

In these mountains, the most known shelters in the Sudetes were built from shepherd or chimneyless huts. In their form they often referred to the native heritage of the region ("Pod Łabskim Szczytem" – "Alte Schlesische Baude", "Strzecha Akademicka" – "Hampelbaude", "Bronek Czech" – "Schlingelbaude", "Samotnia" – "Kleine Teichbaude" or relatively the newest "Na Hali Szrenickiej" – "Neue Schlesische Baude").

Important elements, which also influenced the shape of the wholeness in the case of shelters or inns, were practical aspects, i.e. higher resistance of the building construction to the impingement of weather changes which are particularly destructive in higher parts of the mountains.

In high mountains shelters, the elements which are so frequently used in the construction of buildings situated in lower parts and serve the purpose of tourism, such as balconies, loggias, terraces, dormers and others, are reduced to the minimum. Peculiar asceticism and monumentalism, which serve the purpose of practical goals, are dominant in the shape of the buildings. The only characteristic elements in the shape of shelters and inns are verandas where there are dining rooms and which constitute an excellent place for admiring this magnificent mountainous landscape.

The examples of shelters which have compact and crude forms are: "Na Szrenicy" ("Reifträgerbaude") at the top of Szrenica Mountain at the height of 1365 m above sea level built in the years 1921–1922; "Strzecha Akademicka" ("Hampelbaude") built on the slope of Złotówka meadow at the height of 1258 m above sea level– the present building was designed after the fire in 1906; and finally, the old shelter "Nad Śnieżnymi Kotłami" ("Schneegrubenbaude") at the height of 1490 m above sea level from the years 1895–1897. Also the third shelter "Na Śnieżce" ("Schneekoppe Baude") built on top of Śnieżka Mountain at the height of 1603 m above sea level in 1862 survived for 104 years and it had a compact construction with visible features of the regional architecture. And the shelters with a stepped and pyramid-shaped form of the roof, for example "Dom Śląski" ("Schlesierhaus im Riesengebirge") from the years 1921–1922 at the height of 1394 m above sea level as well as "Odrodzenie" ("Jugendkammhaus *Rübezahl*") on Karkonoska Pass – 1236 m above sea level from 1928 are characterized by a simple form [14].

The interiors of the Sudetes shelters and inns were in many cases arranged in a very interesting way. The interior decorations were based on regional elements which were enriched with motives from fairy-tales and legends connected with mountains and their unique atmosphere as well as a majestic landscape.

After 1945 many of these interiors were deprived of their most precious elements and equipment and some of them somehow disappeared along with the buildings like, for instance, Altschlesische Bauernstube in Kowalowa – Fuchswinkel colony (Lisi Zakątek) near Mieroszów in the Suche Mountains in Wałbrzych district. There were many interesting exhibits in form of furniture, dinner sets, ceramics and fabrics with a regional origin, which were collected in this building by director Bertram from Sokołowsko. The interiors of such shelters, among other things, as "Strzecha Akademicka" in the Karkonosze Mountains, "Dom Śląski" at the foot of Śnieżka Mountain or the present pension "Irena" (the old "Kaffebaude") in Karpacz are also worth paying attention to. The shelters situated in Kłodzko district such as already non-existing "Hindenburgbaude" in Zieleniec or "Puhu Baude" on Puchaczówka Pass in the massive of Śnieżnik, which have stylistically designed interiors with the Sudetes regional character.

Now we would like to present some interiors in the tourist industry structures which survived the war destruction and due to their redecorations we can now see their old beauty and style.

The interior decorations of "Andrzejówka" shelter ("Andreasbaude") in the Suche Mountains in Wałbrzych district in Rybnica Leśna town (Ober-Reimswaldau) come to the fore here for sure [14].

This shelter was built in the years 1932–1933 as a result of an architectural competition in 1928 announced

Fig. 5. Shelter "Andrzejówka" with a sculptured signpost, photograph from the 1930s. From the collections in the Wałbrzych Museum

Fig. 6. Interior of "Andrzejówka" shelter. Inter-war period. From the collections in the Wałbrzych Museum

by GVW (Waldenburger Gebirgsverein) – Wałbrzych Mountains Society which was the part of Wałbrzych Mountains Federation. The initiator of this development was the chairman of GVW Andreas Bock and the shelter was given his name. Thanks to Bock's determination, the process of building the shelter was accomplished despite a very unfavourable financial situation resulting from the world economic crisis. The winner of this competition was the Wałbrzych architect Friedrich W. Kronke, the member of BDA who also managed the whole building place. The building was supposed to be a structure with the architecture referring in its form and construction to the regional traditions and fulfil contemporary functional requirements.

The cornerstone for the building of "Andrzejówka" was put on 20th June 1933 and the official opening of the building located at the height of 805 m above sea level took place already on 22nd October in the same year.

The shelter is a one-storey building with a basement and utility attic. The whole structure is covered with a hip and stepped roof. Grey stone walls of the basement, brown beams of the ground and first floor walls along with white joint of carcasses of the building and finally a silver shade of the roof eternity cover created a particular artistic effect of the shelter.

The carpenter's works during the framework construction of the shelter walls were performed by the master Petrick, while bricklayer's work were performed by the Wałbrzych company called Becker and Bergmann.

We should focus our particular attention on all decorations and woodcarving made by the artist and sculptor Hans Brochenberger from Janowice Wielkie. By sculpturing forest animals, local highlanders, dancing couples or skiers Brochenberger presented the regional topics which were strongly connected with the Wałbrzyskie Mountains. The climate of the building's interior with the open-access

Fig. 7. “Andrzejówka” shelter, view from south.
Photo by author, 2004

Fig. 8. “Andrzejówka” shelter, southern side Shelter interior fragment. Banquet room. Photo by author, 2004

Fig. 9. “Andrzejówka” shelter. Stylized sculpture of a goat supporting. Photo by author, 2006

part for guests as well as lodging part was dominated by woodcarving of the native character which was strongly inspired by the Sudetes and filled with local legends and fairy-tales, which was the wish of the investor – Wałbrzych Mountains Society.

The first leaseholder of the shelter was a famous tourist activist Otto Rübartsch who along with his wife Margaretta ran the shelter for several years and popularized the ideas of active recreation among tourists from Wałbrzych who visited this place in large numbers. He fitted the shel-

Fig. 10. "Andrzejówka" shelter. Cap of the column with the motif of a dancing couple. Photo by author, 2008

Fig. 11. "Andrzejówka" shelter, staircase to the first floor. Skier. Photo by author, 2009

ter interior with furniture at his own expense and several years later he connected the building to the water main. In 1944 Hitlerjugend took over the shelter and one year later Wehrmacht came there. After the war ended the German leaseholder came back to "Andrzejówka" but in 1946 he left it for good. After the war in 1947 the Wałbrzych PTT took over the shelter and together with the Lower Silesian Coal Industry Association it belonged to the PTTK till 1992 when the company ZG PTT "The Sudetes PTTK hotels and shelters" in Jelenia Góra was established.

Most of the shelter woodcarving made by the artist was preserved until today and now we can admire the artistry and symbolism of human and animal figures as well as mountain spirit allegories enchanted in wood [14].

Fig. 12. Rybnica Mała. Gospoda Sudecka Doliny Rybnej. Entrance façade. Photo by author, 2009

"Gospoda Sudecka Doliny Rybnej" (*The Sudetes Inn of Fish Valley*) is another well preserved structure situated not far from the "Andrzejówka" shelter, namely in Rybnica Mała. This building was erected in 1713 as a mill and later it was converted into an inn. It performed this role until World War II, however,after the war ended it became a residential house.

After the general overhaul at the beginning of 2002, which restored the beauty and style of the inn building, this structure again became a place that was willingly visited by tourists.

The interior part, in particular the banquet room on the ground floor, which is kept in the austere interiors style of the old Sudetes inns, is really worth noticing. Simple wooden furniture, small windows giving very little light and the beam construction of the structural ceiling on which there were simple decorative motives created the atmosphere of the interior.

The relatively low interior of the banquet room along with a marked rhythm of the structural ceiling beams additionally create the atmosphere of familiarity and warmth, which is so typical of the Sudetes wooden houses.

Summary

In the Sudetes region, a type of wooden building with characteristic constructional and formal features was created as a result of different cultural influences through centuries. It became a creative inspiration for many generations of architects and builders who designed residential houses, public utility buildings and in particular pensions, inns and shelters in this mountainous region.

The additional significant factor, which had an influence on the shape of creative activity of the representatives of art and culture who lived in the Sudetes, was the magnificent mountainous landscape, especially the highest part of the mountains, i.e. the Karkonosze. The local folklore, which was strongly embellished with mysticism and fairy-tales, in particular the mountain spirit figure – Liczyrzepa, became the force which inspired and stimulated artists" imagination.

"Hala Baśni" (*Fairy-Tales Valley*, also called *Mountain Spirit Castle*), which combined the features of the old German and Sudetes regional buildings, constituted in a way a symbol that united various domains of creative activity of the artists who lived in the artistic colony in Szklarska Poręba.

Another significant element, which shaped the character and climate of houses in the Sudetes, was also – apart from their wooden construction and proportions of the particular parts – the interior decoration which often referred to the local symbolism through the style of woodcarving.

Unfortunately, after the end of World War II, the cultural continuity in the Sudetes was broken; the artistic colony in Szklarska Poręba stopped existing, "Hala Baśni" was demolished, Cieplice Zdrój School of Woodcarving does not exist any longer and the newly built houses in the Sudetes do not refer in their form and detail to the local regional models which were crystallised throughout the centuries.

However, especially during the recent years after 1989, among the inhabitants of the Sudetes region we can observe the rebirth of interest in its rich cultural heritage and among architectonic projects we can notice more or less successful attempts to refer to the regional character of the buildings, although this is by no means a permanent change in the building style. The process of crystallisation of cultural influences, which takes place in the changing social and economic conditions after the year 1945 in the Sudetes, is still in its early stage and we must wait till we see its mature form.

References

[1] *Album vom Riesengebirge mit 31 Bidern*, Graph. Kunstanstalt Globus, Kotzschenbroda, Dresden.
[2] Baedeker K., *Schlesien – Riesengebirge, Grafschaft Glatz*, Edition 2, Karl Baedeker Verlag, Leipzig, 1938.
[3] Birke E., *Das Riesengebirge und Isergebirge in 144 Bildern*, Gerhard Rautenberg Verlag, Leer–Ostfriesland, 1983.
[4] Birke E., *Das Waldenburger und Glatzerbergland in 144 Bildern*, Gerhard Rautenberg Verlag, Leer–Ostfriesland, 1983.
[5] Dehlitz F., *Umgebinde im Überblick*, Graphische Werkstätten Zittau, Gmbh,1987.
[6] *Die Sagenhalle des Riesengebirges (Schreiberhau)*,von Hermann Hendrich, Hugo Schuchard, Paul Engler, Bruno Wille, J.J. Weber in Leipzig, 1903.
[7] Franke H., Ostgermanische Holzbaukultur und ihre Bedeutung für das deutsche Siedlungswerk, Wilh.Gottl.Korn Verlag/Breslau, 1936.
[8] Härtel H., *Ländliche Baukultur am Rande der MittelSudetes*, Schlesien-Verlag, Breslau 2, 1941.
[9] Kłodnicki Z. (ed.), *Dziedzictwo kulturowe Dolnego Śląska*, Polskie Towarzystwo Ludoznawcze, Wrocław, 1996.
[10] Kurverwaltung Schreiberhau, Schreiberhau im Riesengebirge, Sommer, 1929.
[11] Löwe L., *Schlesische Holzbauten*, Werner Verlag, Düsseldorf, 1969.
[12] *Słownik geografii turystycznej Sudetów*, Vol. 3, *Karkonosze*, M. Staffa (ed.), Wydawnictwo PTTK „Kraj", Warszawa–Kraków, 1993.
[13] Suchodolski J., *Regionalizm w kształtowaniu formy architektury współczesnej na obszarze Sudetów,* Oficyna Wydawnicza PWr, Wrocław, 1996.
[14] Suchodolski J., *Architektura schronisk górskich w Sudetach*, Oficyna Wydawnicza PWr., Wrocław, 2005.
[15] Trocka-Leszczyńska E., *Wiejska zabudowa mieszkaniowa w regionie sudeckim*, Oficyna Wydawnicza PWr., Wrocław 1995.
[16] *Wspaniały krajobraz – artyści i kolonie artystyczne w Karkonoszach w XX wieku,* praca zbiorowa, Gesellschaft für Internationalen Kulturaustausch e.V Berlin, Muzeum Okręgowe w Jeleniej Górze, 1999.

Inspiracje regionalną formą architektury w krajobrazie sudeckim

Region sudecki jest jednym z wielu europejskich pogranicznych obszarów górskich o ukształtowanej w ciągu minionych stuleci specyfice i odrębności kulturowej. Złożyły się na to: przynależność do różnych organizmów państwowych w poprzednich wiekach (Polski, Czech, Austrii i Niemiec) oraz przebieg ważnych europejskich szlaków handlowych, łączących Dolny Śląsk z krajami Europy Zachodniej i Wschodniej.

Wielowątkowość kulturowa uwidoczniła się tu także między innymi w całej sferze ludowej sztuki, w tym w rodzimej formie drewnianej architektury.

Rodzima kultura regionalna zaznaczyła się także w podaniach i legendach dolnośląskich, co z kolei wywarło wpływ na malarstwo, rzeźbę i architekturę tego regionu, wzbogacając je o nowe wątki przesycone często duchem mistycyzmu i symboliki.

Wspaniały krajobraz Sudetów z najwyższą ich partią Karkonoszami inspirował swym pięknem i grozą ludność zamieszkującą te tereny od pokoleń oraz turystów przybywających tu coraz liczniej od XIX wieku.

Magia Karkonoszy wywarła także głęboki wpływ na życie i twórczość coraz chętniej osiedlających się tutaj artystów, którzy z końcem XIX stulecia założyli kolonię skupioną wokół pisarzy Carla i Gerharta Hauptmannów.

Key words: Sudetes Region, regional architecture

Słowa kluczowe: Sudety, architektura regionalna

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Present-day issues

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Culture of village public spaces – exemplified by the commune of Krotoszyce

Introduction

Public space is, by definition, accessible and serves the general public. This is where intense life goes on. All important social, cultural and symbolic objects are available in this space.

The village square is also the site of many behaviour patterns. Although it is a public space, it is primarily a social space of its inhabitants. This is also where the highest number of symbols identifying residents with their "own space" is found. This space is certainly shaping human attitudes and behaviours, it facilitates building relationships, and thus affects the quality of life.

The reach of private and commonly used spaces

In the hierarchy of spatial layout the most basic unit is the house. Central village square is in a way second, after the house, in line of other spaces. It is an outer space and is commonly treated as an extension or supplement of the house. Although every person measures space subjectively, space regarded to be one's 'own' has a defined limit, and the owners identify themselves by taking responsibility and caring about it [5].

Today's country house owner perceives their space similarly to an owner of a suburb or city house. They get into their car on their driveway and go to work or school without meeting or talking to neighbours. Reception of used space by a rural resident has narrowed. Central village square with a well, bus stop, church, PGR (State Agricultural Farm), shop is nowadays usually only seen through the wind-shield. Along with group interests, community bonds and the perception of a village square as an extension and supplement of the house have disappeared. Therefore, it can be assumed that the lower the social capital possessed by rural residents, the weaker the community bonds and the smaller the reach of the house, i.e. space perceived to be 'one's own' (Fig. 1).

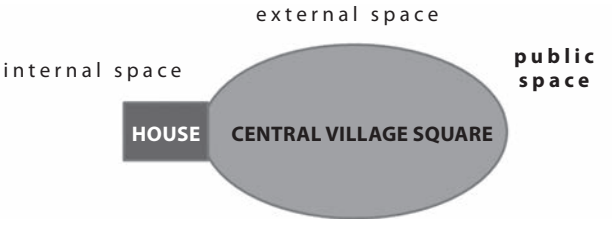

Fig. 1. Space relations diagram

* University of Zielona Góra, Civil Engineering Institute.

Space's impingement on people. Tradition

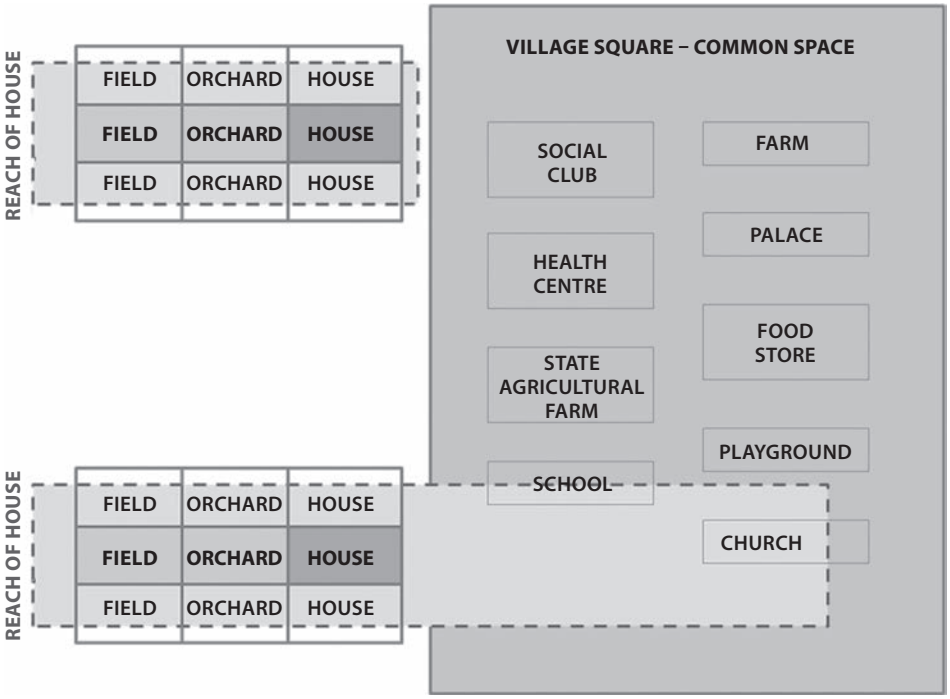

Fig. 2. Relations between public space (commonly used) and home space (private)

The village square, full of symbols, identifies residents with their own place and culture. Culture of space consists of many behaviour patterns, which are customs of a given community related to their beliefs, tradition and social order. Although not every space is a human's living environment, each territorial community must have its space in which it can exist.

Space directly affects our senses and feelings. People react to elements of spatial composition: closing, opening, rhythm, light, colour, the vertical and the horizontal. Space is experienced while watching and moving in it. Every person reacts to space in their own unique way [4].

The very quality of public space depends also on the current fashion. Tastes and preferences vary and they change with time. In reality, they form and influence the reception of a given space. The quality of space is essential to determine the identity of a given area, it is usually connected with a promoted and established vision.

Dehumanized space appears where no man's land (or space) exists [6]. The loss of identity contributes to the polarization of both space and society and it is usually related to social status. Therefore, the reach of public space is defined by a 'perceived' private ownership, thus indicating who, as a member of a given community, is entitled to be in this space and how it ought to be used.

Socially accepted and traditionally sanctioned behaviour patterns have changed over the last few decades. Previously homogenous rural residents who were engaged in the same type of activities, with similar spatial habits, have become less traditional nowadays [3]. Social and cultural customs sometimes identified with the social capital, specific to a given area have lost their significance. Traditional customs expressed in the frequency of contact with each of the elements of the rural environment such as church, well, bus stop, dirt track to the pastures have changed similarly to the reach of used space (Fig. 2). It seems that the biggest influence on this situation was the popularization of individual means of transport as well as a visible increase in family autonomy.

Planning entries

According to the legislative intention, public space area should be distinguished in planning documents through graphics and detailed entries allowing to shape it in a specific direction. In the 2003 Site Planning and Land Development Act, public space ground has been defined as an area 'of special importance in satisfying residents' needs, improving quality of their life and conducive to social contacts as regards its location and functional and spatial characteristics'.

In planning documents, public space is identified graphically, which allows to distinguish it from other common-access spaces. The way a public space is developed and arranged is the key element deciding about the state, appearance and overall image of the village. The specificity of planning entries determining the formation of a 'space that feels right to the recipient and user' should be the selection of such elements so as their co-existence could raise positive

emotions and associations, based on the place's tradition or function. Appropriate scale, properly used material, colour, accent or architectural dominants give such a possibility. The existing construction development lines and building dimension limits arrange and form the borders of these spaces.

According to the act, a commune should not manage space freely. During the planning procedure, commune's administrative organ is obliged to consider all interests at stake, and the planning document is a common ground for all interested parties, including the local community. Through the competences given to a mayor (governor, president) by law, this official has a coordinating function and stimulates spatial development according to predispositions, possibilities and also traditions.

According to the current law, spatial planning should be based on social participation. Participation can be manifested in residents' active role in creation of planning documents, e.g. proposals, participation in public debates, presence at municipal council meetings, as well as in indirect ways, i.e. when people express their preferences, needs, wishes and tastes through research, surveys, polls and other forms of anonymous expression of opinions.

Krotoszyce municipality

Figs. 3–6. Village central square in Tyńczyk Legnicki, Krotoszyce, Kozice, Złotniki

Residential preference surveys of Krotoszyce's residents were compiled by the authors of this article in spring 2010 – these surveys were aimed at finding out which points are important for the residents of the municipality and its individual localities[1]. They were formed as part of a study of conditions and directions of municipality's land development. The questions pertained not only to the pros and cons of the development of various localities, but also requested residents to name central places associated with celebrations, daily life, and worthy of showing to a newcomer. The questions also asked to name "the heart of the village", a place associated with events, a charming but also popular place or the one connected with recreation. The survey aimed to pinpoint public spaces in different localities of the municipality.

Unfortunately, answering these questions proved to be very difficult for the residents of Krotoszyce. An im-

[1] 87 surveys, each containing 19 questions.

age of a municipality with no public spaces accepted by its inhabitants emerged from the survey. Localities[2] do not have a meeting place accepted by the residents. It is difficult to identify the central place of the localities. Perhaps this situation is a consequence of many years when the residents had no influence on the space surrounding the home or apartment. The residents do not identify with the space, they ignore it. The constantly degraded public space of those localities, does not correspond to the needs and tastes, and is therefore mentally bypassed and pushed out of consciousness. The young people are more likely to identify with public spaces of shopping centers of larger cities rather than with the space around their home or school.

The authors of the publication assumed the village square – the central place to be the space in which they found symbols of worship, bus stop, shop or village information boards (Fig. 3–6). In Krotoszyce there is no established central place. The residents pointed to several places important for them, and while older residents pointed out: the field – stadium, where "Krotoszyce Days" are held every year, the church, the municipal office, the younger people mainly chose the bus stop – a meeting place and a symbolic 'window on the world', as if it were the first step on the 'path to a better world'[3].

There is no place that all the residents would consider central, which would have cultural meaning and value. The question about the 'heart of municipality' proved to be one of the most difficult. The residents gave mostly negative responses, and in other cases a specific location could rarely be identified. As in the case of the question: what is the symbol of the locality, answers 'there is no and 'none' were dominating. It seems that a place that could take over the function of a village square should be created or rearranged and this ought to be the main request to the urban plans.

Proposals included in the polls, indicating what the municipality should remove, eliminate, what is the most urgent need, what would residents donate to their city – should be considered as proposals, suggestions to the newly created local development plans. The aim should be to expand the cultural, entertainment and recreational activities offer to protect the needs expressed by the residents in surveys [1].

Commuting to work (on foot or by means of transport) is the most common, usually rhythmic and daily movement of the population, so any loss of time on the way to work exceeding the necessary minimum is met with disapproval of the working people. So it is not surprising that the biggest nuisance for Krotoszyce residents is communication, with about four fifths of the respondents complaining about it. In the polls, most complain about holes in the roads, no sidewalks and overgrown side-spaces that make people's everyday functioning more difficult. The Krotoszyce municipality not only lacks communication links in the form of roads, but the quality of existing ones raises reservations. Improving the roads is the most urgent priority for the residents.

Interestingly, very few people claim the need to construct new bike lanes, despite the declarations, in answer to another question, of active way of recreation. Unfortunately, this may indicate dominance of private car transport and unrealized possibilities of alternative transport options.

[2] Krotoszyce Municipality comprises 14 villages: Krotoszyce, Wilczyce, Krajów, Czerwony Kościół, Winnica, Janowice Duże, Tyńczyk Legnicki, Kozice, Warmątowice Sienkiewiczowskie, Babin-Kościelec, Prostynia, Złotniki, Dunino, Szymanowice.

[3] It is connected with the fact that the municipality is situated not far from Legnica and this city is a place of work for most of them.

Conclusions

Each locality has its central place or places. The larger the town the more likely it is that there are several such sites. However, in the Krotoszyce municipality there are no places which people could identify with. This poll question was a clear sign that the indication of such a place is problematic for residents. Most people did not answer this question.

In the Krotoszyce municipality population has changed after World War II and the present inhabitants are newcomers or their descendants, therefore, they did not inherit the cultural manner of using public spaces. They were not involved in recreating their surroundings related to the field of concepts, meanings, and ideas, and did not produce acceptable relations between common public spaces and particular participants. Commonly personalized news and entertainment (TV, video, computer, phone, etc.) result in even greater isolation of man and limited human activity in public spaces. Today's rural community is much more diverse than it was several years ago. In addition, the increased mobility of rural society causes the situation in which village residents take completely different places in the social division of labour, and they cross the barriers resulting from the social status inherited by them [2].

Varied levels of culture of the residents, their different habits, needs and preferences cause the ineffectiveness of the functional programs implemented so far, which depend mainly on the number of inhabitants. Until now, new investments more often harmed the image of the rural areas rather than improved it.

An important role is undoubtedly played here by the shape and records of the planning documents which relate to communication, administrative and economic conditions of everyday life. Currently, rural social space is not created in relation between private and public space and does not shape social behaviour. This space is created by trying to protect the cultural and environmental values contained in the specific regulations under the pressure of economic interests of developing new jobs.

References

[1] Bagiński E., *Opinie młodego pokolenia mieszkańców o swoich miastach*, Oficyna Wydawnicza PWr., Wrocław 1995.
[2] Bartoszek A., *Kapitał społeczno-kulturowy młodej inteligencji wobec wymogów rynku*, Wydawnictwo Uniwersytetu Śląskiego, Katowice 2003.
[3] Gzel S., *Fenomen małomiejskości*, Instytut Urbanistyki i Planowania Przestrzennego PW, Warszawa 1987.
[4] Jałowiecki B., Szczepański M., *Miasto i przestrzeń w perspektywie socjologicznej*, Wydawnictwo Naukowe Scholar, Warszawa 2002.
[5] Pawłowska K., *Idea swojskości*, Politechnika Krakowska, Kraków 2001.
[6] Trancik R., *Finding Lost Space: Theories of Urban Design*, John Wiley & Sons, New York–Toronto 1996.

Kultura wiejskich przestrzeni publicznych – przykład gminy Krotoszyce

Kultura przestrzeni składa się z wielu wzorów zachowań funkcjonujących w zmieniających się warunkach. Centralny wiejski plac to przestrzeń społeczna i publiczna, której symbole utożsamiają mieszkańców z ich własnym miejscem. Jednak upowszechnienie się w ostatnim czasie indywidualnych środków transportu, podobnie jak wzrost autonomii rodziny, zmieniło zasięg użytkowanej zastanej przestrzeni. Przestrzeń dotąd społeczna stała się niczyja, podobnie jak podtrzymujące ją wspólnotowe więzy i grupowe interesy.

Na terenie gminy Krotoszyce ludność, po II wojnie światowej, wymieniła się, a obecni mieszkańcy są przyjezdnymi lub ich potomkami, zatem nie odziedziczyli kulturowego sposobu użytkowania przestrzeni. Nie zaangażowali się także w wytworzenie swojego otoczenia powiązanego ze strefą swoich pojęć, znaczeń i wyobrażeń, i nie wypracowali relacji pomiędzy przestrzenią publiczną (wspólnie użytkowaną) a poszczególnymi uczestnikami zdarzeń.

Nowe inwestycje najczęściej szkodzą wizerunkowi wsi. Jednocześnie zróżnicowany poziom kultury mieszkańców – ich różnorodne nawyki, potrzeby i upodobania – powoduje nieskuteczność wdrażanych programów funkcjonalnych, zależnych w dużej mierze od liczby mieszkańców. Obecnie wiejska przestrzeń społeczna tworzy się w relacji nie tyle przestrzeni prywatnej do publicznej, co pomiędzy próbami ochrony wartości kulturowych i przyrodniczych a presją rozwoju interesów ekonomicznych.

Key words: Krotoszyce, village, public spaces

Słowa kluczowe: Krotoszyce, wieś, przestrzeń publiczna

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Pop culture as an inspiration in the modern architecture. Chosen issues

Introduction. Mass culture in relation to architecture

The beginnings of mass culture[1] are connected with the industrial revolution. They also have direct connections with urbanization processes that started in the 19th century, the indirect effect of which was the unification and popularization of societies and consequently, the ways of land development.

In the research conducted on the development of mass culture, from which pop culture has been evolving since the 1960s, the meaning of information popularisation (the influence of the mass media) and the consequences of progressing globalization are emphasized. The aspect of pop culture that still requires an analysis is its impact on the modern architecture and the feedback relation of this process, i.e. the influence of the modern architecture on other aspects of pop culture.

Researchers of culture emphasize the existence of stages in the development of mass culture. According to Antonina Kłoskowska, the first stage of popularisation takes place after World War I (the development of film and radio, the peak point of the press development), the second stage is in the middle of the 20th century (development of TV)[2] [2]. Another stage is marked by the appearance of the Internet and further progress of globalization processes.

The 1960s and 1970s are the time of the evolution of mass culture into pop culture, which is connected with a new position of rock music, cinema and television. Fascination of pop culture can also be observed in art, which is manifested by the creation of pop art or the beginnings of American architectural post-modernism[3]. Linking mass culture with architecture gives opportunities for a new original perspective on the history of culture and architecture of the last two hundred years. We can distinguish three phases of mutual relations between mass culture and architecture:

- Phase 1 – 19th century and the beginning of the 20th century (beginnings of mass culture and the 19th century town development). This phase was connected with the concept of a new modern city (from circa 1850), demolition of defence fortifications and creating a new unlimited spatial perspective of city land development based on the industrial development as well as popularisation of the employed spatial forms (among other, a tenement house, factory).
- Phase 2 – the time of modernist culture which takes place throughout most of the 20th century (from 1920s to 1970s). In this period, we can observe further popularization of the ways of architectural implementations and also a considerable influence of the international style which can be perceived as a manifestation of the global culture. Modernism, as an aesthetic concept, dissociated itself from eclectic ideas by suggesting a new formal language which did not approve of popular (folk) culture and tried to create its own elitist character. At the same time in the architecture and urban planning, such terms as

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[1] There are many definitions of the term mass culture. Most of them refer to numerous problems connected with the development of urbanized societies (which appeared in the 19th century) and the mass media existing in these societies. As the most important mass media, the following means are mentioned: press, radio, film, television and most recently the Internet.

[2] These notions are introduced by A. Kłoskowska in her book *Kultura masowa,* which is considered to be a classic position in the sociology of culture.

[3] Compare: D. Strinati, *Wprowadzenie do kultury popularnej*, Wydawnictwo Zysk i S-ka, Poznań, 1998.

repeatability, prefabrication, unification and others were emphasized.

• Phase 3 – introduction of elements of pop culture into the area of high culture, which is started in the 1960s and takes on a new shape from the beginning of the 1990s. Introduction of the forms, so far associated with popular culture, into the area of architectural avant-garde resulted in blurring boundaries between popular architecture and high architecture.

Post-modernist breakthrough, pop culture and architecture

For many years, an intellectual opposition was created between popular culture and high (elitist) culture. Popular culture was ascribed low values, frequent lack of original ideas, anti-intellectualism, commercialization and putting the emphasis mainly on mercantilist values and satisfying the lowest instincts.

We can assume that this division existed in the culture until the revolution of the 1960s, particularly until the development of pop art and postmodernism. These trends introduced a significant change in the interpretation of popular culture by involving some attributes of popular culture in a sort of an intellectual game, thus turning them into high culture attributes, which in practical terms meant that the boundaries between these two cultures blurred[4] [1].

United States of America

Emergence of postmodernism in the USA is connected with the appearance of new theories and publication of such books as *The Death and Life of Great American Cities* – by Jane Jacobs and *Complexity and Contradiction in Architecture* – by Robert Venturi. Particularly important was the fascination with the popular products of culture and kitsch, which was analyzed by R. Venturi along with D.S. Brown and S. Izenour in – *Learning from Las Vegas*. This book contains examples of advertisements and ludic architectural forms into the space of a specific metropolis which is the capital of world gambling – Las Vegas. The observations made by R. Venturi in practice had a broader dimension and described the spatial reality in which the pop attributes were an integral part of the iconosphere of the city of the 1960s and 1970s [4].

A different interpretation of pop was proposed by Ch.W. Moore in the design of the town square Piazza d'Italia in New Orleans. This public design executed in 1978 was addressed to the local community of Italian origins. It employed traditional elements of classic architecture (columns, porticos and presentable stairs) for the purposes of playing with the spectator and it was realized with the use of modern materials (stainless steel, neon).

Among other examples of connections of the American postmodernism with pop cultural forms, we can mention the projects of SITE workshop for the chain of markets Best, where typical rectangular façades of great supermarkets were enriched by the motives of walls which fall off and apart or they used lettering as a decorative

Fig. 1. *Dolphin and Swan Hotels* in Walt Disney World, Orlando 1990. Architect Michaela Graves

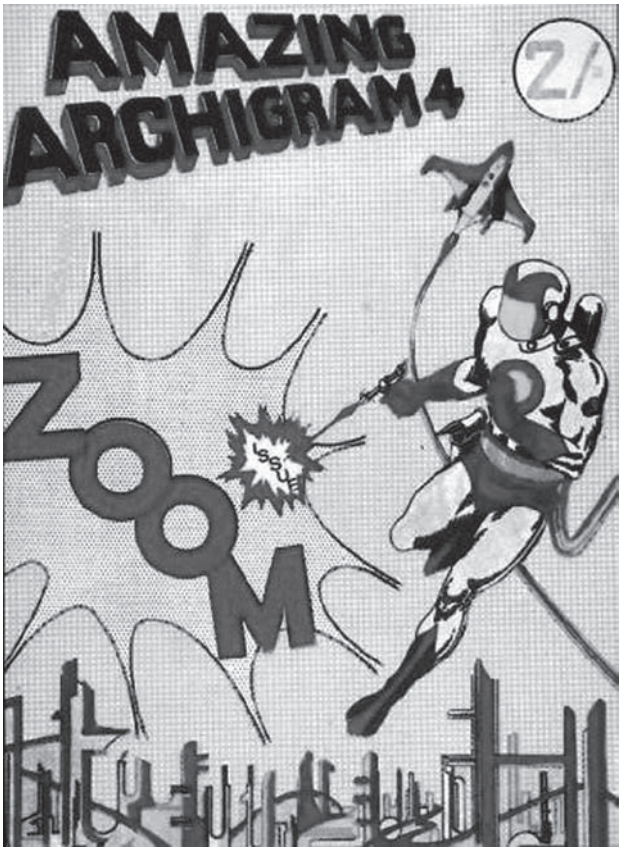

Fig. 2. The cover of *Amazing Archigram* 4 in a convention of comics

[4] Symptoms which anticipated this process were the concept of ready mades, started by M. Duchamp and his *Bicycle Wheel* (1913), *Bottle dryer* (1915) and the famous *Fountain* (1917).

element[5]; also, designs by Michael Graves, with a project that was radical as regards its references to pop culture *Dolphin and Swan Hotels* in Walt Disney Word complex in Orlando from 1990 (Fig. 1), in which he employed figures of dolphins and swans from Walt Disney stories as sculptures forming the building's façade.

Europe

In Europe, the influences of pop culture on architecture in the 1960s and at the beginnings of the 1970s had a slightly less direct character.

The achievements of Archigram (ARCHItecture TeleGRAM) group are very characteristic here. The group consisted of six architects[6] who were fascinated with new and futuristic visions of architecture. Their designs had a theoretical character, the aim of which was to stimulate reflections on new architectural possibilities. The most famous are the following: *Walking city* – a design of the city which transfers like a steel creature; *Suitalion* – a city clothes or a mega-structure design – *Plug-in-City.* The group significantly contributed to the form of presentation of the architectonic idea which strayed away from the pompous and serious approach presented by modernists and suggested the usage of comics and posters (Fig. 2) imitated on pop culture heroes (superman, Spiderman).

Among experienced architects, there were no such radical creators in Europe who would derive their visions from pop culture. The book by R. Rossi *L'achitettura della citta* turned out to be very important for the European post-modernism; however, it was a serious essay which presented the reasons of the modernist city crisis and attempts to get out of it.

Nevertheless, there were also European experienced architects who took advantage of pop motives in their creative activity. Hans Hollein, an Austrian architect, in the first stage of his creative activity was the author of several fine-scale solutions, mainly interiors, in which he used pop iconography in a specific way. For example, he designed the interiors in form of steel palms and cash desk windows with the motives of Rolls-Royce dummy bars in the Austrian Travel Agency in Vienna. He is also the author of ideological designs in which sea ships were to be placed in the interior. On the European ground, Venice Biennale in 1980 turned out to be a breakthrough event, in which functionalistic architecture was replaced by narrative architecture.

[5] The most popular SITE project from this period is a Huston market from 1974.

[6] The Archigram was created by David Greene, Peter Cook, Mike "Spider" Webb, Warren Chalk, Dennis Crompton and Ron Herron.

Artists in architecture

The design presence of artists connected with pop in architecture may constitute an interesting thread of relations between architecture and popular culture.

Frank O. Gehry is an architect who in his early works used some particular ideas – ready made – the example of which can be his own house in Santa Monica (California) built in the 1970s. He is also a co-author of the office complex Chiat/Day/Mojo in Venice (California) built in the years 1975–1991. The co-authors of this concept are the artists connected with pop art: Claesem Oldenburg and Coosje van Bruggen. The central part of the structure constitutes a several-storey sculpture by Claesem Oldenburg, which presents binoculars. Gehry himself also used the contours of objects in his later designs, the example of which can be a fish figure motive used in Fish Dance Restaurant in Kobe (1987); Lewis House in Lyndhurstw in Ohio (1989–1995) and Villa Olimpica in Barcelona (1992).

An original combination of art and architecture was suggested by Friedensreich Hunderwasser – an Austrian painter, sculptor and performer. He is the author of the architectural manifest *Verschimmelungs-manifest gegen den rationalismus in der architektur* (1957) in which he criticized functionalism in architecture. Hunderwasser's suggestions do not directly derive from pop iconography but they are examples of a radically different approach to architecture from the ideological and fine arts point of view.

Architecture as film inspiration

In the 1960s, it was possible to observe the specific feedback in which other activities in the range of pop culture were inspired by architecture, in particular, the film. A good example of this phenomenon can be the film by the classic of the new French nouvelle vague – Jean-Luc Godard *Alphaville*[7]; the film describes a vision of the dehumanised world, which can be understood as an indirect accusation of modernism in architecture. Apart from Godard, the influences of postmodernist iconography can be observed in Antonioni's films and first of all in Fellini's films (*Eight and a Half* (1963), *Satiricon* (1969), *Amarcord* (1973)). In his films, Fellini used architectural space giving it symbolic and ambiguous values in a way that was characteristic for architectural postmodernism.

For architectonic creative activity, a science-fiction trend turned out to be the most significant; in this trend, set designs were created which were supposed to represent the future.

[7] The full title of the film is as follows: *Alphaville, une étrange aventure de Lemmy Caution.* It combines science– fiction and noir cinema by presenting a story about the society managed by Alpha 60 electronic brain. The location of the film was in Paris.

An important film for this trend was *2001 – A Space Odyssey* directed by Stanley Kubrick in1968, in which a new kind of spatial aesthetics representing the future was created.

A contemporary director who is mentioned by architects and architecture critics as a person inspiring their creative activity is Ridley Scott and his two films in particular: *Alien* 1979 and *Blade Runner* 1982. Impressions of the suggested aesthetic solutions included in these films can be found in contemporary designs by Z. Hadid and F.O. Gehry [3].

Participation, hippies and 'do-it-yourself'

Equalization of the achievements of pop culture and high architecture resulted in the appearance of a new trend of architecture created by its users[8] as well as in the residents' participation in professional architectural designs.

The works of a Belgian architect Lucien Kroll can constitute an example of participation in creating architecture. After students' manifests in 1969, Kroll started work on his most famous design of La Merne town for the students of Medicine at Louvain University. Students participated in the process of designing actively and the result of the work was a controversial design which strayed away from a modernist and ascetic form; however, the design was enriched with different extensions as regards the formal aspect, which emphasized the meaning of architecture and greens.

Another famous design from this period is the housing estate 'Byker Wall' by Ralph Erskine. The author opened his office for social consultations[9] and created a different housing sub-estate which took into consideration the remarks and suggestions of the future residents in the design process.

A similar approach characterized also other initiatives, among which the most famous is the activity of ARCAU group from Brussels founded in 1969 or the works by Ivo Waldhor.

[8] This phenomenon was described in 1964 by Bernard Rudofsky in *Architecture without architects. A Short Introduction to Non-Pedigreed Architecture.*

[9] In order to encourage people to visit him, he connected the function of the design office, which was adapted from the old funeral parlor, with the function of the lost property office as well as garden advice and plants sale point.

New situation in the days of globalization. Cyber culture and architecture

Since the 1990s along with the development of the computer studies society, in particular, the development of computerization, the way of spreading products of culture has been modified, which has also created a new situation of the relation between culture and modern architecture. Inspirations of mass culture products such as traditional history of art or cinema – characteristic of postmodernism époque – were replaced by inspirations in the area of new media. Virtual reality and the appearance of the so called cyber culture became particularly significant[10]. Forms derived from computer graphics or virtual reality entered the sphere of architecture[11].

Fig. 3. *Silodam* of MVRDV group in Amsterdam

A good example of the project which used cyber culture inspiration can be Victoria University Online Training Center in Saint Albans in Australia (2001–2002). The author of the project is Studio Lyons from Melbourne whose creative activity is characterized by *irony in the digital times*[12]. In this design, a part of the building façade was covered by computer graphics, which constitutes a reference to the function of the building. The usage of façades

[10] A computer studies dictionary gives two basic definitions of cyber culture: *1. subculture of the Internet users playing computer games; and 2. a new face of pop culture using the multi-media, including mainly computers and the net of computer connections and links.* Source: A computer studies dictionary: www.i-slownik.pl

[11] A separate issue constitutes the existence of structures in the virtual space only. The example of such activities can be Guggenheim Virtual Museum design by Asympote group.

[12] *10.10_2.100 Architects.10 Critics*, Phaidon, London 2005, p. 208.

as a media carrier[13] became also a kind of identification of Herzog de Meuron group which should be regarded as one of the most influential groups in modern architecture.

The project of a transformer station in Utrecht made by NL ARCHITECTS group is also inspiring. It was changed into a sort of sculpture with façades, which have grips for climbing and a basket for playing basketball. This building in its stylistics refers to virtual reality, computer games graphics, representing in this way a wider trend of the architectonic quest.

A uniquely interesting thread of architectonic quests is represented by Dutch MVRDV studio. Their designs derive from Dutch structuralism trend and refer to the classic forms of Aldo van Eyck; however, they give them a postmodernist code – a kind of a formal play which is characteristic of postmodernism. In the design of *Silodam* building in Amsterdam, the façade of the cuboidal building, which stands on water, was divided into fragments which can be associated with building-blocks LEGO or heaps of port containers (Fig. 3). A similar motive of elements and structure was also applied in *WoZoCo* design (residential home) in Amsterdam or a Dutch Pavilion at Expo Exhibition 2000 in Hanover.

[13] Herzog de Meuron used façade motives-overprints (among other, in the design of the University Library in Cottbus) and changeable light façades (among other, the design of Munich Stadium).

References

[1] Dziamski G., *Postmodernizm wobec kryzysu estetyki współczesnej*, Wydawnictwo Naukowe Uniwersytetu Adama Mickiewicza, Poznań 1996.

[2] Kłoskowska A., *Kultura masowa*, Biblioteka Socjologiczna. Wydawnictwo Naukowe PWN, Warszawa 2005.

[3] Maas W., van Rijs J., Richard Koek R., *FARMAX: Excursions on density*, Rotterdam1998.

[4] Venturi R. , Brown D.S., Izenour S., *Learning from Las Vegas*, MIT Press, Cambridge 1972.

Popkultura jako inspiracja w architekturze współczesnej. Wybrane zagadnienia

W artykule opisano związki między kulturą masową i architekturą współczesną. Związki te podzielono na trzy podstawowe okresy: faza 1 – to wiek XIX i początek XX wieku (początek kultury masowej i XIX-wiecznego rozwoju miast); faza 2 – to czas trwania kultury modernistycznej, obejmujący znaczną część wieku XX (od lat 20. do lat 70. XX wieku); faza 3 – to wciągnięcie elementów kultury popularnej w obszar kultury wysokiej na początku lat 60. XX wieku.

Szerzej opisano okres przełomu postmodernistycznego, kiedy to została zniesiona opozycja intelektualna pomiędzy kulturą popularną i kulturą wysoką (elitarną). Kulturze popularnej przypisywano niskie wartości, częsty brak oryginalnych idei, antyintelektualizm, komercjalizację oraz nastawienie w głównej mierze na wartości merkantylne, zaspokajające najniższe instynkty. Podział ten można uznać za istniejący w kulturze do czasów rewolucji lat 60. XX wieku, a szczególnie do rozwoju pop-artu i postmodernizmu, kiedy został unieważniony, a pop stał się częścią kultury wysokiej. W artykule opisano różne przykłady styku kultury masowej i architektury tego okresu w USA i Europie.

Zaprezentowano także przykłady działań artystów pop-artu w architekturze, inspiracje architektoniczne w kulturze popularnej (filmie), nurt partycypacji architektonicznej z lat 70. XX wieku, jako przejaw umasowienia dostępu do architektury współczesnej, oraz przykłady realizacji inspirowanych kulturą popularną (głównie cyberkulturą) z ostatniego dziesięciolecia.

Key words: pop culture, modern architecture

Słowa kluczowe: popkultura, architektura współczesna

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Identity of place and culture of urban development

Fig. 1. The City of Arts and Sciences. Valencia

What is associated with a city? Cities and places are associated with their culture. That culture is often associated with unique architecture but not always.

Valencia is associated with the Old Town which evokes the spatial culture of the past centuries. All historical buildings must be restored but the approach to that is different in different countries. The architectural space restoration culture in Spain is defined by local development plans. They specify which buildings must be restored completely, namely both their interior and exterior shall remain as they were. However, a large part of historical architecture is restored by restoring only the historical front facade while the remaining of the building is demolished and built again, taking into account the modern functional and material requirements. It is characteristic of the protection of the cultural heritage of the whole Spain. Usually a few levels of protection of architectural spaces are determined. The first level is the preservation of all elements of a building (shape, exterior and interior decorative elements). The second level protects the buildings which are important for the urban landscape and not necessarily of high architectural value. These buildings should preserve the body of the building and construction system, whereas the change of internal walls is allowed. The third level protects only some important elements of the building such as facades characteristic of specific epoch and style in which a building was designed or remod-

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Fig. 2. Gdańsk. Old Town

eled. The front of the building is fixed to a special scaffold and the rest is demolished. A new, functional system is created in line with the latest technology and the facade is finally restored. At this level the buildings which significantly affect the urban landscape, however, not due to their shape, which can be changed to some extent, are also protected[1] [3]. Culture of places with historical buildings is connected also with the way in which that urban fabric is replenished. In Valencia most of the new buildings which are built to restore the missing urban fabric of the old town are designed with their dimensions to fit the historical buildings. What is more and more appreciated and applied is the culture of presentation of buildings which are nicely lit so their beauty can be admired also at night.

The contemporary urban space of Turia pedestrian walkway has become a competition for the Old Town which was associated with the culture of Valencia. Everybody can find something interesting here, for instance the City of Arts and Sciences, active and passive recreation or the Nature Park. It is the area whose culture of development and numerous, interesting functions – especially those connected with art and education – attracts crowds of visitors. The modern "City of Arts and Sciences" in Valencia is one of the biggest centers of culture in Europe. It has theaters, opera, science museum, halls for different kinds of artistic events. Is the architecture of these buildings associated with their function? I don't think so but it does not change the great qualities of the whole design. The whole space of the City of Arts and Sciences connected with culture and science is located along the pedestrian walkway. All events are held in individual buildings as well as in the open air. This interesting design does not need to be advertised today; it promotes Valencia and attracts tourists from all over the world. This new space culture has been enthusiastically embraced by both the city dwellers and the visitors. People who are asked what they associate with the culture in Valencia answer: the Old Town, Turia and some with paella (traditional dish).

Szczecin became world famous when the tall ships visited the city in 2007. The event was televised all around the world. Then what is Szczecin associated with? It is associated with the Chrobry Embankments where all major, open air events are held and with the water by which the city is located. A lot of people connect Szczecin with the shipyard and the sea although the Baltic Sea is 100 kilometers away, but what is positive is that they identify it with water. The lack of regular international events is the reason why the knowledge of Szczecin is poor. The development of the most important places of that city does not attract people to spend time there. The architecture alone is not enough. The creation of interesting places for pedestrians with numerous attractions and especially with regular events held there would provide a possibility for these spaces to be always full of people. The other place which should play the role of a hallmark is the old-new town. Just like in Gdańsk, only many years later, an attempt was made in Szczecin to revive the old town. At the turn of the centuries, new buildings were erected on the historical urban layout whose design was stylized to resemble the historical design. However, the buildings alone will not attract crowds. No walkways or squares were built and instead there is one huge parking lot. The culture of a place is not only its urban development but also its character and the people who are supposed to spend their time there, so they need to be provided with a possibility to move around freely without any cars. The development around the buildings is not less significant and sometimes more important than the buildings themselves.

[1] Prepared on the basis of E. Czekiel-Świtalska, *Zatrzymanie przemijania starówek*, Technical Magazine 1-A/2009, Publication by Cracow University of Technology, Cracow 2009.

The hallmark of Gdańsk is undoubtedly its Old Town with its events and the Great Crane; these are the most immediate associations with its culture and recognizability. Although today's old town is a original reconstruction of the old town, it was the buildings, their function, the development of the area as well as advertising of all events that made it the symbol of Gdańsk. A friendly atmosphere of the historical and architectural space, numerous places for meetings and recreation, outdoor and indoor events, care for provision of attractions are the things that make people want to come and spend their time in that charming place. *As a result of changes in social and economic changes as well as changes of needs and habits, people more often than before spend their free time meeting socially in public places such as cafes, pubs and restaurants. These places are most often connected with city centers and old towns. All cities look for ways to attract people to their centers to prevent the old towns from dying. It should not be forgotten that a totally new model of spending free time, especially among the youth, emerged – shopping malls are fighting with city centers for visitors. As a result their interiors are kind of "new marketplaces" where one can buy something but first of all be in the public eye and meet with friends. The spiritual growth of the visitors was also taken care of in those spaces by opening multiplexes and presenting some art by organizing temporary exhibitions there*[2] [5].

Fig. 3. Marina in the center of Marseille with the view of Notre-Dame de la Garde Basilica

The culture of urban development of the old town in Gdańsk is the post-war idea of rebuilding the destroyed old town as an original reconstruction of the historical space. The post-war discussions on the city old town space development were very different and often extreme. Some perceived the culture of that place as a modern and modernistic architecture, whereas others advocated the idea that the historical layout of that space should be restored. Fortunately the latter idea prevailed. The restoration of the old town combined two ideas: in general the historic layout of the streets and facades was preserved but the interiors of the buildings were restored and some elements were developed in compliance with then modern technology. (…) *The more specific guidelines for the plan of space development of the historical districts of Gdańsk* (…) *provide instructions which constitute a kind of synthesis of historical and modernization postulates – for instance it was claimed that despite their historical external forms the tenement houses to be restored should have a "modern layout with modern amenities" (Borowski J.) Especially evident modernistic principles were demonstrated in the recommendation that despite preservation of the historical layout of the streets the urban development of the space between buildings should be significantly open, providing huge open spaces for backyards and green areas. That way of thinking shall soon result in creating an extremely interesting hybrid of history and modernity which the restored Main City in Gdańsk shall become*[3] [2]. It is because of the culture of urban space development of the old town in Gdańsk that today both the citizens of Gdańsk and tourists from all over the world are happy to visit it. All the time the residents of the city and its authorities care for the culture of that place, including both the maintenance of the space and provision of such attractions as for instance the annual Dominican Fair [1].

It may be surprising to realize what Marseille is associated with. A lot of people say it is associated with white taxis which they know from the film titled "Taxi" and with crime. The idea of the culture of that city developed to a large extent on the basis of films. Only after people visit that place do they notice a yacht marina in the center

[2] Hołda K., Przesmycka E., *Uwalnianie przestrzeni*, kulturaenter.pl monthly magazine of exchange of ideas, No. 15, 2009.

[3] Jacek Friedrich, *Problem nowoczesności w kulturze architektonicznej powojennego Gdańska*, http://www.buero-kopernikus.org/_/pl/article/31/7.

Fig. 4. Amsterdam

and beautiful buildings, including the Notre-Dame de la Garde Basilica overlooking the city. It can be said that the culture of that city is created by its monumental buildings and water which is connected with a lot of sailboats in the very heart of the city. Every day in the morning the places where you can eat something are filled with the locals and tourists who want to drink coffee and eat breakfast. In the evening finding a free table in the cafes, pubs or restaurants located in the center by the marina is sometimes almost impossible. The friendly character of the streets that open to the waterfront with dozens of boats makes people like to walk there and enjoy that specific culture of architecture and landscape of that place.

Holland is associated with wind mills, tulips and bicycles as well as narcotics. The perception of Dutch cities, however, is different. The combination of historic architecture and water canals next to it forms the culture of Amsterdam space. The specific, full of live character of the streets running along the waterfront attracts a lot of tourists who visit the city again and again. The specific character is created by the architecture surrounding the numerous canals surrounded by green areas. Between the buildings there is pedestrian and road traffic with numerous speed bumps. Pedestrians and bicyclists use those areas freely and there is a speed limit for cars. The number of parking places for cars is very limited but there is enough room for bicycles. In spite of the diversity of modern and older architecture, the culture of Amsterdam is associated primarily with the architecture around the canals. A lot of buildings feature great historical details and appealing beauty and there are numerous meeting places on their ground floors. The opposite banks of the canals are connected by a lot of bridges which makes the division of the space by water insignificant. The water is here not only an interesting landscape feature providing the place with a specific charm but it also serves as a communication route used by water trams and taxis, connecting different parts of the city with the ocean or places of residence. It is a specific approach to the culture of residing and living because it is rare that people live on water on such a large scale in cities located by water.

The association of a place with culture can develop through events which were or are held in a given city or their form of power. This is the case with Monaco which, perceived as a principality with monarchs, is full of culture connected with water as well as with yachts. Monte Carlo is often associated not with its being a district of Monaco but with its Formula 1, casinos and rich people. The culture of that place is not at all associated with the development of its architectural spaces. The picturesque architecture located among rocks climbing higher and higher as well as marinas with vessels which cannot be seen anywhere else is the culture of space appreciated only by few people, usually those who visited the city. Photo No. 5 shows the picturesque location of Monte Carlo whose landscape has everything: mountains, warm sea, beautiful green areas.

Who makes the decisions on spatial development and consequently infuse a given place with a specific culture of architecture and local development? In practice the planning decisions are made by politicians but it is the owners of real property that implement the assumptions of the plan. Designers make spatial development plans and they advocate their ideas but the final decisions are made ultimately by local authorities, as is the case in most European countries. In Poland until 2003, almost all planning decisions were made by local authorities; after that year politicians make only those decisions which are connected with the local development plans, whereas the decisions on building conditions are made without the consent of local authorities. Wherever there are no valid local development plans, it is the owners of land who decide

Fig. 5. Monaco

on property development and they apply on their own for the decisions provided specific statutory requirements are satisfied. It is possible to assure a harmonious, friendly culture of space only through local development plans. To a large extent the decisions on building conditions result in spatial disharmony and chaos. However, the culture of a specific place is not only its harmonious spatial development but also its acceptance by the society and that is why the society is consulted at the stage of preparing the local development plans, which is not practiced when the decisions on building conditions are granted. In many countries the presentation of the planning ideas to local communities is a very important factor and they consider it very seriously. This is not just a mere satisfaction of a statutory obligation but this is the way of getting as many people as possible interested in that matter [4].

The assumption ... of the systems – English and German ones – is the conviction that providing local authorities with a significant decision-making freedom is necessary to effectively balance the interests. However, the scope of discretion is limited by the obligation to respect the spatial solutions reached at higher levels of local authorities, by necessary consulting with other public institutions and by the obligation to provide the society with a possibility to participate in the planning process[4] [6].

Widely conducted consulting with the community provides the answer to the question whether intended development is received positively or negatively. Often it is the local community, including property owners, that determines the success of the execution of the plan. For instance in Germany and England they are trying to get as big an interest of the community in the planning ideas as possible. They keep looking for new ways of getting to the citizens. In Poland the practice shows that social consulting is only fulfilling the statutory obligation. Most local administrative districts (*gminas*) do not try to get the people who live there interested in the intentions of local authorities regarding space planning. From the very beginning, that is from the collection of applications and then at the stage of making the plan, widely conducted consulting greatly increases the possibility of execution of the plan.

In order to become famous the cities must find their gems of culture which can become known and attract people as well as make them willing to come back to a given place. It happens very seldom for such an object alone to become a hallmark which would be often visited. For example for a lot of people Paris is associated first of all with the Eiffel Tower but the city is visited in connection with its general culture and not for this famous structure itself. It is important that the culture of the whole space which apart from interesting architecture would offer interesting functions and friendly development, conducive to recreation and rest.

The architecture and space development is a significant factor in strengthening the culture of a place, a city or a country. That culture creates a character of a place, offers interesting functions as well as ambiance provided by the buildings and known elements of the culture of being in that space.

It is important how a given place is perceived by average people and not by architects. People create the culture of a given space, whereas architects and urban planners only design it. City authorities do everything to make the created culture popular and consequently draw visitors and investors who would help to encourage the growth. Undoubtedly especially in today's reality every place needs to be advertised. Even the most beautiful architecture without

[4] Izdebski H., Felicki A., Zachariasz I., *Zagospodarowanie przestrzenne,* Sprawne Państwo, Warszawa 2007. Online edition. p. 31.

publicity will not be famous and that is why cities promote themselves more and more strongly, presenting their most beautiful places and offering popular attractions.

The image of the culture of a given place is connected with its recognizability and it is highly important that as many people as possible know it. The popularity of different places is created in different ways. The image of the culture of a place which is created indirectly varies greatly from knowing the place first hand. The persons who have visited specific places usually have associations with the architecture which impressed them, whereas the knowledge of the places which they have not visited is usually associated with the knowledge gained from the media, especially from television and the Internet. The associations are often connected with films, songs, sports and other events. This is the basis on which an image of the culture of a given place is created.

The associations connected with the culture of the places described above have been prepared on the basis of a survey conducted among the persons from different age groups with secondary and university education in Spain and Poland. From among the cities described above Valencia and San Sebastian were least known to Poles and Szczecin was least known to Spaniards.

References

[1] Borowski J., *Zabytkowy Gdańsk w odbudowie,* Technika Morza i Wybrzeża, R. III: 1948, No. 11/12, p. 32.
[2] Friedrich J., *Problem nowoczesności w kulturze architektonicznej powojennego Gdańska*, http://www.buero-kopernikus.org/_/pl/article/31/7.
[3] Czekiel-Świtalska E., *Zatrzymanie przemijania starówek*, Technical Magazine 1-A/2009, Publication by Cracow University of Technology, Kraków 2009.
[4] http://www.buero-kopernikus.org/_/pl/article/31/7.
[5] Hołda K., Przesmycka E., *Uwalnianie przestrzeni*, culturaenter.pl monthly magazine of exchange of ideas, No. 15, 2009.
[6] Izdebski H., Felicki A., Zachariasz I., *Zagospodarowanie przestrzenne.* Sprawne Państwo, Report for Ernst & Young Program, Warszawa 2007, Online edition, p. 31.

Tożsamość miejsca a kultura zagospodarowania

Z czym kojarzy się miasto? Miasta i miejsca kojarzą się z ich kulturą.

Walencja kojarzy się ze Starym Miastem, które prezentuje kulturę przestrzenną przeszłych wieków. Konkurencją dla Starego Miasta stała się współczesna przestrzeń urbanistyczna, jaką jest ciąg pieszy Turii. Znajduje się tu Miasto Nauki i Sztuki, miejsca rekreacji biernej i czynnej oraz Park Natury.

Szczecin kojarzony jest z kulturą miasta nadwodnego, którego wizytówką są Wały Chrobrego. Symbol ten ugruntował się podczas transmisji telewizyjnych ze zlotu żaglowców w 2007 roku.

Gdańsk to Żuraw Gdański i Stare Miasto. Kultura jego zabudowy, czy mocno reklamowane liczne imprezy sprawiają, że jest on znany.

Holandia kojarzy się z wiatrakami i tulipanami. Połączenie zabytkowej zabudowy z kanałami, przy których się znajduje, to niewątpliwie kultura przestrzeni Amsterdamu. Specyficzny klimat uliczek przylegających do wody, tętniących życiem, przyciąga turystów, którzy chętnie tu wracają.

Architektura i zagospodarowanie przestrzeni jest istotnym czynnikiem w umocnieniu kultury miejsca, miasta, państwa. To właśnie ona tworzy klimat miejsca, oferuje ciekawe funkcje, które przyciągają ludzi.

Key words: identity of place, urban development

Słowa kluczowe: tożsamośc miejsca, rozwój urbanistyczny

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Place and time – new forms of sacral architecture (examples of chosen structures from Western Pomerania – as a determinant of new cultural norms)

In order to communicate the message entrusted to His Church by Christ, the Church needs art. Art must make perceptible, and as far as possible attractive, the world of the spirit, of the invisible, of God. It must therefore translate into meaningful terms that which is in itself ineffable. Art has a unique capacity to take one or other facet of the message and translate it into colours, shapes and sounds which nourish the intuition of those who look or listen[1].

John Paul II, the Vatican, dated 4th April 1999: Letter to artists

Sacral architecture of the previous centuries strictly referred to the contemporary style existing in a given cultural area and constituted a typological determinant of a given region and at the same time, it represented the level of 'culture in architecture'. Social and economic changes and civilisation progress which took place after World War II as well as cultural changes in the territory of Western Pomerania, which resulted from immigration of 'New Settlers' to the regained territories, became a determinant for new cultural norms. The factors which undoubtedly influenced the change of sacral structure forms were the Resolutions of the Second Vatican Council, regulations of the 'Canon Law' Code and established by the Polish Episcopate Conference on 25th January 1973 'norms of proceedings in church art issues in the territory of the whole state[2]. First of all, *'a principle of originality'* in the plan formation as well as in the form of the post-council church by applying modern aesthetic conventions was emphasized there'[3] [4]. The established norms in the documents referred not only to the way of erecting new sacral structures and parish buildings as well as utility buildings, but they also specified the rules of an appropriate location choice of a sacral structure in the urban scale. Undoubtedly, the established norms have had their reflection in the character of newly created structures both built in the areas of new city housing estates and in the country.

As a rule, in the period of the Polish People's Republic dictatorship, the location of sacral structures within the territory of newly built housing estates was not taken into consideration at all.

In spite of this situation, a lot of churches were built. However, it was in political authorities' interest to hinder any realization of sacral structures in places which were particularly meaningful, which, among other things, resulted in restrictions in the possibilities of exposing aesthetic values of the composition and made artists agree with this situation whose solution was a compromise itself. Unfortunately, this compromise did not always correspond with the artist's assumptions and images. However, this kind of art gave architects one of the possibilities of individual approach to a particular design and allowed them to cross the limits of typical designing which dominated and was widely spread at that time.

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[1] John Paul II the Vatican, dated 4th April 1999: Letter to artists.

[2] Szymski A., *Kanon formy architektonicznej w kościele katolickim*, Wydawnictwo Uczelniane Politechniki Szczecińskiej, Szczecin 2000, p. 381. All documents of the Council, see: „The Second Vatican Council: constitutions, decrees, declarations", Pallotinum, Poznań, 1986, Edition III.

[3] Szymski A., *Kanon formy architektonicznej*..., op. cit.

The artists could also apply untypical and innovative solutions.

At present, we can observe numerous multi-layer differences between the architect – the creator of the future structure in a new architectural form, the parish priest, i.e. the investor who has his own vision of the church and then his superior, the ordinary of diocese who does not always agree with other persons involved in the investment process. A compromise must be worked out among these persons. Moreover, we must take into account the obvious fact that the church as a cubature structure has to comply with many regulations referring to the construction law as well as it is subject to the assessment of the official body who is a verifier of this law – in this case it is the District Urban Commission, The City Architect who forces his 'own point of view' regarding the spatial order. [4, pp. 421–422].

Sacral structures, which were built in the territory of Western Pomerania as well as in the area of Szczecin after the Second Vatican Council, were subjected to an analysis. It should be indicated that after 1971[4] over twenty new structures of religious worship of the Roman-Catholic rite and several parish churches of other rites – which are poorer in the form as well as in the cubature in comparison to the Roman-Catholic equivalents – have been built in the area of this city agglomeration. The aim of the present study is the analysis of the chosen structures from the above mentioned area. Many a time these structures influence the existing architecture in their surroundings in a negative way and this is mainly caused by changes which are introduced without the architect's knowledge and agreement. The exemplary structures have been chosen from different parts of the city – some of them are situated in the historical area, while the others in the territory of the new housing estates.

[4] In June, 1971 the Parliament adopted the act 'on the transfer of ownership of some property for the good of the Roman-Catholic Church legal persons as well as some other churches and religious organizations'; this legal act regulated the right to make decisions as to erecting buildings on the particular territories.

General presentation of chosen churches in Szczecin and the surroundings

In the years 1974 – 2000 in the territory of the existing and new districts as well as housing estates of Szczecin, new parish churches were built, respectively: in the area of Pogodno district, Książąt Pomorskich housing estate, Śródmieście district, Słoneczne and Bukowe housing estates. However, in the suburbs and in the country, sacral development consisted mainly in renovating the existing churches and chapels which had been destroyed during the war. Moreover, residential or utility buildings, which temporarily satisfied the need for a place of warship, were adapted too because there were no funds to build new structures. In the country, new churches were built only after 1980 [5, pp. 253–265].

Chosen sacral structures in the territory of Szczecin:

Holy Cross Church, designed by architect Z. Abrachamowicz 1974, H. Wieniawskiego Street in Szczecin, Pogodno District (Fig. 1).

Fig. 1. Holy Cross Church, designed by architect Z. Abrachamowicz. Photo by author

The church was built under the pretext of the development of the existing church which was situated in the prewar villa district and was one of the first realisations after World War II. The new church was based – as the central foundation – on the projection of a circle. The old church was built on the rectangle plan – it now performs the function of the chapel [2, p. 21]. *The architectural composition of the new church, which was based on shaping the form by means of a pavilion roof based on a contrastively different structure of the external walls – integrated totally the forms of the old and new churches. The old church was frontally divided with the wall joined with the new structure and covered with one pavilion roof. Only after entering the courtyard can we see the original southern façade of the old church nave* [2]. The external walls at the presbytery and opposite sides are built of columns and they are completely openwork filled with colourful stained-glass. The other walls are full (only with small windows in the basement) with a clear curve of the roof, which distinguished the church from the nearest surroundings. The structure presents a unique situation of the so called forced location which was overwhelmed by the buildings standing there for years. The design is an individual approach to the church structure whose originality determines a connection with the place, but this does not reflect its character and places it in the row of the street frontage.

Resurrection of the Lord Church, project – architect A. Szymski, 1988 (basic structure), Książąt Pomorskich Housing Estate in Szczecin (Fig. 2, Fig. 3 – model).

The church was traditionally situated on the axis east–west on the outskirts of the new housing estate. A dynamic structure was achieved thanks to inclinations of trapezoid

Fig. 2. View from Przyjaciół Żołnierza Street, Parsonage and Divine Mercy Church. Photo by author

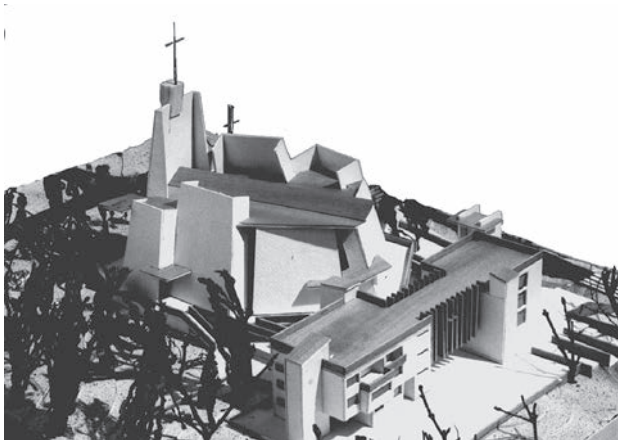

Fig. 3. Model – north–west view of the catechistic-office-residential complex, from collections of A. Szymski – design's author

planes connected with the chapel in the shape of a round 'tent'. The effect of installing the skylight in the ceiling gave southern light directed at the nave while the side skylights collect light from various sides [4, pp.467–471]. Colourful play of lights creates a unique, calm and atmosphere. The church blends in with high blocks of flats of the housing estate and dominates with its interesting architecture. The change from the original Resurrection of the Lord Church into Divine Mercy Church undoubtedly influenced the final appearance of the church structure. The initial concept of the building form was supposed to resemble a cracking rock massif which symbolised the act of resurrection. However, changes of parish priests and their new ideas regarding the final appearance of the structure as well as financial limitations resulted in changes of the original assumptions. In spite of this, a general structure of the church preserved its form. Działoszyński Travertine lining was supposed to be a façade material (with the final effect of golden colour patination) but it was replaced by a trapezoid sheet in red colour, which absolutely does not correspond with the nature of the structure.

Apart from this, the formal idea of the design was not put into effect completely – the whole form of the structure was supposed to grow from irregular granite blocks, which would give the visual impression of a solid foundation. The development of this church shows lack of understanding of the architect's concept, his architectural assumptions and directives. It should also be mentioned that the original design of the parish building in the proposed arrangement was changed into an 'ordinary' villa-type house with some garages, which was designed by another author; this new form did not correspond to the entire arrangement in any way. It must be said that nothing destroys the architect's work more efficiently than supplementary packaging and the form of 'reflection' which is not always true.

St. Dominique Church of Dominican Friars, design – architect W. Zaborowski, 1996–2000 (now, the interior is being completed), Ofiar Katynia Square in Szczecin (Fig. 4).

The complex of sacral development consists of a church and monastery building which belong to Dominican fathers. The church building, which was built on the Greek cross plan with a traditional orientation east – west, is made of brick. A roof with a construction made of wood glued together and covered with copper constitutes a curiosity and rarity for the structures of this type in our times. In spite of changing the previous steel structure, the present structure blends with the church interior in a much better way. The façade was lined with clinker tiles in the tone which corresponded with the monastery building facades. The complex of buildings constitutes an inseparable whole – it creates a united formation with the surrounding residential buildings and has the same form. The whole complex, which was designed and built with relation to the historical tradition, was accepted by the investor who is going to realize the whole complex of sacral structures along with the interior [1, pp. 191–206].

Fig. 4. Dominique Church of Dominican Fathers, Ofiar Katynia Square, Szczecin. Photo by author

Fatima Mother of Jesus Chapel at Immaculate Heart of Blessed Virgin Mary Church, design – architect A. Szymski, architect M. Rozwarski, 1987–1988, Słoneczne housing estate in Szczecin (Fig. 5 – model, Fig. 6, 7).

The Chapel, which is situated by the main exit route from Szczecin, with its concise structure, refers to the ro-

Fig. 5. Model – Fatima Mother of Jesus Chapel and Immaculate Heart of Blessed Virgin Mary Church, Słoneczne housing estate, Szczecin, from collection of A. Szymski – design's author

Fig. 6. Fatima Mother of Jesus Chapel and Immaculate Heart of Blessed Virgin Mary Church, Słoneczne housing estate, Szczecin. Photo by author

Fig. 7. Fatima Mother of Jesus Chapel at Immaculate Heart of Blessed Virgin Mary Church, Słoneczne housing estate, Szczecin. Photo by author

tunda which relates to the past as well as to the future (Fig. 5). The use of natural light which enters the interior of the structure from almost each side of the world through stained-glass windows provides interesting light effects. The main building material of the sanctuary is brick and concrete which give the impression of a solid foundation of the whole building. The main entrance, which is situated a little above the ground level, creates the atmosphere of grandness and seriousness, while the undeveloped area around the chapel makes an impression that the foundation is not completed. The chapel interior, which is filled with strange light and warm colour, intensifies the sacrum atmosphere (Fig. 5). The whole foundation (Fig. 5) was supposed to consist of a complex of sacral buildings but unfortunately, only the chapel was realised out of the presented architect's vision. The sanctuary already by another author (M. Rozwarski) was built some time later and it has a completely different character. It does not refer to the original idea in anything and does not create a compositional entirety with the chapel.

Jesus Good Shepherd Church, design – architect Anna Zaniewska, Bukowe housing estate, Szczecin (Fig. 8).

Construction of the church started on 4th July 2000. Now, it is totally finished along with the interior details. The structure of the church was accomplished by the tower and the whole structure, which is dubiously founded in the cultural landscape, does not shock with innovative solutions. The main material is brick which connects the past with the tradition. It is easy to guess the function of the building and the structure really performs its role of the house of God very well. The door is a real curiosity – heavy and full of religious symbols – shows the relation between God and man as well as between earthliness and eternity.

One of the churches located in the territory of Western Pomerania:

Fig. 8. Jesus Good Shepherd Church, downloaded from: http //szczecin.kuria.pl/

Fig. 9. Father Pio Church, Pniewy district, Bukowe housing estate, Szczecin, downloaded from: http //szczecin.kuria.pl/

Father Pio Church, circa 2003, unknown author, Pniewy, Western Pomerania District (Fig. 9).

The church, which has a very simple structure, was built on the plan similar to the square. The hip roof has a small arcade which underlines the main entrance. The whole church was built according to the traditional technology which is typical of residential buildings, i.e. bricks, clinker lining, roofing tiles. The only element which shows the character and intended use of the building is the cross which is situated on top of a 'small tower' fixed on the roof. The whole structure blends in perfectly with the existing cultural landscape – scattered residential buildings in a roadside village. However, does it really meet people's expectations at present? Is it perceived as a symbol of sacrum?

According to Professor Konrad Kucza-Kuczyński *In Poland, 97% of all structures, which are built and treated as sacral architecture, presents non-architecture. Ugly churches are built with people's and priests' consent because average of our aesthetic tastes shows that we value richness of forms, decorations and materials above the simplicity which is recommended by The Second Vatican Council*[5].

The above example makes us aware that not only splendor and wealth but also excessive simplicity may lead to the creation of non-architecture which becomes barely recognizable and although it expresses nothing, it is still desired.

[5] Konrad Kucza-Kuczyński, kierownik Pracowni Architektury Sakralnej na Politechnice Warszawskiej, downloaded 9th October 2010 from http://rp.pl/artykul/2,350242_Kościół _in_style_hight_tech_.html, p. 4.

Summary

Modern sacral forms are the result of search and respect for differentiated reception of art. Creating one common view which, in fact, constitutes a specific spatial form built in an intended place, is a great challenge for the architect. Sacral buildings, which have been built in the territory of Western Pomerania after World War II, in their majority can be said to be a form of manifestation of individualism. The vision and a certain kind of symbolism were connected with a timeless form and building material as well as with innovative technological possibilities and new materials. Looking for *a connection between place and time with new forms of sacral architecture as a determinant of cultural norms being created* we must state that nowadays sacral buildings do not possess a permanent, typical or established character – every time different forms are created, which depend on time, situation and financial possibilities as well as on the relations of the Church with congregation. *Modern church, at least apparently, gives the architectural environment complete freedom in looking for a new canon in working out a vision of a modern church form. However, a mystery of sacrum (as it is traditionally understood by the church hierarchy in the Roman-Catholic Church) requires from an architect – according to Bishop Marian Duś – not only a talent but also mystical sensitivity and a creative responsibility for introducing the atmosphere which is conducive to concentration and praying* [3, p. 2].

The idea of building a sacral structure gives unlimited possibilities and the cross itself determines the character of such a place. The choice of an architect means the entrance to the creation of the church, however, a question arises – what kind of church?

The time, place and image, which the architect presents by telling a story about God referring in his opinion to our spirituality, give the effect in form of a new sacral architectural structure. However, is there any context of place and time for this type of architecture nowadays or is it only the architect's desire of self-realisation, who does not care about many centuries cultural landscape and goes beyond the accepted 'norms of culture' for this type of structures in a newly created space?

Fig. 10. Beginnings of the parish in Dołuje, 2006, downloaded from: http //szczecin.kuria.pl/

References

[1] *Budownictwo sakralne i monumentalne* '2000, Dział Wydawnictw i Poligrafii Politechniki Białostockiej, Białystok 2000, pp. 191–206.
[2] Nekanda-Trepka J., *Książka o Parafii Św. Krzyża*, Szczecin 2006, p. 21, 9th October 2010 downloaded from *http://www.krzyz.yoyo.pl/Ksiazka_o_Parafii_Sw_Krzyza.pdf/*.
[3] Szymski A., *Architektura sakralna przełomu wieków XX/XXI a chrześcijańska idea sacrum*, p. 2, 9th October 2010 downloaded from http://kgpipp.geo.uni.lodz.pl/space7/szymski.pdf/.
[4] Szymski A., *Kanon formy architektonicznej w Kościele katolickim*, Wydawnictwo Uczelniane Politechniki Szczecińskiej, Szczecin 2000, pp. 421–422.
[5] Szymski A., Rzeszotarska-Pałka M., Ignaczak-Felińska J., Pawłowski W., *Wieś Pomorska wczoraj i dziś*, Wydawnictwo Walkowska, Szczecin 2006, pp. 253–265.

Miejsce i czas – nowe formy architektury sakralnej (przykłady wybranych obiektów z terenu Pomorza Zachodniego jako wyznacznik tworzących się nowych norm kulturowych)

Architektura sakralna minionych stuleci ściśle nawiązywała do stylu obowiązującego ówcześnie w danym obszarze kulturowym i była wyznacznikiem typologicznym danego regionu, a jednocześnie świadczyła o poziomie „kultury w architekturze". Przemiany społeczno-gospodarcze, postęp cywilizacji, który nastąpiły po II wojnie światowej, oraz zmiany kulturowe na terenie Pomorza Zachodniego, które były efektem napływu na ziemie odzyskane „Nowych Osadników", stały się wyznacznikiem dla tworzących się nowych norm kulturowych. Czynnikiem mającym mającym niewątpliwie wpływ na kreację form sakralnych były uchwały II Soboru Watykańskiego, przepisy kodeksu 'Prawa Kanonicznego" oraz ustalone na Konferencji Episkopatu Polski 25.01.1973 r. „normy postępowania w sprawach sztuki Kościelnej obowiązujące na terenie całego kraju. Poddając kwerendzie obiekty sakralne na terenie Pomorza Zachodniego i samego miasta Szczecina należy zaznaczyć, iż po II wojnie światowej tylko w granicach tej jednej aglomeracji miejskiej powstało ponad dwadzieścia nowych obiektów kultu religijnego obrzędu rzymskokatolickiego

W pracy omówiono przykłady z różnych terenów Szczecina zarówno usytuowane w historycznym obszarze miasta, jak również na terenie nowo powstałych osiedlach mieszkaniowych . Wskazując na stopień ich powiązania z zastanym krajobrazem kulturowym wraz z oceną spójności pomiędzy zamierzeniem projektowym a faktyczną realizacją.

Key words: church, sacral architecture

Słowa kluczowe: kościół, architektura sakralna

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Designing not only for human. Animal in architecture as a determinant of the humanitarian education standard

According to the assumptions of Agenda 21, humanitarian education became a part of the canon of actions which have the purpose of propagating the principles of sustainable development directed not only at the desire of satisfying people's needs, but also connected with their life and domesticated environment.

In our times, sustainable development is becoming a form of shaping mutual relations of man and animal, which makes it possible to create particular patterns of social behaviours in the society where the animal becomes an equal partner of man. Owing to the civilisation progress, there is no need to objectify domesticated animals any longer and consequently man discovers in animals a different and lively creature whose needs should be respected.

Of course, the subject of animal in architecture constitutes a very wide notion. It includes any presentations of animals which perform a decorative role as well as the role of a carrier of ideological and symbolic meaning. This is also a problem of legislation connected with the development of buildings used by man for farming and raising domesticated animals. Moreover, this is a problem of the development and usage of zoological gardens which serve the purpose of recreation for human beings or finally the structures in which unwanted animals or those which need professional care as a result of 'meeting' man find appropriate man's protection there. We must mention here not only stables, paddocks, pigsties, cow sheds and henhouses, aviaries for birds or zoological gardens but also shelters and emergency service for animals. These are the topics which have been known and shaped for centuries on the basis of man's comfort and spatial requirements of different genres.

However, the problem of designing for animals also includes a number of newly created issues and forms which have appeared recently in connection with the interest in animal as a conscious recipient of the space. It happens so because of the growing awareness of the fact that an animal is not only 'a lively object' but also a creature that feels and thinks. The animal is a friend and member of a family for people living in cities. At the present pace of life, man often becomes 'a lonely island', an individual who is unable to establish good interpersonal relations. Therefore, man transfers emotions to an animal using a kind of auto-therapy completely unconsciously and at the same time he/she learns to function with respect for all patterns of social behaviours. Paradoxically, it is the man who starts to socialise through the contact with an animal. Establishment of the humanitarian education programme, which assumes respect for all living organisms, also has an influence on this situation.

However, such behaviours result not only from man's nobleness – a humanist and human being – ecologist, as everybody happens to consider himself/herself as such in secret. There is one more aspect of taking up actions of this type. This aspect is more down-to-earth, i.e. the western civilisations developed an attitude of blind consumerism beyond all limits. Along with a gradual process of the society getting rich, 'hunger' for novelties increases. If there is nothing new and surprisingly luxurious to come up with, people start to look for a luxury in making their pets' lives more attractive. An extreme example of this phenomenon can be the products for the clients' pets, which are already introduced as a standard offer of the biggest fashion houses or jeweller's stores. A jacket from Chanel or a diamond collar for a dog do not surprise any longer in some environments. We can only ask what next?

A trend of pattern-designing or a trend of art which uses the significance of wild animals living in a city environment should be discussed in the first place. Recently, there appeared many architectural and sculptural forms implemented in urban spaces as a form of a happening

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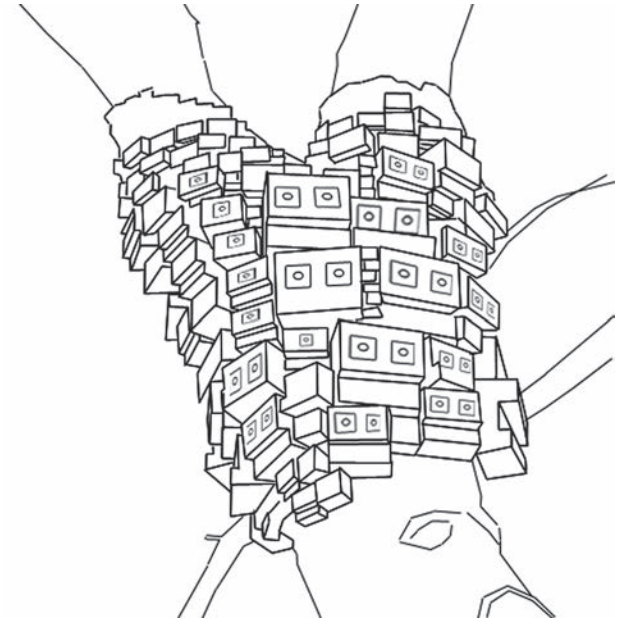

Fig. 1. London Fieldworks „Spontaneous City in the Tree of Heaven"

or a permanent structure for 'wild' inhabitants of the city. They all aim at the attempt of humanisation – 'animalisation' of the unfriendly environment in such a way so as not only people would feel free in the city. The subject which has recently been brought up more frequently refers to the creation of proper conditions for animals in order to make them come back to the human settlements from which they once escaped to avoid the dangers of our mechanical world. On the other hand, some artists try to compare natural forms of settlements made by animals to unified residential estates which look as if they 'just left' a production line of a big residential houses panelák factory, giving the lie to the Le Corbusier vision of a machine for living. Is that really so? Don't the appearance and rules of functioning of beehives or bird nests constitute a natural confirmation of human behaviours and tendencies of standardisation within one group?

This year's gallery called 'Up Projects' took place during the Secret Gardens Projects Exhibition. Among the sculptures placed by different artists in some small, little-known or completely unknown gardens of London, there was also a design entitled 'Spontaneous City In the Tree of Heaven' by London Fieldworks group [1]. In fact, it comprised two spatial forms nested in two points – Cremone Gardens in Kingston and Duncan Terrace Gardens in Islington. Module living 'cells' for birds or bees were simply stuck onto trees creating in this way a miniature version of housing estates which surrounded both parks.

A similar initiative turned out to be this year's design by Ben Faga [2] who decided to persuade bees to come back to the area of London after they had left the city many years ago because of too heavy pollution of the environment. The design, which is still under development, consists in fixing a man-made box with a scent decoy inside within the distance of five kilometers from an existing beehive in order to encourage lured bees to settle in this new 'breeding box'. In this way, the artist decided to give the bees their territory back.

In both of the described examples, animal became the motif of the designer's work because the animal's fate reflected the level of the conscious creation of the city space. However, it is not always so. Some designers treat animals in a subjective way or as a form of expressing certain social ideas and do not pay particular attention to their fate in the artificially created scenery.

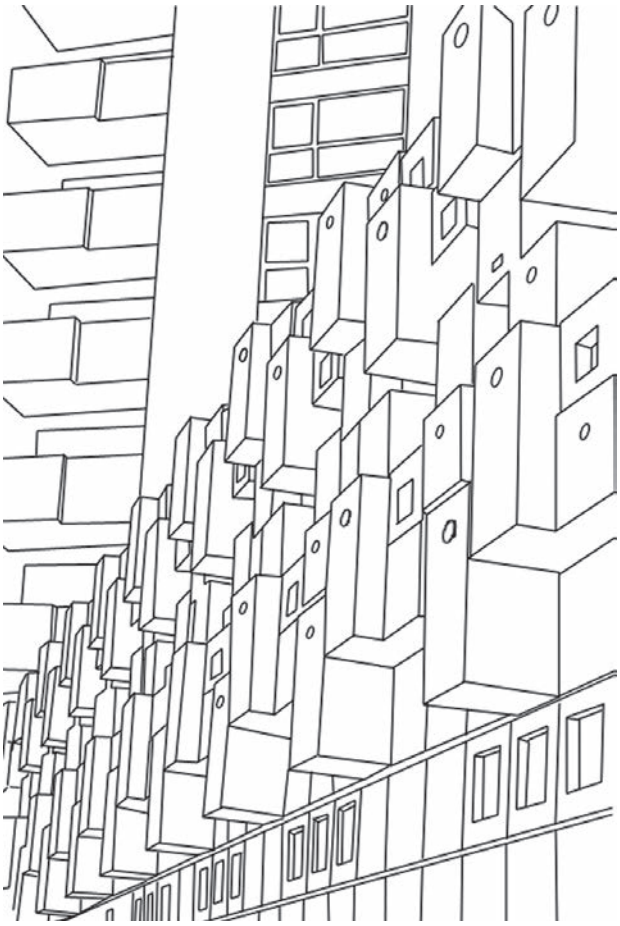

Fig. 2. "Animal Wall", by Gitta Gschwendtner

The example of this kind of activities is the design 'Animal Wall' by Gitty Gschwendtner [3]. In the territory of Cardiff Bay she created a monumental 50-meter-high wall which consisted of four types of breeding boxes for various genres of birds. This wall separated a new big housing estate called Century Harf with over one thousand flats from the wharf. Although the artist explains that by creating her work of art she wanted to give bird genres their original settlements on the wharf areas back, this curtain wall has little to do with conscious shaping of the place of living for birds and it only constitutes a form, in accordance with the idea that animals will simply start to defend their natural environment.

An extreme example of an ideological attitude in designing for animals is the auction organised by a pro-ecological organisation called Adventure Ecology and Phillips de Pury & Company [4]. This organization aims at

leveraging funds for endangered species protection in Great Britain. Each of the invited reputable designers (who were many) was supposed to design a habitat for one of such species from the recycling materials. A long list of the participants included, among other persons, Rolf Sachs, Michael Young or Peter Marigold. However, these designs – although designed for animals – will never serve their recipients. These designs reflect very simplified images of the designers only, for example, the appearance of a bird nest which is built by animals from elements that can be found in the natural environment.

In this way, the designers deal with the problem of wild animals' presence in the urban environment. Some small architectural forms are designed and they quickly become popular. Their authors attempt to harmonize nature and an artificial structure which is the city. This trend is continued, however, in form of permanent architectural structures which serve both animals and a local society. It is true that people who have been brought up in cities live in a state of permanent separation from nature without any awareness of the life outside the urban areas. The only source of knowledge referring to the animals' life and habits are the mass media or zoological gardens. However, the fact that a child brought up in this way shall know more about the life of wild African animals than about the native or even domesticated animals sounds paradoxical.

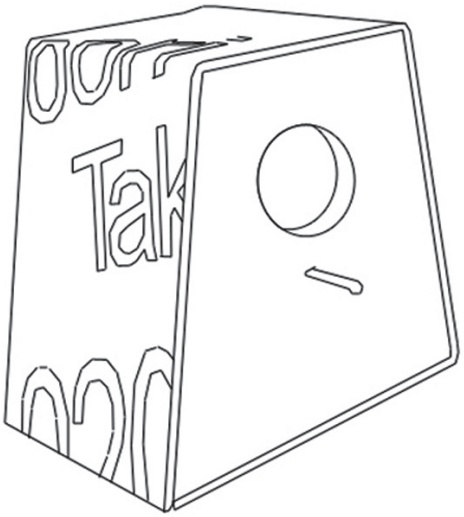

Fig. 3. The Birds, Bats and Bees habitat, by Peter Marigold

In order to cope with this problem, some miniature farms were created in the city parks where animals are raised for educational purposes and where a real physical contact with them is possible. 'Petting Farm' building, created by 70F study, is an example of such a structure. It was built in Almere (Holland). The building is not big and it fulfils the role of a shelter as well as a place for interaction for different genres of animals.

Along with the increase of social awareness regarding the role of animals in man's life and the significance of empathy in man – animal relations, people started to treat education and domesticated animals breeding in a more responsible way. The cases of non-humanitarian treatment of animals are condemned in public more and more often. Along with the problem, a social answer to it appears. When the mass media publicised the fact that in many houses dogs are kept on chains in horrible conditions, many companies which specialised in producing comfortable kennels appeared on the market. The example of this kind of designing actions is the activity of the German brand 'Best Friend's Home' in the European market, which refers to the humanitarian traditions of Bauhaus even in its ideological sphere. Although some of their works constitute an example of a skilful operation on the border of stylization and kitsch, their products – apart from the appearance – provide the maximum of comfort as well [5].

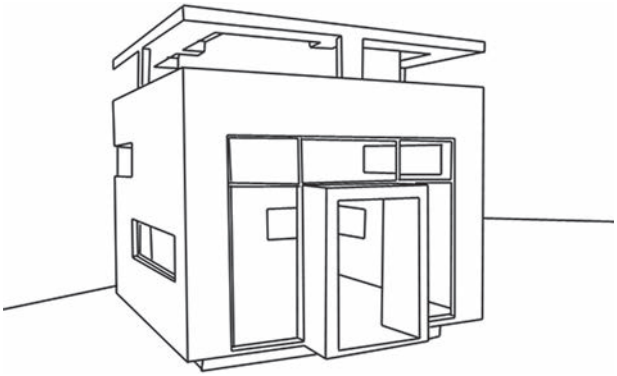

Fig. 4. Residence for a dog Cubix, by Best Friends' Home

Similar actions were taken up when the mass media started to criticize a wave phenomenon of throwing out pets before holidays. At present, there are more and more hotels for animals, which – apart from the basic care during the period of stay – provide pets with additional attractions. On the whole, if a dog or cat is a family member, it also has the right to have a rest on holidays.

The environment of man's life, which is more and more degraded, causes numerous civilization diseases. They also trouble animals which live together with human beings in the same environment. Similarly to man, dogs and cats also face problems such as obesity, asthma or allergies more often. Therefore, these problems are remedied by creating health or rehabilitation centres, biological regeneration or even fitness centres for pets. Such institutions combine also the hotel function and in this way the pets' owners can plan the whole holiday for their animals [6].

In the standard of this hotel we can find separate rooms with a comfortable bed for each dog, a nursing room for animals, play room. Pets go on regular walks and have individual diets. Many hotels, like for example the Elmtree in London, provide places for pets whose owners work and the transport of those pets to their owners' houses. At first glance, it all may seem a bit bizarre, but if we compare the way of functioning of such an institution with similar institutions in the United States of America we can drive at the conclusion that Europe has still a lot

to do. Chateau Poochie in Pompano Beach in Florida is an example of one of the most luxurious centres where – apart from normal care – the best dog and cat stylists look after pets. On the owners' request animals can use a botanic spa or have a peat bath. Visiting a pet manicure salon or a senior's corner every day is a standard. The fitness centre is furnished and equipped with sport equipment which makes the animals keep fit at the same level as their owners do. In this situation, we are forced to ask a question about possible limits of luxury that a human being can reach [7, 8].

The presented issues constitute only a small part of the problem with regard to designing for animals. Along with the analysis of the presented examples, we must ask a question about the rightness of these directions duality in which this sphere remains. On the one hand, animal became a determinant of luxury – an easy form of manifesting a social status, on the other hand, the role of animal in man's life and functioning, not only as a beast of burden and a source of food, was noticed at last. In this situation, humanitarian education performed a significant role by teaching humans a humane approach towards animals.

References

[1] http://www.dezeen.com/2010/09/08/spontaneous-city-in-the-tree-of-heavenby-london-fieldworks/
[2] http://www.dezeen.com/2010/07/21/if-you-build-it-they-will-come-by-ben-faga/
[3] http://www.dezeen.com/2009/08/28/animal-wall-by-gitta-gschwendtner/
[4] http://www.dezeen.com/2008/06/20/the-birds-bats-and-bees-by-various-designers/
[5] http://www.elmtreekennels.co.uk
[6] http://www.bestfriendshome.com
[7] http://www.luxlux.pl
[8] http://www.70f.com/projects/al0504/al0504.htm

Projektowanie nie tylko dla człowieka. Zwierzę w architekturze jako wyznacznik poziomu edukacji humanitarnej

Równocześnie z pojawieniem się idei rozwoju zrównoważonego narodziła się konieczność wprowadzenia tej myśli w życie poprzez edukację społeczną. Jedną z form jej przejawu stała się postawa wobec zwierząt. W świadomości projektantów pojawił się inny od człowieka użytkownik architektury. Związane to jest również ze zmianą pozycji zwierzęcia w krajach zachodnich. Wraz z systematycznym odchodzeniem od przedmiotowego – czysto użytkowego podejścia, możliwego dzięki znacznemu postępowi technicznemu, zwierzęta stały się częściej towarzyszami-przyjaciółmi człowieka. A skoro wprowadzamy je do silnie przetworzonych przestrzeni dostosowanych do potrzeb konkretnego gatunku, to automatycznie rodzi się problem konieczności dostosowania ich do odmiennego typu użytkownika. Czy jednak mamy problem ten traktować jako fanaberię, czy wynika on z realnej potrzeby ciągłego udoskonalania otaczającego nas świata?

Key words: animal in architecture, humanitarian education

Słowa kluczowa: zwierzę w architekturze, edukacja humanitarna

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Elżbieta Komarzyńska-Świeściak*

Crossing boundaries. New contexts for architecture in the face of exponential urbanism

Den(s)city

Nowadays there is a need for 'infinite' architecture. Buildings and structures should be in state of constant change in order to match the dynamic processes taking place in a modern city: its fragmentation and ephemeral character, vivid cultural context, mobility and interlace of infra, urban material and landscape. Furthermore, urban sprawl creates an exponential growth of continuously moving masses – housing, working and recreation are situated far apart, so everybody is continuously on the move. With the intention to deal with horizontal density expansion, urban development seems to be a major policy and a central principle of growth management programs used by cities around the word. One way to create density is stacking programs, structures and volumes, still leaving necessary unbuilt voids. All this leads to creating more challenging and dense contexts for currently realized projects.

Extorted public space

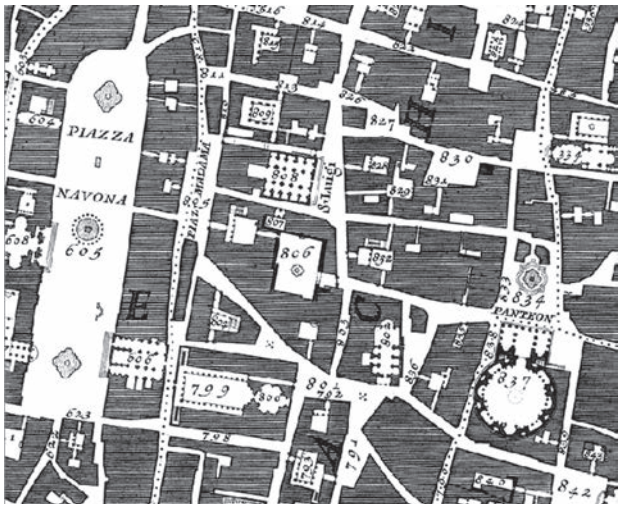

Fig. 1. The 1748 Nolli ichnographic plan of Rome – Giambattista Nolli

Mobility and high-car dependence are signs of modern life style. As a result car traffic takes over the city. Streets and many old squares, which in the past were part of public realm, became just necessary links to get from point A to point B. Street in no more public as it is used mostly by cars instead of people. In a well-known Nolli plan of Rome from 1748 (Fig. 1), private spaces such as dwellings are rendered as black solids and public spaces such as streets and squares or church interiors as white. If we would draw Nolli plan of contemporary Rome, there would be a lot fewer white voids than before – the heavy-traffic streets would have to be rendered as solid blocks. Part of public realm was taken.

Integration

After the representative age with the subsequent post war concept of 'The Black Box' (Modernism, representing urban programs in clearly defined volumes) we gradually enter an era where representation fades and is go-

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ing to be replaced by integration [8]. Integration of architecture with existing and already defined city core. As a result, activities have to overlap and buildings must adapt to different programs over time (Bernard Tschumi's cross-programming concept [6]). *If there is to be a 'new urbanism', it will not be based on the twin fantasies of order and omnipotence; (...) it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions– the reinvention of psychological space* [3]. Infinite architecture of contemporary city has to be integrated and deal with most concentrated, intense and dynamic contexts so far.

Overlooked context

Individual building is always seen first as a part of the whole. Every building engages in a dialog (which sometimes happens to be a quarrel) with the history, beliefs and needs of a particular place and time. City fragmentation, urban growth and demand for new kind of programs incorporated into existing urban fabric makes architecture territory spread on sites which have never been considered before: infrastructure nodes, postindustrial brownfields, highways surroundings, underground garages and passages, bridges and viaducts, roofs and walls of existing buildings, rail tracks, etc. On the one hand, these spaces are unadapted yet and hard to deal with. On the other hand, they provide interesting conditions for vivid architecture of compression and intensification. Rough and uncommercialised territories determine new challenges and strategies for cityscape. The potential urban performance of the unprogrammed spaces is gigantic and could be introduced in a wide variety of projects: from small landscape concepts to large-scale developments. Many empty and unused zones can be heavily programmed in order to fill the urban material with diversity and missing integrated services, leading directly to higher efficiency and lower costs.

Architecture takes the streets

Fig. 2. A8ernA in Koog aan de Zaan – NL Architects. Photo by Luuk Kramer

Part of our public domain has been already overtaken by heavy traffic but it still can be given back. Even busy streets – treated as an opportunity, instead of as a disaster – could become a friendly environment to accommodate a new type of urban life.

Famous 'Westblaak Skatepark' and Restaurant in Rotterdam [5] – already an icon of the city's cultural identity – proves that even in dense cities there are still places for recreation or play. It was constructed on an underused green area (perceived as an urban void in the central area) in the middle of the Westblaak, a major traffic artery bordering a shopping district. This central location is so effective that it guaranteed the skatepark's success and it is always crowded – both by skaters and

their audience, especially in summer. The development somehow compensated dramatic lack of useable green space within Rotterdam downtown district – the skatepark became there an asset for reinventing the wider city in creative ways to produce joyful, lively and playful urban space.

Another project that took advantage of the concrete jungle in order to create new urban quality is 'A8ernA' in Koog aan de Zaan (Fig. 2). The new road crossing Zaanstad town produced a brutal cut in the urban fabric, creating a challenging context for any kind of architectural development. Furthermore, progress in traffic system has resulted here in a radical separation between the Church and the former town canter. The NL Architects project restored the connection between both sides by activating the space under the road. Instead of a disaster, the remarkable (because of its cathedral-like spatial quality) space under the road was considered an opportunity. New type of urban life was accommodated there: skate bowl, soccer field, basketball pitch, parking lot, roofed square with the supermarket, little shops, fountain, mini-marina, 'panorama deck' and 'river'. In an unexpected way, the elevated highway provides an opportunity to reconnect the village to the source of its existence.

'Living Bridge' concept for Hamburg Hafencity by Hadi Teherani is a completely different type of project, dealing with incorporating new functions into the traffic system. His proposal is 'a city on the water' – 700-meter-long development in the form of a five-storey bridge spanning over the Elbe River and including luxury apartments, shops, parks and other businesses. There are many other similar concepts, like 'art-' and 'recreation-' bridges (they all took inspiration from the 14th century market place bridge Ponte Vecchio) in Florence but 'Living Bridge' – if approved from logistic and political point of view – would be the world's largest such development and could then fundamentally change the way we think about infrastructure.

Reclaiming the landscape

Fig. 3. The High Line in New York City – Field Operations and Diller, Scofidio & Renfro. Photo by Vivien Chin

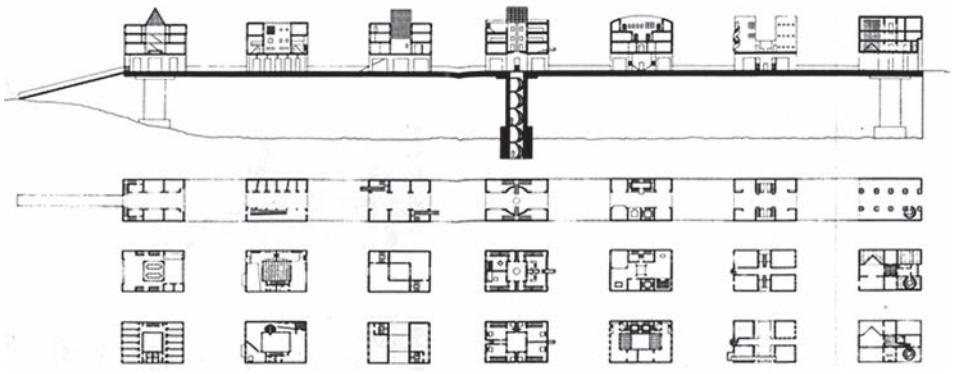

Fig. 4. Bridges of Melbourn – Steven Holl. Photo by author

A dramatic lack of pleasant useable greenery within dense city centres can be also solved by introducing landscaping to challenging and dense contexts, like degraded infrastructure zones. Interlace of infra, urban material and green areas leads here to reclamation of landscape.

The High Line project (Fig. 3) in New York City is a good example here – design for converting the old elevated defunct rail that runs 30 feet above Manhattan to a public space. Architects have fantasized about the High Line since at least the early 1980's, when Steven Holl first completed a theoretical proposal to build a "bridge of houses" that straddled the elevated tracks (Fig. 4).

Finally in 2004, Field Operations and Diller, Scofidio & Renfro was selected to design a master plan that would transform an abandoned section of elevated freight track into a public park [1]. The first two sections the three-section High Line are now completed; the third has yet to be approved. The designed walkway includes more than 100 species of plants that were inspired by the wild seeded landscape left after the trains stopped running. The design includes several squares, sitting and focal points, a giant outdoor movie screen, visible from the street and a public swimming pool with an elevated sandy beach. It is considered one of the most thoughtful, sensitively designed public spaces built in New York in years. On the other hand, it still provides flexibility and responsiveness to the changing needs, opportunities, and desires of the dynamic context – the proposal is visibly designed to remain perpetually unfinished. *The* (…) *design succeeds in preserving the High Line's tough industrial character without sentimentalizing it* [4].

Introducing a landscape program over the infrastructure was also the main topic of "Olympic Sculpture Park" project (Fig. 5) [2] in Seattle. The context here was an 8.5-acre industrial brownfield incorporating a drop of more than forty feet from street level to the waterfront, sliced into three by active railroad tracks and an arterial road. Weiss/Manfredi *Architects* proposed in such context an exemplary strategy of civic placemaking. The industrial brownfields context was approached here by rediscovering it and its potential to become part of an urban landscape by suggesting additional infrastructures, uses, and public activities. The concept was a complex "artificial topography" of unfolding planes reconnecting the city with its neglected waterfront. As a result Seattle gained a "park building" fusing architecture, engineering, and landscape architecture. In terms of context, on one level, the Olympic Sculpture Park can be seen as affirming the conflicts and tensions generated by Seattle's simultaneous development of industrial and postindustrial profiles. But on another level, it creates an unprecedented urban space allowing for new encounters and interactions.

Parasitic architecture

Fig. 5. Olympic Sculpture Park in Seattle – Weiss/Manfredi Architects. Photo by Benjamin Benschneider

Another kind of relation between architecture and intense urban fabric could be a parasitic relationship. As more and more people filter into the city, open land to build on will become more and more scarce, and we may have to use every available bit of space we can, including empty bare walls, bridge pylons, and retaining walls. In this context, parasite developments – nowadays still considered only single extravagant actions – could become essential tools in order to obtain the density of urban development. Such attributes of parasitic architecture as adaptability, transience, and mobility could be the answers to the ephemeral and dynamic character of contemporary cities.

Among many parasitic architectural objects, there is a visible tendency to serve the need for mobile living and

Fig. 6. Nomiya Temporary Rooftop Restaurant in Paris – Pascal Grasso. Photo by Kleinefenn

extraordinary experiences. The potential of mobile exclusive services is shown by Parisian architect Pascal Grasso who has installed a temporary, transportable Nomiya Restaurant (Fig. 6) on the roof of Le Palais de Tokyo museum. But then again The Prefab Parasite, designed by Australia-based Lara Calder Architects reveals the possibilities of reusing existing empty vertical surfaces. The proposed structure aims to turn previously plain wall into a liveable private space. Mimicking parasitic qualities, the home is designed for durability and adaptability, evident in its construction made of prefabricated panels so that the home could be affixed onto any wall or pylon large and strong enough to hold it.

Programming infrastructural nodes

The most advanced relation between architecture and infrastructure would be the development fully integrating both urban and infra layers. The blueprints of the infrastructure system and the building would evolve then into simultaneously designed and tight cooperation between architects and traffic engineers would decide about the shape of the cityscape.

In 1997–1998, Monolab conducted an independent study called 'Infrabodies' on programming of empty zones along heavy infrastructure. The A20 highway, which functioned as a test case, is the northern part of the Rotterdam Ring – a bundle of infrastructure. The research was not approached in accordance with current laws and regulations in order to reveal the potentials. There were chosen six locations in the A20 context which represented typological examples of many comparative situations in Holland. Research put emphasis on intertwining of program and infrastructure in conditions of high compres-

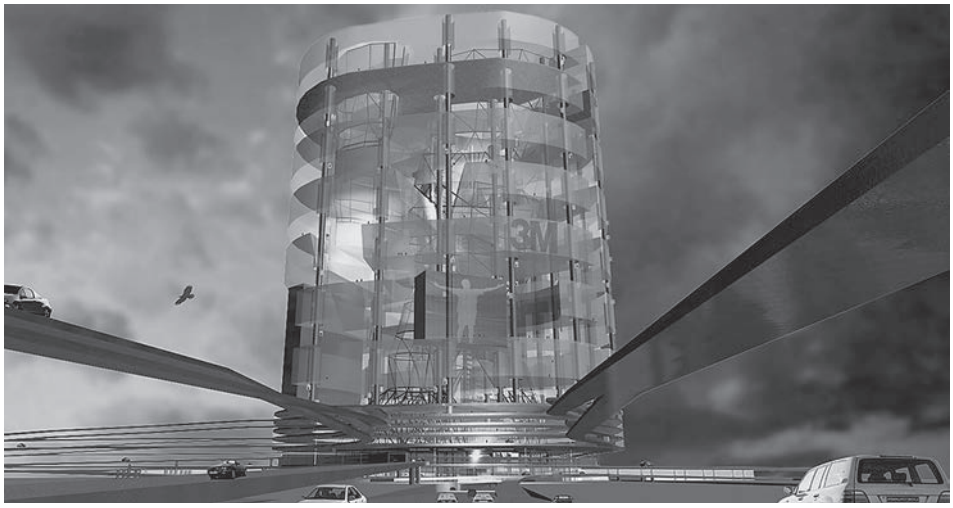

Fig. 7. Compressor Overschie – Monolab Architects

sion, as fusion creates new programs and performs best with flexible and variable programming. The main idea behind the concept is that nodes, embedded in existing infrastructural networks, are ideal locations to realize massive programs.

After that study Monolab Architects researched several similar test cases in Holland, such as infrabody 'Compressor Overschie' (Fig. 7) and 'A12 Long Term' – long-term view of the highway. *These kinds of sites are difficult to develop, but they force us to learn techniques of concentration and intensification, the tools for urban planning in the nearby future* [9]. The projects proves that the urbanism is loaded with much more potential than we are using these days and that concept, fusing infrastructure and urban material with existing landscape, is the right way of integrating metropolitan programs, especially in cases where the visual presence of these programs is inappropriate or not wanted.

(Cross) programming the city

Bernard Tschumi in *Event-cities* [7] explores the relationships between spaces and events. This is apparent in the 'unclassifiable' or 'unprogrammed' space found in the gaps, margins, and in-between spaces included in many of his later projects (Kansai Airport, le Fresnoy in Tourcoingt). These are places in which an infinite number of unplanned events could take place, where life is not exhaustively determined by functionalist architecture dedicated to the proposition that there is only one set of appropriate behaviours for a specific space. Representation is replaced by integration.

The same strategy could be used in the case of exponential urbanism. Many empty and unused zones in contemporary cities can be heavily programmed in order to fill the urban fabric with diversity and missing integrated services. There is a huge potential in (cross) programming these spaces as it could lead directly to higher efficiency and lower costs.

New contexts for architecture of contemporary city – apart from physical (infrastructure layer, city roofs, etc.) – are the cultural and sociological conditions like dynamic and interlaced life patterns (living/working/leisure) mobile and flexible life style. Density (concentrated layouts of functions) and integration/cooperation of previously separated functions are the tools to deal with all these contexts.

References

[1] Corner J., Scofidio R., *Designing the High Line: Gansevoort Street to 30th Street, Friends of the High Line*, Nowy Jork 2008.
[2] Jodidio P., *Olympic Sculpture Park*, [in:] *Green Architecture Now!*, Taschen, Köln 2008.
[3] Koolhaas R., *S, M, L, XL*, Monacelli Press, USA, 1998, p. 969.
[4] Ouroussoff N., *Gardens in the Air Where the Rail Once Ran*, New York Times, 12.08.2004.
[5] Tajima M., *The city a playground*, [in:] *Nova Terra – Jaargang 5*, 2005, No. 1, pp. 35–39.
[6] Tschumi B., *Architecture and Disjunction*, Cambridge: The Massachusetts Institute of Technology Press, 1996.
[7] Tschumi B., *Event-cities*, Cambridge, Cambridge, Massachusetts; London: The Massachusetts Institute of Technology Press, 1994.
[8] van Kuilenburg J.W., *Infrabodies*, *ARCH+*, No. 147, August 1999, pp. 67–73.
[9] van Kuilenburg J.W., *Infrabodies*, [in:] *Monolab texts – the green booklet*, Monolab Architects, Rotterdam 2010.

Przekraczanie granic. Nowe konteksty architektury w dobie procesu zagęszczania się miast

Fragmentacja miasta, tzw. 'urban growth' i zapotrzebowanie na projektowanie budynków o elastycznym i multifunkcjonalnym programie prowadzą do tego, że architektura współczesnych miast musi się mierzyć z nowym rodzajem kontekstu. Terytorium architektury rozszerza się na węzły komunikacyjne, poprzemysłowe tereny, otoczenia autostrad, parkingi i przejścia podziemne, mosty i wiadukty, dachy i ściany istniejących budynków, torowiska kolejowe, etc. Na podstawie wybranych realizacji i koncepcji w artykule przeanalizowano zależności między architekturą a takim nietypowym „agresywnym" kontekstem.

Key words: exponential urbanism, crossing boundaries

Słowa kluczowe: zagęszczanie miast, przekraczanie granic

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Ewa Łapa*

Modern architecture around historic monuments. Transformations of architectural space in Cracow

The term "culture" can be understood in a number of ways. In this article that term will be presented in reference to its original Latin meaning. *Culture* as "exercise or improvement"[1] [6] means a process where man changes the existing environment to submit it to his own needs and improve it. Transforming space is an intrinsic part of civilization as its improvement and adjustment to his own needs enables constant growth.

In this article I will try to answer the question of modern approach to transformation of historical space (both architectural and urban) in order to increase its quality and adjusting it to applicable standards. As an introduction, the history of relations between forms in given contemporary periods to the architectural environment will be presented.

Over a great portion of the history of human civilization the transformations of space were treated pragmatically – what is inappropriate for functional or aesthetic reasons or due to deterioration of matter – was replaced or remodeled. Depending on capabilities and resources, these changes were total changes. In some cases the limited capabilities prevented complete erasure of existing buildings and their fragments, sometimes large, were preserved as traces of the past.

Only in the 19th century did a real change take place in perceiving structures which would present a memory of the past. Appreciation for them along with crystallization of the notion of a *monument* caused a slow process of departing from previous practices. In the evolution of ideas the activities of Eugène Viollet-le-Duca were especially significant; he claimed that *To restore a building is not the same as maintain, repair or renovate it but restore it completely to its probable original state*[2]. This resulted in the development of a school of architects *happily invading a historic monument whenever it is possible, who do not know how and do not want to assume an ascetic position*[3] [1]. The counterbalance was provided by the ideas of John Ruskin who greatly valued historic monuments and encouraged to *count* (...) *the bricks* (…), *protect* (...) *like the gates of a besieged city; strengthen weakened places with iron, support with a beam the places to prevent collapse and do not worry about ugliness of the support because it is better to support something than lose its part*[4] [9]. What was missing in these two conceptions was the look at a modern form as an independent architectural entity because it was either submitted to the style of the building or the only thing which was noticed was the technical aspect of its introduction.

Next stage of development of conservation of historic monuments was the theory of historical value of monuments formulated by Alois Riegl and implemented by his student Max Dvořák. The "Vienna School" created by them was the foundation of the ideas which were expressed in 1931 in the *Athens Charter*. It dealt with modern elements around historic monuments casually. It recommended that the infill structures be distinct from

* Pracownia Projektowa Archex s.c., Bielsko-Biała.

[1] Own translation [after:] *Oxford Latin Dictionary*, P. Glare (ed.), Oxford 2009 (reprint), p. 466.

[2] E. Viollet-le-Duc, *Słownik logiczny architektury francuskiej od XI do XVI wieku, 1854–1868,* [in:] *Zabytek i historia. Wokół problemów konserwacji i ochrony zabytków w XIX wieku. Antologia*, P. Kosiewski, J. Krawczyk (eds.), Warszawa 2007, p. 79.

[3] A. Tomaszewski, *Wiek XX w konserwacji, konserwacja w XX wieku*, [in:] *Badania i ochrona zabytków w XX wieku*. Materiały konferencji naukowej zorganizowanej staraniem Wydziału Architektury Politechniki Warszawskiej, Generalnego Konserwatora Zabytków i Towarzystwa Opieki nad Zabytkami w stulecie urodzin Profesora Jana Zachwatowicza w dniu 4 marca 2000 roku, Warszawa 2000, p. 16.

[4] J. Ruskin, *Lampa pamięci*, 1849, [in:] *Zabytek i historia...*, p. 109.

Fig. 1. Roofing the courtyard of Pod Kruki House. Photo by author

historic fabric[5] and that the building elements which were introduced for technical reasons "should be hidden to prevent the deterioration of the appearance and character of the restored building"[6] [3]. It was required to pay attention to the surroundings of historic monuments and modern architecture which is designed near them, however, no specific recommendations were provided.

Still in the interwar period often it was not permitted to combine historic monuments with the emerging radical modern art. One of those who were against it was Gustavo Giovannoni who was advocating the idea that the new should not be combined with the old. He argued that the value of modern architecture is lower than that of historic monuments and that is why they should not exist together[7] [2].

Next stage of the evolution of the conservation doctrine is the *Venice Charter* from 1964 whose provisions can be considered to a large degree applicable today. It provided that *all complementary works which are considered necessary should derive from architectural composition and display the distinctive features of our times*[8]. Additions were permitted *as long as they respect all major parts of the building, its old surroundings, composition balance and relations with the surrounding environments*[9] [3]. Those provisions indicate that transformations were permissible but they had to meet numerous conditions and restrictions.

The postulates of the *Venice Charter* were confirmed by the *Cracow Charter 2000*. That document can be considered one of the signs of decentralization of the conservation doctrine of historic monuments which over the last few years emphasized more and more evidently the issue of regional specificity[10]. Apart from the "conservative preventive conservation of the environment, emergency maintenance and repair" the *Cracow Charter* considers permissible also *restoration, renovation or rehabilitation*[11]. Furthermore, *...if necessary, for a proper use the building, completion of more extensive spatial and functional parts should reflect contemporary architecture*[12] [12]. The liberalization of the approach to potential transformations of historic buildings is evident here.

All above-mentioned conservation documents provide only general recommendations regarding a possible intro-

[5] Karta Ateńska Konserwacji Zabytków, [in:] E. Małachowicz, *Konserwacja i rewaloryzacja architektury w środowisku kulturowym*, Wrocław 2007, p. 585.

[6] Ibidem, p. 586.

[7] A. Kadłuczka, *Ochrona zabytków architektury. T. 1, Rozwój doktryn i teorii: (vademecum)*, Kraków 2000, p. 60.

[8] After: E. Małachowicz, *Konserwacja i rewaloryzacja*..., p. 591.

[9] Ibidem, p. 592.

[10] Compare B. Szmygin, *Obiekty zabytkowe – pojęcia zakres i zasady działania*, [in:] *Wybrane zagadnienia ochrony i konserwacji zabytków architektury*, B. Szmygin (ed.), Lublin 2007, pp. 32–34.

[11] *Cracow Charter 2000*, http://www.zabytki-tonz.pl/pliki/Karta%20Krakowska%202000.pdf, 27.10.2010.

[12] Ibidem.

Fig. 2. Layout of the interior of Pasaż 13. Photo by author

Fig. 3. Former Schindler's factory – before remodeling. Photo by author. Below: design of Contemporary Art Museum. Source: http://architektura.muratorplus.pl/projekty/muzeum-sztuki-wspolczesnej-na-terenie-bylej-_fabryki

Fig. 4. Wyspiański Pavilion 2000.
Photo by author

Fig. 5. Faculty of Finances.
Photo by author

duction of transformations in historic monuments. Due to their individual character the approach to historic monuments must be also individual. The theoretical deliberations rather provide a kind of direction, emphasize trends of thought in specific periods. In the second part of this paper I will try to present how the postulates put forward by me are implemented.

I will analyze attempts at architectural and urban improvements of the buildings located in Cracow whose historical value has been established. The group of buildings will be additionally narrowed down to buildings of public utility where transformations took place in the 21st century that is after 2000. They include comprehensive projects evidently invading the historical fabric of a given building. The descriptions of the buildings in that group will not then include details in such areas as carpentry, metalwork or such building or construction improvements as new floors or bracings. The described group also excludes reconstructions (regardless of their historical or modern forms).

The restriction regarding a building capacity which prevents operations of a company or an institution is often the motivation to perform works transforming a historic monument. As it is difficult to resign from good location which is offered by most of such buildings it is often necessary to extend them. Due to the extent of the invasion such activities are considered beyond conservation[13] [3].

The extension of the International Center of Culture located in the Pod Kruki House by the Market Square is a perfect example of that. The project was prepared in 2001 by Atelier Loegler. The transformation included enclosing the courtyard and adding an additional storey to the annex. Above the courtyard, where a conference room was designed, an exhibition space was created at the level of the 1st floor. The whole extension was covered with a glass roof. A bay window was added to the annex, where a reading room was designed, and an additional glazed storey covered with a semispherical roof. The interiors were laid out in modern style.

Another example is the adaptation of two connected houses at the Market Square for shopping and services. This structure currently functions as Pasaż 13. It was designed by Arch. Marcin Janowski and it was completed in 2006. Like in the case of the Pod Kruki House, additional space was created by roofing the courtyard.

This was additionally emphasized by leaving the modern staircase open from the basement level up to the skylight. In order to draw attention to the exceptional character of the structure (which is supposed to generate the marketing value) the original Gothic and Renaissance architectural details were displayed. They were contrasted with modern and rather minimalistic interior design. The remodeling caused a lot of controversy due to the extent of the invasion. The most negative comments regarded the balcony designed on the facade with the writing "Pasaż 13" instead of balusters[14] [11].

Another investment where enclosing of the courtyard was an important element is being executed now – namely roofing of the courtyard of the Home Army Museum – by AIR Jurkowscy-Architekci. The institution is housed in former Austrian barracks. The steel structures which support glass planes allude in style to the raw military architecture, however, they do not try to imitate it, retaining a separate character. The project included adaptation of basements for exhibition purposes.

In the designs of MCK and Pasaż 13, it was necessary to develop new circulation in the buildings by introducing additional stair case and elevator shafts. It was also connected with providing emergency exits and adjusting the buildings for the disabled.

A similar modernization was conducted in the house at the corner of the Market Square and Sienna Street where at present Empik Mega Store is located. The design from 2000–2001 by J. Kapitoński includes a possibly discrete adjustment of the building for the needs of its new users. Elevators were added connecting all storeys of the store. Glass planes were supposed to provide transparency of these elements so that they do not overwhelm the interiors.

Apart from the need for new space, another reason for introduction of architectural transformations in historic monuments is the changes caused by social processes such as "moving" the citizens from the city centers. The buildings where they lived previously – as attractive commercial spaces – undergo conversion into new facilities providing services or sales. Conversion of tenement houses into hotels is a popular solution. It was the case with Gródek hotel (Na Gródku Street), Stary hotel (Szczepańska Street) or Rubinstein hotel (Szeroka Street).

Another group of functional adaptations includes post-industrial structures which, as a result of the city center growth, became useless from the point of view of production profitability. Abandoned by their users, they offer good location for large-capacity investments. However, the existing architecture is not always considered fit for renovation.

Galeria Kazimierz is an example of a transformation conducted on a complex of post-industrial structures. The project by IMB Asymetria and HOK included preservation and renovation of only six buildings of ae large 19th century slaughterhouse complex. Now they house cafes and restaurants. The brick buildings and the street along them provide an axis for pedestrian circulation leading inside the completely new shopping mall.

The Bonarka City Center investment goes even further. The project by Bose International Planning & Architecture which included adaptation of the factory for a huge services and shopping center in fact resulted in total winding down of Bonarka Chemicals Plant after which the center took its name. As a sign of former function the factory chimney was left there with changing color and pattern LED lighting. Remodeling was completed in 2009.

The authors of the Museum of Contemporary Art in former factory *Emalia* where Oskar Schindler's plant was located during the Second II had different assumptions. Claudio Nardi Architetto from Italy decided to preserve

[13] E. Małachowicz, *Konserwacja i rewaloryzacja*..., p. 128.

[14] *Szopa dla hotelu*, „Gazeta Wyborcza. Kraków", 19.06.2006, <http://krakow.gazeta.pl/krakow/1,35812,3427883.html>, 27.10.2010.

the sawtooth roofs typical of the post-industrial complex. The new urban development was supposed to introduce order into existing architecture. In order to do that it was decided to demolish the building of historic porter's lodge. It has not yet been executed so the actual effect of the transformation of the historic halls is still unknown. However, it should be noted that despite considerable invasion into the structure of the buildings the architect declared that the historic value of that place will be respected[15] [7]. The transformation of the complex is an element of the plan of revitalization of Zabłocie District.

The principle of minimal invasion was the basis of the project from 2004 by M. Tomczak that was developed for the Museum of Galicia. A brick hall located at Dajwór Street which in the past was used as a furniture factory was adapted for its seat. As the history of Jews was to be the main subject of the exhibitions it was decided to leave the patina on the building and the new materials were supposed to harmonize with the post-industrial architecture.

The existing space can be improved not only in architectural but also in urban scale. All complements enriching the city fabric can be good examples of that.

The Exhibition and Information Pavilion Wyspiański 2000 is the most famous example of that type executed over the last few years in Cracow. It was erected in the place where the Pod Lipką House was demolished before the Second World War. That place for a long time was considered for an investment, however, no solutions that were prepared met the high requirements for a design located in such a prestigious place. The structure was supposed to commemorate the year 2000 when Cracow was one of the European Capitals of Culture. K. Ingarden's design whose execution lasted from 2006 and 2007 became the reason of numerous disputes[16] [10]. It is worth, however, looking at the building itself. Its elevation is composed of ceramic tiles decorated with chest tree leaves to honor the patron. Placing them on movable rods controls the amount of light that is allowed inside. The elevation has stained-glass windows made in the 1:2 scale according to Wyspiański's templates. The architecture is modern but the use of natural materials integrates well with the surroundings. The distribution of elements also facilitates the dialog between old and new architectural forms.

Regardless of subjective judgments, the attempt at integrating into the character of the place which is a very difficult task should be appreciated.

The development of the infill buildings of the University of Economics located between Lubomirskiego and Rakowicka Streets had a different character. In 2004, a building of the Faculty of Finances was constructed there; after the swimming pool and the sports hall[17] [4, 5] it is another design by Atelier Loegler in this area. The clinker brick is the building material which was used to refer to historic monuments, however, the very articulation of elevation itself, the use of large glazing areas and prominent steel structures is very modern in its expression. The new buildings became hallmarks of the school with their distinct appearance along Lubomirskiego Street.

As demonstrated in the examples the activities within the term of *cultura* that is attempts at improving and adjusting to the current needs of historic space of the city are clearly visible in Cracow. These transformations take place even in structures with significant historic value. This means that there is approval of invading that space, necessary further (continuous) adjustment of architectural and urban objects to contemporary needs. That trend is stronger than the recommendations included in conservation documents to limit intervention to necessary repairs and conservation.

Special attention should be paid to treatment of objects of post-industrial heritage. Due to their relatively not so distant date of creation, frequently poor technical condition and, as it seems, general lower appreciation, they undergo far-reaching transformations and sometimes they are totally lost during adaptation works. What remains is sometimes only architectural details and single elements such as the chimney of Bonarka complex.

As it is put in the *Cracow Charter 2000*: *Conservation of cultural heritage should be an integral part of the planning and management processes of a community, as it can contribute to the sustainable, qualitative, economic and social developments of that society*[18] – so the investment processes should be managed in such a way that the changes which are made would be least devastating and most reversible because historic monuments are not obstacles for investments and the requirements imposed by them can make modern architecture more interesting as they add the context of the past.

[15] Compare *Włoskie miasto sztuki w Krakowie*, „Architektura–Murator", 10/2007, p. 24.

[16] Compare *Pawilon z witrażami Wyspiańskiego jest już prawie gotowy*, „Polska Gazeta Krakowska", 29.05.2007, http://krakow.naszemiasto.pl/archiwum/1456258,pawilon-z-witrazami-wyspianskiego-jest-juz-prawie-gotowy,id,t.html, 27.10.2010.

[17] M. Motak, *Architektura Krakowa 1989–2004. Nowe realizacje w kontekście miasta historycznego*, Kraków 2007, p. 55.

[18] *Cracow Charter 2000*, op. cit.

References

[1] *Badania i ochrona zabytków w XX wieku*. Materiały konferencji naukowej zorganizowanej staraniem Wydziału Architektury Politechniki Warszawskiej, Generalnego Konserwatora Zabytków i Towarzystwa Opieki nad Zabytkami w stulecie urodzin Profesora Jana Zachwatowicza w dniu 4 marca 2000 roku, Warszawa 2000.

[2] Kadłuczka A., *Ochrona zabytków architektury.* T. 1*, Rozwój doktryn i teorii: (vademecum)*, Kraków 2000.

[3] Małachowicz E., *Konserwacja i rewaloryzacja architektury w środowisku kulturowym*, Wrocław 2007.

[4] Motak M., *Architektura Krakowa 1989–2004. Nowe realizacje w kontekście miasta historycznego*, Kraków 2007.

[5] Motak M., *Nowe realizacje a przestrzeń publiczna Krakowa w latach 2005-2010*, Czasopismo Techniczne, z. 6, r. 107, 2010.
[6] *Oxford Latin Dictionary*, edited by P. Glare, Oxford 2009 (reprint)
[7] *Włoskie miasto sztuki w Krakowie*, Architektura–Murator, 10/2007, p. 24.
[8] *Wybrane zagadnienia ochrony i konserwacji zabytków architektury*, B. Szmygin (ed.), Lublin 2007.
[9] *Zabytek i historia. Wokół problemów konserwacji i ochrony zabytków w XIX wieku. Antologia*, P. Kosiewski, J. Krawczyk (eds.), Warszawa 2000.
[10] *Pawilon z witrażami Wyspiańskiego jest już prawie gotowy*, „Polska Gazeta Krakowska", 29.05.2007, http://krakow.naszemiasto.pl/archiwum/1456258,pawilon-z-witrazami-wyspianskiego-jest-juz-prawie-gotowy,id,t.html, 27.10.2010
[11] *Szopa dla hotelu*, Gazeta Wyborcza. Kraków, 19.06.2006, http://krakow.gazeta.pl/krakow/1,35812,3427883.html, 27.10.2010
[12] Towarzystwo Opieki nad Zabytkami Przeszłości, http://www.zabytki-tonz.pl/pliki/Karta%20Krakowska%202000.pdf.

Architektura współczesna w otoczeniu zabytków – kultura w przekształceniach przestrzeni

W artykule przedstawiono rozumienie terminu „kultura" w nawiązaniu do pierwotnego, łacińskiego znaczenia tego słowa. Kultura – uprawianie mające na celu poprawę stanu obecnego, w przypadku architektury oznacza przekształcanie przestrzeni w nadziei na podniesienie jej jakości. Proces ten może zachodzić w istniejących strukturach architektonicznych przedstawiających wartość historyczną. W jaki sposób podejście do przekształceń obiektów zabytkowych zmienia się? Osią analizy jest Kraków, miasto o bogatym architektonicznym dziedzictwie, poddawane nieustającym przekształceniom.

Key words: modern architecture, historic monuments

Słowa kluczowe: architektura współczesna, zabytki

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Transformations of urban and architectural space of the market square in Leszno at the turn of the 20th and 21st centuries

Introduction

If we agree with the assumption that an architect and urban planner are the professions which enjoy public trust, then we cannot in our work resort to cultural patterns, social needs or ecological conditions. If, however, we egoistically assume that the most important thing is individual artistic experience of the author, realizing their unrestrained vision of architecture or urban development, and its future users do not participate at all in this process, then we only build a monument of the author which is useless for local community.

There are a lot of examples of such egoistic activities in architecture and urban development. For instance the design of Brazylia in the second half of the 20th century,

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Fig. 1. View of Town Hall in Leszno located on the Market Square

which is admired by architects and rejected by the community and has been challenged by demographic problems or development of a Le Corbusier unit where few people want to live.

Assuming that at present in architecture and urban development we operate in a transition period from industrial to information civilization, then the subject of transforming market square spaces is especially interesting from the point of view of urban changes which have been taking place over the last twenty years in out country.

In this context the opinion voiced by Krzysztof Domaradzki [2] is especially pertinent; he defined the problem like that: *The rebellion against scenic axes, traditional squares and developments cannot mean that designing cities in the 21st century should contemptuously reject the whole classical art of space development. Knowledge should not be replaced with ignorance, and the skills developed over the centuries should not be replaced with their lack. Conservatism in space development of the city,* (…) *usually means proven solutions which have been verified by history as well as by users who feel good in them and which they simply like.*

The post-war activities in Polish architecture and urban development seem to be searching for a new direction which would lead out of that dead-end street created at the beginning of the 20th century by CIAM's modernism. They include efforts at restoring the significance of space with clearly defined boundaries. This does not exclude in any way the search for new means of expression in architecture and urban development. This includes the search for a new expression of public spaces which change in accelerated motion the needs of Polish cites. This search could be exemplified by the plan of modernization activities in the area of the old town market square in Leszno[1].

[1] *Koncepcja urbanistyczno-architektoniczna dla terenu rynku w Lesznie* – development plan commissioned in 2009 by the City Office in Leszno from a team of designers: Wrocław University of Technology, Professor Robert Masztalski, D. Eng., Arch, Ewa Masztalska, M. Eng., Arch., Paweł Pach, M. Eng., Iwona Olanin, M. Eng. and Łukasz Truchalski, M. Eng., Arch. [4].

History of the market square in Leszno

Leszno was designed in the middle of the 16th century on a plan of a slightly irregular grid with two streets going off each of the corners[2]. Its four-sided market square, with the dimensions of the sides 81 m × 91 m × 65 m × 90 m, was created at the crossroads of the major streets from Rydzyn to Kościan and from Głogów to Poznań [5]. 6.5–8.5 m wide plots were marked around the market square [6]. The dominant and original function of the market square was connected with commercial trading. Apart from common Monday and Friday trade fairs held on the market square in Leszno on specifically designated days in the year there were also fairs which attracted merchants from Greater Poland as well as from more distant regions. The commercial function determined the market square development

[2] This type of design refers to much earlier, medieval locations based on German law to the north and east of the upper and middle Elbe river basin [1, 5].

Fig. 2. Elements of development of the market square in Leszno installed along its sides

Fig. 3. One of the market square sides separated from the market square space by "beer gardens"

Fig. 4. One of the structures enclosed in the "beer gardens"

full of sheds, stands and benches where goods were traded. From the very beginning the market square in Leszno also served representative functions. The houses around the market square owned by the wealthiest townsmen were usually the tallest and most decorated. The town's most important secular administration and commerce building, the town hall, was located in the middle of the market square. The first masonry town hall was built in the middle of the market square in Leszno in 1639. Over the next years it was remodeled many times. The present town hall, which was built in 1707–1709, is one of the most valuable Baroque and classicistic buildings in Poland (Fig. 1). In the late 1670s, the population of the city was about 5 thousand and over the next one hundred years it at least doubled [5].

Although most of the original buildings around the market square were gradually replaced, the function and the main elements of the market square development for centuries actually remained unchanged. The market square served its functions as the main place for commercial trading. The prestige of the city, and consequently of its market square, has grown significantly since the moment when in 1975 Leszno became capital of newly established Leszno Province.

Fig. 5. Pedestrian street mall between houses and a row of trees

In 1977, the Polish Central Harvest Festival was held in the city. The preparation to that festival greatly improved the appearance of Leszno. That improvement included for instance the cleaning of the facades of the town hall and of the houses around the market square. However, the most important modernization for the functioning of the city center was banning vehicular traffic from the market square. Another important modernization of the center was conducted in the middle of the 1990s. Wolności, Leszczyńskich and Zielona Streets were converted into pedestrian streets, which was caused by the need to facilitate further development of shopping facilities along those streets. In the middle of the 1990s, the town hall was extensively modernized and renovated.

The market square in Leszno today

The area of the market square today is the main public space in Leszno. In the representative building of the Town Hall, there are exhibition and conference rooms and a cafe. Most of the historic houses around the market square which were built in the last quarter of the 19th century and in the first quarter of the 20th century demonstrate high architectural qualities[3]. Most of their facilities on the ground floor are used for services mainly commercial. Over the last few years the services have been provided also on upper floors, replacing their residential use. The market square space is occupied by rows of trees growing along its sides as well as small architecture structures and technical infrastructure. These elements have been located there over the last fifty years, generating a sense disorder of the market square space. Their location is often random and their style incoherent (Fig. 2). Their number and the size of some of them e.g. "beer gardens" make the space along the sides of the market square seem overloaded and overwhelmed (Figs. 3, 4). Unfortunately, the market square surface does not seem representative enough to reflect the 'city salon' either. Paved with gray granite blocks, the market square which was earlier used by cars now is surrounded by sidewalks whose surface covered with typical concrete blocks, going around the market square. The rows of trees and beer gardens going along the sides of the market square divide functionally and visually the space of the market square into a pedestrian street mall along the sides and the market square (Fig. 5).

[3] As many as 21 of them are on listed in the register of historic monuments, whereas the rest are on the list of protected historic monuments.

New vision of the 'Old' market square

In 2009, the authorities of Leszno commissioned an urban and architecture development plan of the market square in Leszno from a team of Wrocław designers. While conducting the plan the present state of the market square development was diagnosed and the following design objectives were formulated:

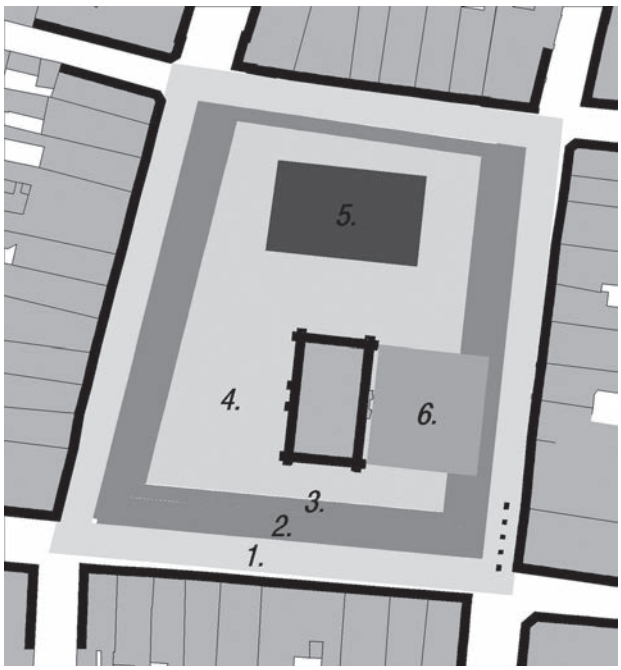

Fig. 6. Diagram of division of the market square space into functional zones: 1) Pedestrian mall along the market square side, 2) Seasonal temporary structures zone, 3) Green Zone, 4) "Free Space", 5) "Forum of Attractions", 6) Representative town hall entrance

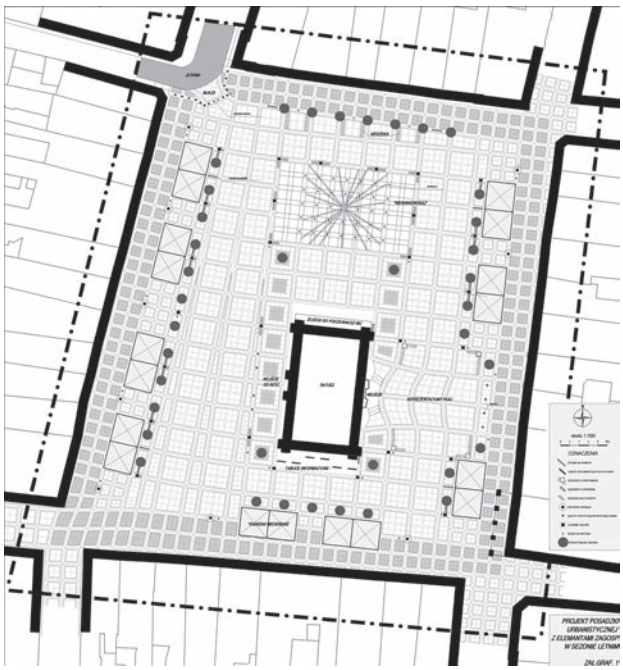

Fig. 7. Development plan of the market square in Leszno in the summer season

– elimination of structures disturbing spatial order and diminishing the prestige of the place[4];

– design of an attractive public space, emphasizing the valuable elements of the development;

– creation of places and attractions attracting citizens and tourists and emphasizing the prestige of the market square.

After the development of the functional utility program accommodating the modern needs of the citizens, specific urban functions were assigned in the space and the space functional division diagram was developed (Fig. 6).

The plan introduced in those zones specific elements of the development, suggesting and indicating a specific way in which this space would be used. According to the plan it was important for those elements not to divide the market square space visually but only by using adequately selected small architecture structures which would form subtle boundaries between spaces that serve different purposes. The restrictions assumed in the plan regarding the locations and sizes of temporary "beer gardens" and season's holiday stands should prevent the total separation of the pedestrian street mall from the rest of the market square. The shopping units and recreation elements which are admissible in this zone shall be located within designated distances, providing a possibility of unrestricted moving around in all directions on the market square, without blocking the view of the town hall. Furthermore, the location and kind of trees to be located in zone 3 shall correspond with the idea of opening the view of the town hall and the houses around the market square. The development of the remaining area between the rows of trees and the town hall (zones 4–6) shall also match the functions and attractions provided there. The "Free Space" shall serve the pedestrian and exceptionally vehicular circulation, and that is why it should be minimally developed, unlike the "Forum of Attractions" which shall be designed as the most attractive fragment of the "remodeled" market square. The multimedia fountain to be installed in the market square surface and the signpost showing the main directions in the city shall be the magnet attracting both tourists and citizens to the market square. This is also where special events in the city life shall be held. Another section of the market square, located nearby the town hall main entrance, shall serve the more representative purposes. The broken orthogonal layout of the market square surface as well as the small architecture structures located there (benches, flag poles, lighting elements) shall emphasize the significance of the place and the prestige of the town hall.

It is important for the operation of the market square that the plan provides for different use of the market square in different seasons of the year.

In respect of transportation the plan provides for a restricted accessibility to the market square[5]. The new market square development shall revive the unused space around the town hall, which earlier was used by vehicular traffic.

[4] The following elements were considered disharmonizing: building structures in the "beer gardens", sidewalk along the market square sides, "modernist" benches, flowerbeds and trash cans, waste segregation containers, some wall advertising items and signboards and elements of technical infrastructure.

[5] The market square would be accessible only for emergency vehicles, city maintenance vehicles and delivery trucks at designated hours.

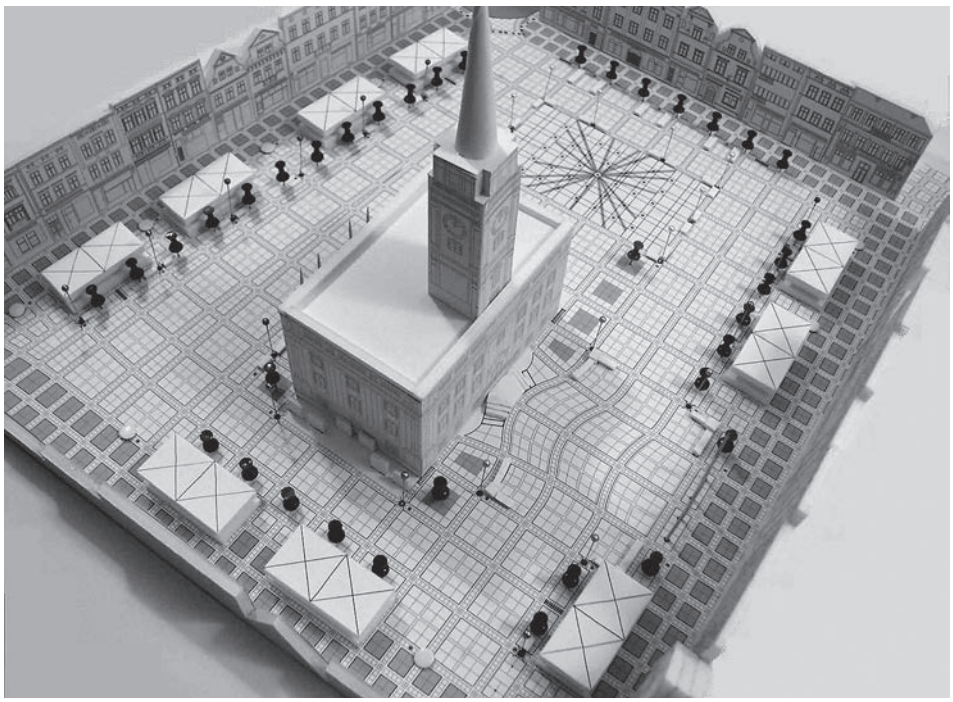

Fig. 8. Model presenting the new pattern of the surface and elements of the development in Leszno market square

Forms of development adequate to modern times

The new market square development plan was supposed to address the modern needs of the citizens of Leszno and introduce the forms of development which would be adequate to the urban lifestyle of the 21st century information society. It does not mean that the plan breaks the bonds with history. On the contrary, the plan references to the history of the place are an important aspect of tourist promotion of the city and its architecture[6].

It is important for the plan to attract to the market square people who in fact shall make the city center vibrant with life. For the market square space to be an attractive place of recreation, it must be adequately equipped. The location of all small architecture structures is the result of assumption that individual zones shall serve specific purposes.

At the request of the investor, one of the issues that needed to be addressed in the plan was a possibility of location of a monument on the market square. After conducting composition analyses it was found that at this stage it is impossible to indicate any specific location for any monument due to the lack of information of its form, size or style – features which greatly affect the context in which any monument could be designed.

The following principles were followed while designing the elements of small architecture structures: durability of used materials, unified style, functionality and prestige. Furthermore, it was considered important to support pro-ecological activities by providing selective waste collection containers.

The plan assumes replacing the existing market square surface. The new one, referring to the historical orthogonal urban layout of the city, would be a matrix indicating the functional division of the market square. As a result of the assumed intensified pedestrian circulation on the market square, its surface was designed especially for pedestrian traffic. The surface emphasizes the zoning layout indicated by specific colors for specific functions. It introduces geometric order for the market square space, drawing attention to specific places e.g. the Town Hall entrance.

The plan assumed the introduction of new rows of trees along the market square sides, setting them back more than now. The selection of appropriate species of the trees in respect of the size of their crowns and root systems as well as the speed growth and resistance to city conditions shall assure their easier care and maintenance.

The plan allows for the location of so called "beer gardens" on the market square, however, it also provides certain conditions on which they can be located there[7]. The plan excludes the location on the market square of permanent stands or other roofed structures and it imposes the requirement to maintain a unified style. The provision of the conditions for the location of the gardens is an attempt at finding an appropriate form for the relatively new function of the market square as a recreation space. The adaptation of the market square space to changing lifestyle and spending time in public space is necessary to maintain its usefulness.

[6] Boards have been designed to be placed on houses with information about their origin and history. Information about the development of the city of Leszno shall be presented on free-standing boards.

[7] Their location is possible only within designated spaces 6 m × 12 m.

Fig. 9. Visualization of the "Forum of Attractions" and small architecture structures

Fig. 10. Visualization of the "pedestrian street mall" along the market square sides

Summary

The market square, as the urban organism heart, changes along with the changes of lifestyle of its citizens. Its development must address the citizens' current needs. These needs change in time so it is only natural for the market square to follow the changes. The plan in question is a unique example of adaptation of the market square to the needs of modern citizens. The newly introduced functions increase the attractiveness of the market square as a recreation space both for its citizens and equally important tourists. A modern market square is no longer only a place for commercial trading; it is primarily a meeting place for the citizens to integrate and have fun. The 'city salon' is also an ideal place for presentation of the city culture, its history, and tradition. Over the last few decades, the history of this place has developed in the market space in Leszno the functions contributing to creating there a cultural and entertainment center.

References

[1] Czerner R., *Zabudowy rynków. Średniowieczne bloki śródrynkowe wybranych dużych miast Śląska*, Oficyna Wydawnicza PWr., Wrocław 2002.
[2] Domaradzki K., *Urbanistyka dla architektów, czyli ciągłe nieporozumienie*, [in:] Architektura-Murator, No. 10, 2006.
[3] *Koncepcja urbanistyczno-architektoniczna dla terenu rynku w Lesznie* – development plan commissioned in 2009 by the City Office in Leszno from a team of designers: Wrocław University of Technology, Professor Robert Masztalski, D. Eng., Arch, Ewa Masztalska, M. Eng., Arch., Paweł Pach, M. Eng., Iwona Olanin, M. Eng. and Łukasz Truchalski, M. Eng., Arch.
[4] Lubocka-Hoffman M., *Miasta historyczne zachodniej i północnej Polski. Zniszczenia i programy odbudowy*, Bydgoszcz 2004.
[5] Topolski J. (ed.), *Historia Leszna*, Leszno 1997.
[6] Wróblewska G., *Rozplanowanie nowożytnych miast wielkopolskich od XVI do końca XVIII wieku*, Warszawa–Poznań 1977.

Przekształcenia przestrzeni urbanistyczno-architektonicznej rynku leszczyńskiego na przełomie XX i XXI wieku

Dynamiczny rozwój Leszna po drugiej wojnie światowej wiązał się ze zmianami sposobu kształtowania przestrzeni jego rynku. Rynek miasta średniej wielkości, jakim jest Leszno, będący częścią żywej, wciąż zmieniającej się tkanki miejskiej ośrodka o znaczeniu regionalnym, podlegał przekształceniom estetycznym i politycznym, które zdarzyły się na przełomie XX i XXI wieku w Polsce. Miasto, w latach 1975–1999 było stolicą województwa, co w znacznej mierze przyczyniło się do zmiany wizerunku rynku. Historia tego miejsca w ostatnich kilkudziesięciu latach wyodrębniła w przestrzeni rynku leszczyńskiego funkcje przyczyniające się do tworzenia tu centrum kulturalnego i rozrywkowego miasta. W świetle owych przemian podejmowane współcześnie działania modernizacyjne rynku zdają się mieć jedynie charakter „kosmetyczny", czyli wyłącznie porządkujący. Bardziej zdecydowane działania pozostają wciąż wyłącznie w sferze koncepcyjnej.

Key words: Leszno, market square, urban transformation

Słowa kluczowe: Leszno, rynek, przekształcenia urbanistyczne

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Ecological and energy efficient architecture as a new trend in the architectural culture

Climate change at the turn of the 20th and 21st centuries is indisputable. In 1988, two Organizations of the United Nations – the World Meteorological Organization (WMO)[1] and the United Nations Environment Programme (UNEP)[2] created the Intergovernmental Panel on Climate Change (IPCC)[3]. IPCC is a permanent forum of cooperation of hundreds of scientists from many countries, publishing every few years the reports which greatly affect the development of national and international climate programs and the policy of financing research on climate change. The first report of IPCC was published in 1990, next ones in 1995 and 2001 and the last one in 2007. The last report was developed by over 600 authors from 40 countries, reviewed by over 620 experts and representatives of governments. The summary of the report was accepted by representatives of 113 countries. The key conclusions of the Fourth Assessment Report of the IPCC (AR4) are as follows:

– Warming of the climate system is unequivocal,

– The probability that this is caused by natural climatic processes alone is less than 5%,

– The probability that this is caused by anthropogenic (human) greenhouse gas concentration is >90%,

– During the 21st century world temperature could rise by between 1.8 and 4 °C. However, the possible rise ranges from 1.1 to 6.4 °C,

– Sea levels will probably rise by 28 to 42 cm,

– There is a confidence level >90% that there will be an increase in heat waves and heavy rainfall.

In architecture the first ideas to save energy and construct environmentally friendly buildings appeared during the fuel crisis of the 1970s. A growing interest in new, non-conventional sources and technologies of energy generation has resulted in the development of philosophy of architecture which is friendly both to people and environment where it is located as well as the doctrines of sustainable development of architecture. *Currently sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs, is possible* – this famous sentence from the 1987 WCED report – "Our Common Future" (Brundtland Report – after the last name of Gro Harlem Brundtland – the Chair of the commission) set a new direction in the development of architecture at the end of the 20th century. The beginning of the 21st century strongly confirmed the ecological and energy efficient architecture as a canon and indicator of culture in creating human life space. Taking into account the precisely assigned objective of the European Commission to shift to an energy efficient and low carbon economy already in 2020 (reduction of the demand for energy by 20% and reduction of emission of CO_2 by 20% as well as

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[1] The World Meteorological Organization (WMO) – international organization with 188 member states which originated from the International Meteorological Organization (IMO), which was founded in 1873. Established 1951, WMO became a specialized agency of the UNO whose task is to unify, improve and exchange of publications on meteorology as well as support studies of climate, geography, and hydrology.

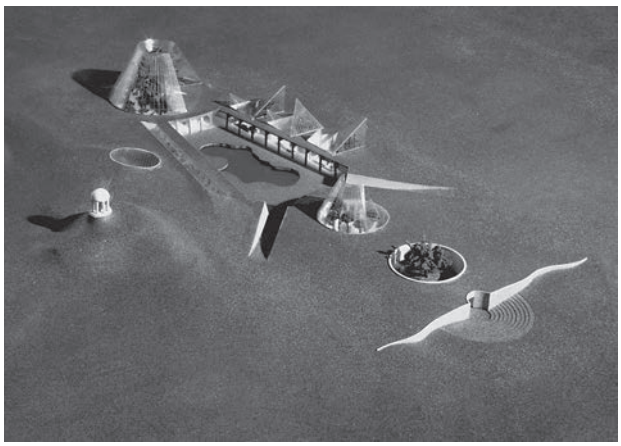
Source: http://pl.wikipedia.org/wiki/Światowa_Organizacja_Meteorologiczna.

[2] The United Nations Environment Programme (UNEP) – agency of the UNO established by the resolution of the General Assembly of the UNO no. 2997 from Dec. 1972 to coordinate UN environmental activities, constantly monitoring the global environment. UNEP is based in Nairobi, capital of Kenya. Achim Steiner from Germany is the Executive Director of UNEP.

Source:http://pl.wikipedia.org/wiki/Program_Środowiskowy_Organizacji_Narodów _Zjednoczonych.

[3] Intergovernmental Panel on Climate Change (IPCC) – organization established in 1988 by two organizations of the United Nations – World Meteorological Organization (WMO) and The United Nations Environment Programme (UNEP) to assess the risk of climate change caused by human activity.

Source: http://pl.wikipedia.org/wiki/Intergovernmental_Panel_on_Climate_Change.



Figs. 1, 2. Lucille Halsell Conservatory, San Antonio, Texas, Emilio Ambasz – source: http://www.flickr.com

an increase in use of renewable energy by 20%), the following question arises: *Is ecological and energy efficient architecture only a fashion or temporary trend caused by the problems with global natural resources or architectural culture growing from the receptivity to the ideas of eco-philosophy and care for future generations as a vision of the future?* The analysis of the conception as well as of the execution of architectural designs from the turn of the 20th and 21st centuries in Europe and globally can provide the answer to that question.

Since the 1970s, the works by Emilio Ambasz have been permanently in the center discourses about ecological architecture[4] due to their incorporation into surrounding landscape and vegetation. His works are a perfect example of the integration with nature – the key postulate of ecological architecture. The theories developed by Emilio Ambasz include the basic criteria of ecological architecture – relation to context, creative approach to landscape, symbols, ecological technologies and visionary imagination. In his designs Ambasz treats landscape as integral part of an object and, just like other architects, incorporating a human dwelling place into the context of nature, he makes references to the achievements of Frank Lloyd Wright. Schlumberger Research Laboratories in Austin, Texas, is a center of technology whose interiors, according to the assumptions of its investors, were to adapt to the changing number of its employees [3]. The location of the buildings was to be associated with data flowing through the computer and that is why the whole compound was designed as integrated with the landscape with its individual buildings buttressed with earth berms. Ambasz achieved two goals: integration with the surroundings and a better thermal insulation of the buildings regardless of the season by covering the buildings with masses of earth. Furthermore, the design displays cosmological relations with ancient Celtic buildings and at the same time indicates the connection between the computer age communication techniques and art of earth as well as ancient rituals. Another example of work by Emilio Ambasz where earth berms are used to incorporate the building into the landscape is Lucille Halsell Conservatory in San Antonio, Texas (see Figs. 1 and 2).

The buildings with specimens of plants resemble the Hanging Gardens of Babilon. The design is crowned with forms resembling glass pyramids surrounded by furrows in the ground and moulds. This makes it look like a living monument in honor of plants, earth, and sky. The whole design provides for proper sun exposure, microclimate and exchange of air for the plants kept inside. The biggest design by Emilio Ambasz is ACROS Building in Fukuoka, Japan completed in April 1995. This is one of the most significant examples of architecture – the garden design is in opposition to garden architecture interpreted as "return to nature" associated with a house built in the natural environment. ACROS Building expresses the ecological desire to give back to nature the space taken by people and to rebuild the natural environment destroyed in the 20th century. The use of the green facade of the center of culture as an extension of the nearby parkland is no longer a visual object and it becomes an icon of architecture absorbing and stimulating senses. This design refers to the important issue for architecture ecological namely the man-made nature as opposed to original nature. This is also an answer to the question: *What is green architecture at the turn of the 20th and 21st centuries?*

The Pit by Peter Noever can be a European example of pro-ecological architecture, expressing the vision of architecture regarded as an extension of landscape [3]. The architect remodeled an old wine cellar abandoned for over two hundred years and a nearby quarry located in Breitenbrunn, Austria. This is a special combination of integrated environment, public space and landscape architecture, creating green architecture provoking further work on ecological apartments of the future. Another example of architecture integrated with the natural environment is EFA – a radio satellite station by Gustav Peichl in Aflenz,

[4] Ecological architecture – although the idea of energy efficient and environmentally friendly architecture has always been embraced by utopian architects, it became especially popular and important in the early 1970s, and particularly after the fuel crisis in 1973. London's Ecological House by Graham Caine is the flagship building of this type. Some of the most spectacular examples of ecological architecture, although never executed, include the arboreal designs by Magdalena Abakanowicz from 1991.

Source: http://www.artinfo.pl.

Austria [3]. The design integrating the broadcasting station technical facilities with residential buildings into an earth slope refers to the works by Emilio Ambasz and his green architecture designs.

These examples of ecological architecture at the end of the 20th century are set in the context of the idea of integration of a man-made space with the natural space. They provide the answer to the question asked earlier: *What is ecological architecture?* The sensitivity of architects expressed in those examples and the consequence of the idea of integration of architecture with its surroundings is the best confirmation of the high culture in creating a man-made environment. The respect for green natural resources by giving back the space taken by man is an expression of a deep concern for the environment of the future generation and realization of the vision of contemporary architecture. It is worth noting that the examples do not apply modern energy efficient solutions or use renewable sources of energy. Their focus is more on design solutions and implementation of the idea of earth-oriented ecological architecture.

Ecological architecture of the 21st century is totally different. Its characteristic features include a rapid development of information technologies and technological achievements in the scope of use of renewable sources of energy. In order to meet the current needs of the society ecological architecture sets a new direction in creating human life space. Physalia – which in Latin means jellyfish – is a giant cnidarian driven by hydro-turbines designed by Vincent Callebaut covered with plants and solar panels (see Fig. 3) [1].

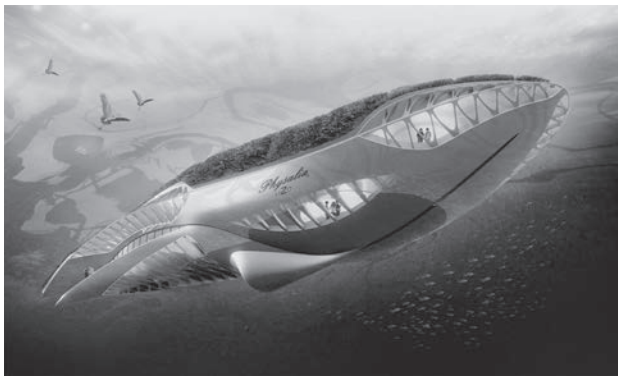


Fig. 3. Physalia, Vincent Callebaut
– source: http://portal.architekturakrajobrazu.info

Physalia is meant to navigate through the rivers and clean water. Furthermore, inside there will be lecture halls and gardens where the visitors will live pro-ecologically. Another design by Vincent Callebaut called Dragonfly is a vertical farm providing healthy and ecological food. The program includes the production of high quality vegetables and fruits. The futuristic ecological farm without pesticides will be located in the heart of New York. Anti-Smog is a project for one of industrial districts in Paris (see Fig. 4) [1]. A structure whose surface is coated in titanium dioxide will efficiently reduce the amount of

Fig. 4. Anti-Smog, Paris, Vincent Callebaut
– source: http://portal.architectkrakrajobrazu.info

smog in the air. Modern architecture is supposed to be not only energetically self sufficient but also contribute to removing toxic pollutants from the air, cleaning water in nearby reservoirs or using rainwater for technical purposes.

The architect calls his work an "organic parasite" placed in a post-industrial environment full of both still operating and already abandoned factories. It will consist of two main parts. The "Solar Drop" perched over an unused railroad tracks on de l'Ourcq canal – an elliptical structure resembling rugby ball which, in compliance with the requirements of ecological architecture, will have hundreds of photovoltaic panels supplying necessary energy and systems to collect rainwater which can be used e.g. to flush toilets or clean photocells. What is, however, truly distinctive about the project by the Belgian designer is its exterior coated in titanium dioxide which, according to the author, will reduce the level of airborne pollutants and contaminants. In its reaction with smog it will break down organics and consequently clean the atmosphere. Inside the "drop" there will be public spaces and a huge exhibition hall – everything designed around a central garden full of vegetation. The other building in the ecological compound is a 45 m tall "Wind Tower" with an art gallery and a skytop garden with a spiral path leading to it. The name of the building derives from the name of special vertical axis wind turbines used in its construction that operate like the Darrieus wind turbine[5]. The Tower will be coverd with LED screens to display news. Inspired by the shape of a water lily, Vincent Callebaut designed the Lilypad – a completely self-sufficient floating eco-city. This visionary urban agglomeration will be adapted to meet the need of contemporary civilization. It will have apartments, gardens, shopping centers, places for recreation and entertainment. The project is a vision of an ecological city of the future. Born in 1977 in Belgium, Vincent Callebaut expresses in his projects the ideas of ecological human life spaces needed by the 21st century information society. This is also expressed by the Perfumed Jungle as a reminiscence of jungle located in the

[5] The Derrieus turbine – sometime called an *eggbeater* is one of two main types of vertical axis wind turbines (VAWT). Patented by Georges Darrieus in 1931.

Source: http://pl.wikipedia.org/wiki/Turbina_Darrieusa

Fig. 5. Eco Boulevard, Ecosistema Urbano – source: http://www.plataformaarquitectura.cl

Fig. 6. Penang Peaks, Michael Sorkin, Makoto Okazaki, B. Degn, Y. Koda – source: http://sorkinstudio.net/PenangPeaks.htm

harbor. The project implements the assumption of green areas provided to the residents of Hong Kong for recreation, relax and entertainment. It may also house offices and other facilities.

Architects from Ecosistema Urbano created a project of an ecological urban space. The designers of Eco Boulevard, in Vallecas, a suburb of Madrid, assumed that it would serve two purposes: an ecological filter and a place to stimulate social activity. They deliberately chose the form of an open pavilion that can be freely used by the residents of Vallecas (see Fig. 5) [1]. It also serves as a city amphitheater to hold concerts and performances as well as a meeting place for the residents of the district. Eco Boulevard is a self-sufficient structure fitted with photovoltaic fuel cells. On individual floors there are potted plants to filter the air in the district. The most interesting effect was created inside the pavilion where the air temperature is lower than outside by 8 to 10°C.

Architecture of the 21st century evidently evolves in the direction of ecological ideas, maintaining modern appearance and application of the latest technologies. This is confirmed by Rafflesia Zero Energy House from Kuala Lumpur in Malaysia, Zoki Zoli or Elm Park in Dublin, Ireland designed by Bucholz McEvoy Architects and California Academy of Sciences in San Francisco. Global solutions for cities such as Penang Peaks in Malaysia by Michael Sorkin Studio (see Fig. 6) or Shenzhen Logistic City in China, by JDS-Julien de Smedt architects are more and more popular [2].

It is impossible to describe all examples which would provide the answer to the question asked earlier: *Is ecological and energy efficient architecture only a fashion or temporary trend caused by the problems with global natural resources or architectural culture growing from the receptivity to the ideas of eco-philosophy and care for future generations as a vision of the future?* One can conclude that although contemporary architecture is a deliberate direction inspired by the ideas of eco-philosophy, however, it still applies the latest information technologies and technical solutions. The examples of projects presented above as well as architectural concepts define the vision of the future, respecting the context of the place and the natural environment as well as show deep ecological concern for future generations.

References

[1] Jodidio P., *Green Architecture Now!*, Tashen GMBH, Cologne 2009.

[2] Van Uffeln C., *Ecological Architecture*, Braun Publishing AG, Berlin 2009.

[3] Wines J., *Zielona Architectura*, Taschen/TMC Art., Cologne 2008.

Architektura ekologiczna i energooszczędna nowym kierunkiem kultury architektonicznej

Przedmiotem artykułu jest architektura ekologiczna i energooszczędna jako odpowiedź na wzrastające zapotrzebowanie i tendencje w nowoczesnej wizji architektury. Kreowanie architektury przy użyciu odpowiednich materiałów oraz stosowanie zintegrowanych systemów energooszczędnych z wykorzystaniem odnawialnych źródeł energii staje się nowym zjawiskiem kulturowym. Artykuł podaje przykłady ekokultury architektonicznej i odpowiada na pytanie czy jest to moda obecnych czasów, czy powszechny kierunek kultury architektonicznej.

Keywords: ecological and energy efficient architecture

Słowa kluczowe: architektura ekologiczna i energooszczędna

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Modernization and development of the Central Museum of Textiles in Łódź

The Central Museum of Textiles has been on the cultural map of Łódź since 1950s and it constitutes an example of a museum institution which is in constant progress and still enriches its offer. CMW (Polish acronym of the name) is an exceptional institution – not without reason it was created in the greatest Polish centre of the textile industry called 'Polish Manchester', and in this way it emphasizes the specific character of Łódź by documenting its industrial tradition, with time becoming a distinctive feature of the city. Also the location of the museum is symbolic – it is housed in the town's oldest, attractively located factory consisting of many departments whose architecture is so extraordinary that it is nowadays considered as one of the most beautiful examples of the industrial architecture in Poland.

As a public institution, the Central Museum of Textiles plays many important roles and fulfils various tasks, has cognitive functions adapted to changing requirements and expectations and it encourages visitors to enjoy its rich program in many dimensions. Each visitor may choose their own sightseeing path by focusing attention on buildings, their construction, architecture, details… A visitor can admire the size and space of old factory halls, can look at machines and try to understand how they functioned and can learn about history and development of the textile industry. Finally, visitors can admire fabrics, fashion and works of art; also, in the near future it will be possible to enjoy the virtual world of technology and art… All this can be found in that one exceptional place on famous Piotrkowska Street.

The first important element is the very place – location of the museum, factory buildings and the adjoining, designed by us, wooden architecture open-air museum. Due to their unique character, these structures in themselves became almost museum exhibits in the developing city tissue. The fact that these buildings were revitalized and they are now housing cultural institutions contributed to the protection of the original factory buildings and typical wooden residential buildings, which are so important in the history of the industrial city. Thus, the museum was turned into the symbol of great respect for the continuity of local urban and architectural tradition, which can be felt by visitors who analyze in detail the particular structures.

Another cognitive element is the method of adapting interiors and their adjustment to the new requirements. Wandering around halls, floors and buildings, visitors have a unique opportunity to see the typical 19th century factory interiors – their construction, overall dimensions and characteristic space, they can witness the subsequent phases of the textile factory development, imagine what old workplaces looked like and thanks to the presentation of textile industry tools and equipment, they even have the chance to observe the production process. By documenting the textile industry development, the museum became the guardian of memory about the industrial revolution times, about the era of formation of Łódź and its factories and it is also the witness of history, thought and technology development and the witness of human labour as well…

The enormous factory halls also perform another role – they constitute the place where various contemporary and historic objects of art are exhibited and presented. In this way, the museum combines the industrial tradition of the city with modern times, while the exhibitions held in the museum provide the visitors with a chance to admire an exhibit, work of art, effect of artist's thoughts and activities. The museum is proud to have one of the greatest collections of industrial and metric fabrics as well as printed, harness and Jacquard ones, it has numerous ready patterns, and it archives projects, sketches, technical drawings and photographs of fabrics. The collections are an excellent source of knowledge about textile technolo-

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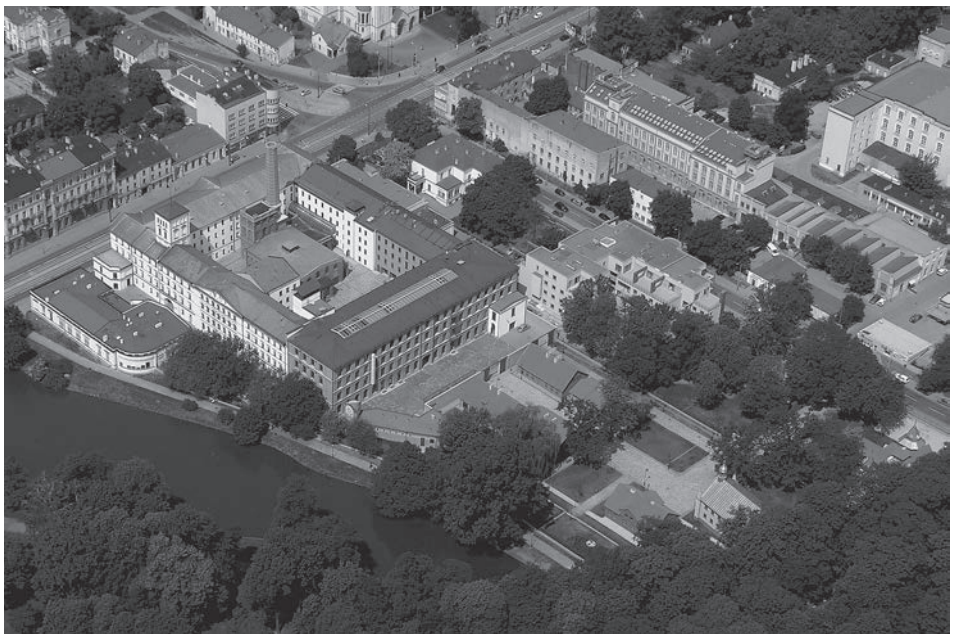

Fig. 1. The Central Museum of Textiles and Open-air Museum of Łódź Wooden Architecture. Photo by Wiesław Stępień

gies, current changes in pattern designing of fabric and the process of formation of trends and fashions. The most prestigious periodic exhibition to be held in the CMW is the International Fabric Triennale, which has been organized since 1972 and it is the oldest and greatest international exhibition of this type that promotes a unique fabric and 'the art of the yarn' in a broader context. The museum designated the area of seven thousand square meters in total for the exhibition purposes and there have been almost one thousand exhibitions organized since the museum was established…

The exhibitions organized in the museum give the visitors a chance to see the exhibits, while in the design of the modernized boiler room we suggest a new way of presentation and a different interior organization. The main purpose of the adaptation of the building is to create an original space and a modern structure based on the 21st-century technology which is addressed to a new recipient.

Apart from its statutory activity, the CMW also constitutes an attractive 'active' public space, resilient centre, adapted to various creative and cultural activities. It hosts numerous events and periodic presentations – starting from the graduation banquet of Academy of Art students, fashion shows such as Fashion Week, Comics and Games Festival and finally symposia, workshops and concerts.

It has taken many years to introduce these changes and create the present state of the CMW… This institution developed gradually but consequently and thus it was turned into a significant institution and the centre of great importance to the Polish culture.

The history of factory buildings, which are now part of the CMW, was started in 1828 when Ludwik Geyer arrived there from Saxony to occupy the attractive areas situated on Piotrkowska Street, the main road of the developing city, on the corner of Górny Rynek next to the picturesque pond created on the Jasień River. In the years 1835–1837 the first monumental factory building was constructed on the scale never seen before; this building was the seat of a spinning mill, weaving mill and printing house. The structure was based on the English solutions; it was given 26-axis white plastered classicist façade, which was not typical of factory construction and it contributed to its name: 'White Factory', which expression is in use until today.

In 1838 the boiler room was built along with the northern wing and ten years later the southern wing – a four-storey spinning mill situated by the pond on the Jasień River and finally in 1886 the eastern wing was built of bricks, which significantly differed from the others. In the meantime, the buildings were complemented by additional extensions and elements thanks to which an original complex of various buildings was created, equipped with water and dust towers situated around romantic, irregular and cobwebbed yard. Through such evolution, a dense quadrilateral building complex was formed – so untypical as for a textile plant and unusual for the Łódź city tissue, making the factory similar to a fortress. The Geyer's factory is a unique place also for other reasons: in the factory boiler room the first steam machine in Łódź was installed; in was here that the first smokestack in town was built, which is part of Piotrkowska Street scenery until today; finally, in 1907 the factory bathhouse was erected – this is one of the first buildings of this type in Łódź and the only one preserved until now.

After the Second World War and the nationalization, the former Ludwik Geyer factory was used by the Cotton Industry Works 'Eskimo' until 1990; in the end this plant was declared bankrupt, which took place in 2002.

The idea of establishing a museum of textiles appeared already in 1946. In 1952 at the Museum of Art, the Weaving Department was created which after 1955 got its own seat and in 1960 the independent Museum of Weaving History was created; in 1975 the name was finally changed into the Central Museum of Textiles.

Fig. 2. Open-air Museum of Łódź Wooden Architecture

In the oldest buildings of the spinning mill and Geyer weaving factory a new city institution was created in the 1950s – the Weaving Department of the Museum of Art. The location of the cultural institution on the territory of the unique factory complex, which had unusual historical and artistic values, was symbolic and gave an opportunity for favourable functioning and perspective development of the museum. Reconstruction of buildings in the early post-war years resulted in the fact that the museum in a way became a pioneer in adapting industrial structures for exhibition functions – the process of rebuilding the western wing was probably the first in Poland and doubtless one of the first post-industrial architecture reconstructions for museum purposes in the world.

The CMW gradually took over the next buildings – in the western and southern production buildings with wooden structures, huge and spacious exhibition halls were arranged successively, while in the southern building – technical rooms, workshops of textile preservation and conference rooms. The buildings were connected and the transport between particular storeys and functional places was provided. The first reconstruction and building works started in the oldest western wing already in 1958 but they were limited to the adaptation of big production halls for the needs of the museum exhibitions; thanks to this reconstruction, the most valuable building structure was preserved and the old 'gloomy' appearance of authentic halls with low storeys and a dense system of wooden supports was maintained in one-room interiors. In the years 1962–1964, according to the project of Professor H. Jaworowski, the northern building was rebuilt; in the years 1972–1975 in the northern corner of the western building a new entrance with a hall and open staircase was created and in 1981 works in the boiler room started; in the years 1989–1992 the southern wing was reconstructed.

After the liquidation of 'Eskimo' Factory in 2002, the CMW received the last element of buildings – a devastated eastern wing which was not used for 12 years and whose revitalization was supposed to be an opportunity to integrate and modernize the whole complex of post-factory museum buildings.

In March 2002 the authorities invited tenders to prepare an architectural concept of the eastern wing adaptation and land development. On winning the first prize, we made projects which included rebuilding of the eastern wing along with the modernization of adjacent parts of the buildings, adaptation of the old factory bathhouse, and arrangement of the inner yard according to the project of Open-air Museum of Łódź Wooden Architecture as well as land development of the museum surroundings. The realization of our projects from 2002 brought about a diversity of the program & space offer and museum exhibition; at the same time, it became an example of a different approach to revitalization of industrial buildings. Revitalization of the eastern wing and bathhouse constitutes an example of creative rebuilding of structures subordinated to the exposition of the industrial character of interiors; a planned conversion of the boiler room into the multimedia museum is the example of making use of interiors deprived of original elements in order to introduce new functions and stylistics, while the open-air museum is the result of relocation which constitutes a method of wooden structures protection which are endangered in the city space development.

The basic purpose of the museum modernization was the improvement of the functional system of the complex, enrichment of its program offer and finally integration of buildings with the surroundings, which we managed to obtain by means of exposing the eastern wing to the first-rate role as well as the representative and entrance function. The change in the entrance location resulted in the change of the urban arrangement and functional reorganization of the whole museum; in this way, it gained a representative entrance zone and not existing earlier yard at the side of the city park, which was enriched

Fig. 3. Open-air Museum of Łódź Wooden Architecture

with the Open-air Museum. Thanks to the new space organization, the open-air museum became an integral part of the museum – the first 'exhibit' which a visitor can admire.

At the turn of the 1950s, Krystyna Kondratiukowa – the founder and first director of the museum – wanted to create the open-air museum of city wooden architecture in the part of the nearby park. This idea was made concrete in the 1970s, however, its realization took place at the beginning of the next century…

The imperative idea of creating the open-air museum was protection and preservation of the 19th-century typical wooden houses and sacral buildings which were becoming rarer and rarer in Łódź agglomeration. In the open-air museum there were eight various historical buildings translocated from Łódź and the surroundings: five living quarters for weavers and clothiers (19th century), a summer villa (beginnings of the 20th century), a church (former Protestant church) and a tram stop (beginnings of the 20th century). This complex, which was created by us, constitutes the first in Poland open-air museum of urban architecture. Wooden buildings were dismantled, restored and then put together again on the territory of the open-air museum; the original appearance and facades colours as well as the arrangement of rooms were restored (which dispelled a myth that the 19th-century Łódź was grey and dirty). The objects in the open-air museum are not only exhibits but they are adapted to fulfil different functions; they create a space which is live and attractive for the visitors. St. Andrew Bobola Church was consecrated once again and wedding ceremonies already take place there. The complement of the open-air museum development con-

Fig. 4. Eastern building and dust tower from the side of the inner yard direction

Fig. 5. Two-storey exhibition hall in the eastern wing; Triennial of Fabric 2010

stitutes a revitalized former big factory bath house where a museum coffee shop is supposed to be situated; the area was enriched with the exhibition of historical technical devices and elements of small architecture creating in this way picturesque places which became photographic locations willingly visited by people.

The space composition of the open-air museum referring to historical urban structures of Łódź is based on the rectangular net which additionally arranges the space and emphasizes a newly created entrance zone. The element which organizes the space arrangement is the longitudinal axis of the museum buildings on which particular elements of the urban structure were placed – the inner yard with the boiler room, museum buildings, entrance square with the old bathhouse and the complex of historic wooden buildings of the open-air museum situated along the so called 'Łódź Street'.

According to our project, in the eastern wing which adjoins the cast-iron yard there is a representative entrance hall whose favourable location ensures a convenient entrance to the exhibition spaces of the southern and western wing as well as to the conference rooms and a technical equipment room which are situated in the northern building. Thanks to this rebuilding, it is now possible to use all the buildings situated around the inner yard; walking through particular rooms it is possible to observe the yard from different perspectives.

The main goal of rebuilding the eastern wing was to maintain the industrial character of the building according to its original purpose; therefore, the imperative aim was to make an impression as if the rooms were one-space and open interiors of the old production halls. Intensification of this impression results from the en suite arrangement of rooms and application of transparent and neutral glass divisions which allow the visitors to see particular rooms; visitors who walk on the open staircase hung in the atrium, can observe the interiors from new perspectives. Thanks to these new spaces it was possible to make a spectacular exhibition of fabrics of great sizes, which was earlier difficult to make.

Adaptation of the boiler room shall complete the revitalization of 'White Factory' buildings complex and enrich the exhibition space as well as ensure additional transport inside the complex. There will be a hidden surprise in the brick boiler room – the external cover shall include rooms and objects which will form the protection for illusions and a peculiar theatre hidden in the inner labyrinth spaces. A visitor is supposed to become a participant of spectacles which are created from virtual 'artificial' reality, performances generated on the basis of arranged light scenes and interactive projections. The hero of spectacles shall be the textile industry – its history, development, buildings and factories, equipment and machines as well as the product, effects of their work and man's activities – thread, weft, fabric and finally a work of art… A spectator will be able to learn about all these things thanks to the multi-media presentations, computer programs, logic games; he will be able to familiarize himself with the CMW collections and see the work of huge production devices.

The most satisfying for us is the fact that the eastern wing received the title 'The Best Interior of the Year 2008' and the adaptation of the museum and the open-air museum got a honorable mention of Polish Union of Urbanists in 2009 and a special prize of Polish Urbanists Association in Łódź in the category of 'Newly created public space'.

Thanks to the revitalization, which has been carried out in recent years, the museum became an important place not only because of the unique collections documenting the history of the textile industry or collections of art, but it also became an attractive public space where concerts, shows and ceremonies important for the city are organized. The new space created new perspectives and we do hope that the Central Museum of Textiles will be developing in future…

Przebudowa i rozwój Centralnego Muzeum Włókiennictwa w Łodzi

Centralne Muzeum Włókiennictwa, mieszczące się w zabudowaniach tzw. Białej Fabryki Ludwika Geyera w Łodzi, stanowi przykład stale rozwijającej się i wzbogacającej swa ofertę jednostki muzealnej. Muzeum dokumentuje rozwój przemysłu włókienniczego, eksponuje elementy historycznego wyposażenia technicznego oraz promuje sztukę współczesną związaną z tkaniną unikatową, łącząc w ten sposób industrialną tradycję miasta ze współczesnością.

W artykule zaprezentowano projekty autorskie z lat 2002–2010, dotyczące rewitalizacji Centralnego Muzeum Włókiennictwa, dzięki którym zostały zmodernizowane dziewiętnastowieczne zabudowania, zaadaptowana d. łaźnia zakładowa oraz powstał Skansen Łódzkiej Drewnianej Architektury Miejskiej. Nadrzędnym celem przekształceń było poszerzenie roli muzeum jako miejsca kontaktu z kulturą, sztuką i zabytkami, miejsca inicjującego różnorodną działalność, stworzenie interesującej wieloelementowej przestrzeni publicznej oraz wykreowanie nowych relacji między muzeum a otoczeniem.

Key words: Łódź, museum design

Słowa kluczowe: Łódź, projekt muzeum

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Architectural remedy for love. City and architecture in polish films of the 1960s

Fig. 1. Joanna – main character of the film *Lekarstwo na miłość* (*Remedy for love*) against the background of the modern architecture – the terrace of CDT. Courtesy of The National Film Stock Library, Warszawa, Photo No. F-2306–171

Situation of the Polish cinema in the 1960s

Ewa Mizerska in the Film Quarterly in 1999 wrote: *'From the very beginning, cinema is an art characteristic of a great city – for many decades the majority of its viewers originated from those who, according to the Marxist terminology, are defined as an industrial working class, which meant poor people who could not afford a better entertainment'*[1] [5]. For Poland, the 1960s were the times of getting back to normal after the period of Socialist realism[2] [9] which, as we know, in the years 1948–1956 dominated many areas of life, including architecture and film.

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[1] Mizerska E., *Janusowe oblicze filmowego miasta*, Kwartalnik Filmowy, No. 28/1999, p. 39.

[2] Leopold Tyrmand (1920–1985) in his journal wrote about the Socialist realism architecture: *Communists believe that they are creating the most wonderful epoch in human history and that this era must find its expression in huge architectural forms, full of monumentality and pathos*. (…). *Of course – functionalism, which expresses material content and defines exactly the usefulness of a given object for man, is devoid of monumentality and pathos; therefore, it was considered as hostile, destructive, killingly monotonous and inhumane. Theoreticians of the Socialist realism architecture had to look for alliance in the past as the presence did not confirm the legitimacy of their postulates and proved these claims to be reactive and anti-artistic*. Tyrmand L., *Dziennik 1954*, Original Version, Publishing House Tentem, Warszawa 1995, p. 200.

At this stage we would like to present the situation of the Polish cinema and film in the period which was called the small stabilization[3]. After the year 1956 some democratic changes were introduced in the country and this became an impulse for creating broader schemes of film activity, where the film was supposed to reflect the reality as well as describe and make a comment about the present times. Unfortunately, this short period of freedom came to a swift end. The existing system of censorship made it impossible for the film makers to tackle the subjects connected with the current social and political situation. This contributed to the production of numerous film adaptations of national literature canons and entertaining films – film comedies[4]. ln the years 1961–1966, 119 films were produced in Poland; as many as 24 out of this number were classed as comedies[5][1]. The film title which is included in the title of this article – Jan Batory's 1966 production named *Remedy for love*[6] – is an example of this genre.

[3] Name of this period in the most recent Polish history comes from the play written by Tadeusz Różewicz *Świadkowie, albo nasza mała stabilizacja* (1964). The play can be characterized as minimalism of requirements and passivity of actions. Różewicz writes about historical and cultural situation of the 1960s. The characters in the play do notice many imperfections of the surrounding reality. However, they do not want to change it because they are simply afraid to lose the acquired material values.

[4] Haltof M., *Kino polskie*, Publishing House Słowa/Obraz/Terytoria, Gdańsk 2004, p. 135.

[5] Haltof M., *Kino polskie*, Publishing House Słowa/Obraz/Terytoria, Gdańsk 2004, p. 176.

[6] The screenplay was based upon the book by Joanna Chmielewska under the title *Klin*. Director: Jan Batory, screenplay by Joanna Chmielewska, Jan Batory, starring: main characters; Kalina Jędrusik (main character, Joanna), Krystyna Sienkiewicz (Janka, Joanna's friend), Wieńczysław Gliński (Janusz, boss of money forgers' gang), Andrzej Łapicki (captain of Militia).

Modernistic architecture and the plot of the film Remedy for love

The plot of the film is not very complicated. Joanna, an architect, lives a pretty boring life, shared between work in the architects' office and dates with her lover [Janusz, boss of money forgers' gang]. One day, when she is trying to write an article about esthetics in interiors, she answers an apparently insignificant call. Since then things diverge from their ordinary course. We desire to solve the mystery – who the mysterious Honorata is, about whom the people who call Joanna keep asking. The main character walks around the city (Warsaw, as it is the case here) together with her friend Janka to find the solution and a remedy for unhappy love, which she finds in the arms of a militia officer (Andrzej Łapicki). Many times the film story develops in the space of a modern city, complemented with real life buildings. From the historical viewpoint, many of them entered the canon of the Polish architecture, like Central Department Store CDT (1949–1952), *perfect in the style, but with terrible finishing,* according to the *Dziennik 1954* by Leopold Tyrmand[7], Supersam (1952–1962) or Eastern Wall (1958–1968) [9]. Modern architecture and the city became a frequent motif used in Polish films in the 1960s. Flat and simple building facades, wide perspectives of modern housing estates became the mark of the new times, the times so different from the previous era. Modern architecture became an ideal background for the creation of imaginary stories related to real life in a socialist country. Krzysztof Kornacki wrote about the re-

[7] Tyrmand L., *Dziennik 1954*, Original Version, Publishing House Tentem, Warszawa 1995, p. 203.

Fig. 2 Joanna and Janka in front of the Supersam. Courtesy of The National Film Stock Library, Warszawa, Photo No. F-2306–279

Fig. 3 Joanna and Janka while walking in the passage Ściana Wschodnia (Eastern Wall). Courtesy of The National Film Stock Library, Warszawa, Photo No. F-2306–388

ality created in the Polish film of the 1960s: *the small stabilization cinema created the image of a non-existing country*[8] [2].

Modern architecture in the film *Remedy for love* comprises the leading examples of the Polish modernism. The first building to be presented is Central Department Store CDT designed by Zbigniew Ignatowicz and Jerzy Romański. This building in its form corresponds to famous examples of European trade architecture and in the film it is becoming the background of the meeting of two main characters: Joanna and the Militia captain. The café with a characteristic balcony hanging above the street becomes a certain stage on which a performance is acted: the performance involves the city life with all its aspects, people moving and looking at one another, having conversations with the sound of cups and plates on the tables in the background. The trading part of the mass of the CDT building protruding above the balcony complements it naturally, at the same time framing the street in a superb way. The minimalist architecture of the building is used as a background for the film plot. The architectural form of the building is by no means dominant in the film, however, without its sublimeness and reticence each performed scene would be deprived of its thrilling sensuality.

The building of Supersam[9] (supermarket) in the film space plays the role of the main characters' – Joanna and Janka – meeting place. Its original architecture was used in a few sequences of the film, among others, the telephone conversation of Janka and Joanna. It is also a point from which they start the further search for solving the mystery. The futuristic structure with the characteristic inscription SUPERSAM became a strongly recognized motif shown in the film. Undoubtedly, the fact that this building forms the background of the film was a sign of respect towards modernistic architecture on the one hand and it proved how important it was for the Warsaw inhabitants' awareness on the other. As I mentioned before, modernistic architecture faithfully reflected the spirit of the 1960s. The modern form of the building, so different from the Socialist realism lacelike motifs, wonderfully fit the existing iconosphere of the city. I my opinion, the Supersam architecture was supposed to confirm the thesis about the openness of Poland and Polish architecture to global tendencies. The director Jan Batory used the building as a modern counterpoint in the space of the city and we can assume that the building's architecture again, as before, became a natural scenery where the film's characters have their adventures.

French director Jacques Tati (1907–1982) was quite reserved towards modern architecture; in an interview which he gave in 1958 he said: *I do not like uniformity at all* (…) *To be honest, today it is really difficult to tell the difference between a food store and a pharmacy*[10] [8]. Tati's films, especially the series of Mr. Hulot's adventures (*Mr. Hulot's Holidays* 1953, or *My Uncle* 1958) presented the image of modern architecture seen by the eyes of a person who does not fully understand it. For him, it becomes a series of misunderstandings and constant problems with how to find himself in its interiors. The Batory's film has a stylistic concept which is different from the French one. The modern architecture, which is the background of the film, is contrasted with the historical structure of the city and the architecture of the past. Joanna's flat is situated in an old tenement house, (however, her window overlooks a modern housing estate) and the place where the

[8] Kornacki K., *Bohater w przydeptanych kapciach*, [w:] *Człowiek z ekranu. Z antropologii postaci filmowej*, M. Jankun-Dopartowa, M. Przylipiak (eds.), Kraków 1996, p. 77.

[9] The building was designed by Maciej Krasiński; for the first time in Poland an innovative construction of a hanging roof was employed here. The building was pulled down in December 2006 and replaced by an office block designed by Stefan Kuryłowicz.

[10] Penz F., *Architektura w filmach Jacques'a Tati*, Kwartalnik Filmowy, No. 28/1999, p. 113.

Fig. 4. Janka in the cafe on the CDT terrace. In the background the characteristic BGK building designed in 1931 by Rudolf Świerczyński. Courtesy of The National Film Stock Library, Warszawa, Photo No. F-2306–164

forged banknotes are produced is located in a dingy basement. These scenes which are set in the space of the city are marked with an 'invisible' inscription: novelty, sun, progress, modernism.

The real architecture of the 'Eastern Wall'[11] buildings became an illusory space where Joanna and Janka – the main characters – are walking. Their figures are reflected in the shopping windows behind which numerous consumer goods are housed. In this way, multiplication of space shown by Jan Batory in this particular fragment, reminds the viewer of motifs from Jacques Tati's films, for example *Mr. Hulot's Holidays* 1953, or *My Uncle* 1958, where glass and transparency were employed by the director as a universally defined symbol of modern times.

Modernity in the film *Remedy for love* creates an illusory image of architecture and the city on the one hand, while on the other it equips the architecture with non-material features. The main characters' figures reflected in the shopping windows lose their material form for a moment. We could even say that in this way they assume the form of modernistic caryatids who do not support anything, but with their figures they carry the modern architecture into a non-material space. To sum up this part of my reflections, I would like to quote the words of Francois Penz: *Film as the registration* (…) *of vision constitutes a mirror in which architects can see the reflection of buildings and the city. However, they may not like this reflection*[12] [8].

[11] Authors: Zbigniew Karpiński, Jan Klewin, Andrzej Kaliszewski.

[12] Penz F., *Architektura w filmach Jacques'a Tati*, Kwartalnik Filmowy, No. 28/1999, p.115.

Modern city in the film Remedy for love

In many films made in the 1960s we can observe the process of creating a non-existing image of the city space[13]. It is a formally distorted image which is adapted for the needs of the screenplay. The characters in those films move around against the scenery of real architecture, yet its real context is usually neglected to a large extent. The city in the film *Remedy for love* can be divided into two spaces: a modernistic or modern one in which good film characters are seen and an old one which is reserved for the people whose dealings are not quite clear. The main seat of the money forgers' gang is situated in the basement of a dilapidated tenement house, which is not a nice place, rather dark and with no sunshine. On the other hand, the good city is literally flooded with sunshine, with broad perspectives of the film city and no traces of the past [except for the scenes at the old town market place in Warsaw]. The context is defined in a way that has no connection with the reality, the viewer gets the impression that the film plot develops in two parallel spatial layers: one spins the film story, the other is the space where urban interior and modern buildings are on the foreground.

Each of the chosen film sequences presented in this article uses the modern architecture and the city space in a different way for the purpose of showing or complementing the story of the film. Fictional stories which are set in the

[13] The 1920s were the times of fascination with the idea of the city in the film picture. It was then that such significant films were made as: *Paris sleeps* by Rene Clair (1924), *Metropolis* by Fritz Lang (1926) or *Berlin, symphony of the great city* (1927) by Walter Ruttmann. Each of those films pictures the city as an independent spatial unit which is ruled by its own rights and in a sense uses the human genius to create its own power [6].

real space become a sort of a sign or symbol of a new spatial reality of the Polish cities at the beginning of the 1960s. A certain unreality and location of the plot of the film in the existing reality give the film picture a new dimension.

From the viewpoint of an architectural researcher, it seems really important to analyze the aforementioned phenomenon while examining the reality in which fiction and certain unreality are part of the created spatial and visual iconosphere of the city. To sum up these reflections upon the city in the film, I would like to quote the words of Ewa Mizerska who defined the image of the city in the film in the following way: *The cinema* (…) *could present the city faithfully, almost scientifically (due to its photographic nature),* (…)*. In this regard, a particularly valuable technical means was montage, thanks to which an artist was able to move instantly from the centre to the suburbs, from the inside of the building onto the street, from the roof of the skyscraper to the basement*[14] [5]. City and architecture in the Polish film of the 1960s became determinants of progress and development. They provided opportunities to create the image of Poland as a country which is modern and lives up to the Western world. The image of city and architecture recorded on the film tape can be interpreted as another stage in the discussion on the phenomenon of memory in architecture. Building museums, archives, historical research, caring about the national heritage, including the film heritage – all these actions prove that we deal with the culture that does not want to forget and cannot forget. Walter Benjamin said that history and memory together mean a search for dominant force. Memory is a fragment of the past which enters the present times in a way that is uncontrolled and expressive and thanks to this an individual is able to sense hegemony of history [6]. A film picture became a record of an epoch and at the same time provided a possibility to commemorate architectural structures which are significant for the Polish architecture history in their natural environment. This means the city, combined with human sensations, desires and expectations for a new bright future.

[14] Mizerska E., *Janusowe oblicze filmowego miasta*, Kwartalnik Filmowy, No. 28/1999, p. 39.

References

[1] Haltof M., *Kino polskie*, Publishing House Słowa/Obraz/Terytoria, Gdańsk 2004.

[2] Kornacki K., *Bohater w przydeptanych kapciach*, [in:] *Człowiek z ekranu. Z antropologii postaci filmowej*, M. Jankun-Dopartowa, M. Przylipiak (eds.), Kraków 1996.

[3] Kurz I., *Twarze w tłumie. Wizerunki bohaterów wyobraźni zbiorowej w kulturze polskiej 1955–1969*, Świat Literacki, Warszawa 2005.

[4] Leśniakowska M., *Architektura w Warszawie w latach 1945–1965*, Arkada Pracownia Historii Sztuki, Warsaw 2003.

[5] Mizerska E., *Janusowe oblicze filmowego miasta*, Kwartalnik Filmowy, No. 28/1999.

[6] Nadolny A., *Memory architecture. We may live without it, but we can't remember without it*, Zeszyty Naukowe Politechniki Poznańskiej, seria Architektura i Urbanistyka, Zeszyt 17/2009, Poznań 2009.

[7] Nadolny A., *Miasto w filmie na przykładzie „Metropolis" Fritza Langa*, Zeszyty Naukowe Politechniki Poznańskiej, seria Architektura i Urbanistyka, Zeszyt 6/2006, Poznań 2006.

[8] Penz F., *Architektura w filmach Jacques'a Tati*, Kwartalnik Filmowy, No. 28/1999.

[9] Tyrmand L., *Dziennik 1954*. Original Version, Publishing House Tenten, Warszawa 1995.

Architektoniczne lekarstwo na miłość. Miasto i architektura w polskim filmie lat 60. XX wieku

Architektura i miasto modernistyczne stały się w latach 60. XX wieku szeroko wykorzystywanym motywem w polskim filmie. Płaskie i oszczędne elewacje budynków, szerokie perspektywy nowoczesnych osiedli były wyznacznikiem nowych czasów, tak odmiennych od przeszłości. Architektura modernistyczna stała się doskonałym tłem dla tworzenia fikcji w odniesieniu do realnego życia w kraju socjalistycznym. W wielu filmach z tego okresu mamy do czynienia z tworzeniem nierzeczywistego obrazu przestrzeni miasta. Jest to formalnie zniekształcony obraz dostosowywany do potrzeb scenariusza. Bohaterowie obrazów filmowych poruszają się w scenerii realnej architektury, ale z rzeczywistym kontekstem ma to bardzo mało wspólnego. Zjawisko kontekstu jest definiowane w sposób oderwany od rzeczywistości, odnosi się wrażenie, że fabuła filmu toczy się w dwóch równoległych przestrzeniach: pierwsza z nich opowiada historię poruszaną w filmie, druga jest przestrzenią, w której pierwszoplanową rolę odrywają wnętrza urbanistyczne i nowoczesne budynki. W tytule celowo umieściłem tytuł jednego z filmów z tego okresu *Lekarstwo na miłość* (reż. Jan Batory, 1966). Fabuła filmu jest niezbyt skomplikowana. Pani architekt o imieniu Joanna prowadzi nudne życie, które dzieli między pracę w biurze architektonicznym a spotkania z kochankiem. Pewnego dnia, kiedy próbuje napisać artykuł o estetyce we wnętrzach mieszkalnych odbiera z pozoru nieważny telefon. Od tego momentu nic nie jest tak jak było. Rozpoczyna się walka o rozwiązanie zagadki, kim jest tajemnicza Honorata, o którą pytają ludzie dzwoniący do mieszkania Joanny. Tytułowa Joanna wraz przyjaciółką przemierzają miasto (w tym przypadku Warszawę) w poszukiwaniu rozwiązania zagadki. W wielu miejscach akcja filmu toczy się w przestrzeni modernistycznego miasta, którego dopełnieniem stają się rzeczywiste budynki, takie jak Supersam czy CDT.

Key words: city, architecture, polish films

Słowa kluczowe: miasto, architektura, polskie filmy

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Why photograph architecture? From architectural photography to visualization

The history of photography goes back to the first half of the 19th century. The first known permanent rendition of reality is "View from the Window at Le Gras" (Fig. 1) made by a pioneer of photography, French inventor Joseph N. Niépce in 1826. The quality of that photograph was, however, very poor and that is why it is considered that photography was invented in 1839 when Louis J.M. Daguerre presented his invention, which is called after his name Daguerrotype, to the French Academy of Sciences. The quality of the image in a daguerrotype is very high and it renders a lot of details but it cannot be reproduced. At the same time an English scientist William H.F. Talbot was working on a competitive method of 'recording'. The method developed by him was the beginning of what today is known as positive–negative photography. Talbotype, or calotype, enabled the reproduction of many copies and despite lower quality of fixed images it became more popular. William Herschel was the first to call the new technique of 'recording' photography which soon grew popular among both professionals and amateurs and quickly became a new field of art. Both methods required a very long exposure of a photosensitive material to light and that is why architecture and its static character was an ideal subject of artistic works in the new era [1], [3], [5].

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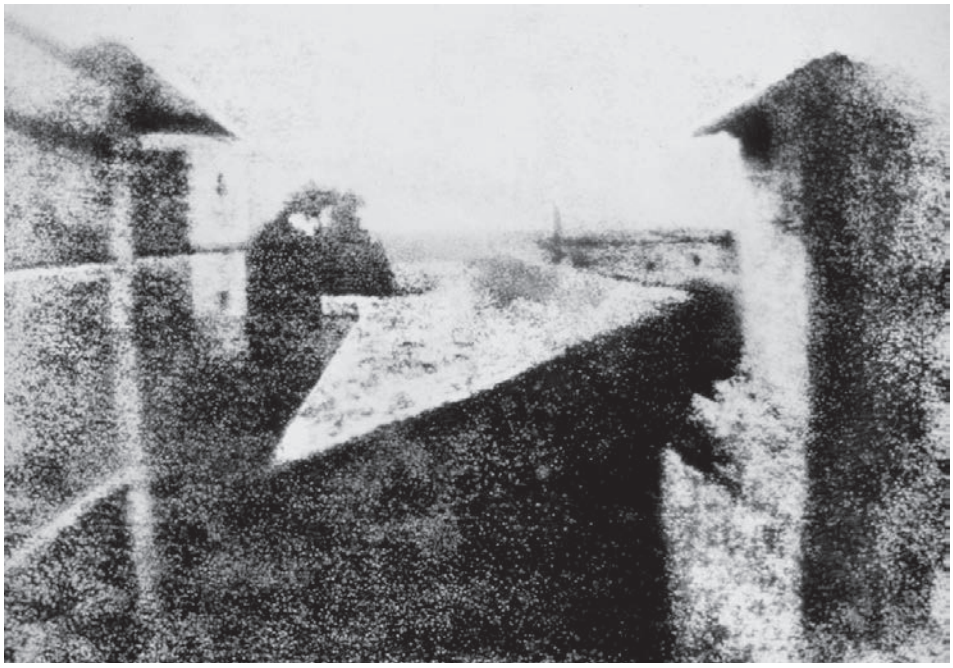

Fig. 1. *View from the Window at Le Gras*, Joseph Nicéphore Niépce. Source: http://commons.wikimedia.org/wiki/File:View_from_the_Window_at_Le_Gras,_Joseph_Nic%C3%A9phore_Ni%C3%A9pce.jpg (access date October 2010)

Fig. 2. “Little Italy 1925”.
Source: http://www.stevestenzel.com/portfolio/rephotography/bridge2large.html

Fig. 3. “Upper Landing 2003”.
Source: http://www.stevestenzel.com/portfolio/rephotography/bridge2large.html

In their book *Architecture Transformed: A History of Photography of Buildings from 1893 to the Present* Robinson and Herschman wrote that originally two styles prevailed in photography of architecture. The first of them: “the elevation” consisted in photographing a building from an elevation to illustrate detail as precisely as possible and render the character of the building, especially its facade. This method showed architecture almost in the same way as an architectural drawing and the photographs were essentially two-dimensional images. The other method: “the perspective” focused on capturing the spatial character of the buildings and emphasizing their three-dimensionality. Buildings were photographed from a corner to show their whole structure. This way of taking photographs stimulated greater creativity, although in the first decades after its discovery photography was treated as a documentation tool and it complemented architectural drawings [5]. As a result of the development of the technique and especially the development of the technology which enabled the reduction of exposure times, it was possible to use photography more freely and more creatively but the photographers were still interested in architecture which was either their main subject or the background in the photographs showing human life. These two examples of use of photography in portraying architecture provoke reflection on how to render in a two-dimensional visual representation of architecture what it really is? Indeed architecture is not only individual buildings but first of all a character of the city, its architectural and non-architectural climate. Architecture is not only the solids, details or proportions captured in a picture; it’s also the spatial relations, atmosphere and impressions which architecture evokes in the viewers as well as the relations with the surrounding area. Jan Gehl wrote that *life between buildings is both more relevant and more interesting to look at in the long run than are any combination of colored concrete and staggered building form* [2]. A question arises then: How to render what is happening in space, and perhaps more importantly, what is happening in time? What we see today is not the same as what it will be tomorrow, and the place where we stood a moment ago provides us with an opportunity to look at the ‘building’ from a totally different perspective than the place where we are going to stand in an hour, a minute or even a second. The contemporary photography of architecture is not only the professional, graphically perfect pictures published in architecture magazines and albums but first of all hundreds of thousands of pictures taken every day by anonymous tourists that are an attempt at capturing architecture as a ‘process’. It’s no coincidence that a lot of cities have special places from where tourists can take pictures or photograph the city skyline. The cognitive value of such pictures sometimes seems greater than that of professional pictures which, as a result of professional ‘enhancement’ treatment, do not show the buildings as they really are, and when we see them in reality our impressions are totally different than those which we have when we look at them in the pictures. When photographing architecture everybody perceives the building which is being framed individually, post-projecting it in their own unique way.

Since the moment when photography was invented not only has the technology changed but first of the very architecture changed. New trends made photographers change the way they look at objects they photograph. Furthermore, many new applications of photography emerged, making it a useful tool in the hands of architects and space explorers. Today, photography is used both as a form of documentation and as an independent method supporting designing and analyzing architecture. Good examples of that would include such independent fields as

orthophotography[1] or photogrammetry[2] as well as the use of photography in qualitative research of human habitat[3]. The Rephotographic Survey Project is an interesting example of the use of photography[4]. This undertaking shall enable the observation and assessment of visual changes which took place in urban space as well as those which take place in front of our eyes (Figs. 2, 3). This kind of initiatives are much appreciated both in Poland[5] and abroad[6] by architects as well as by heritage sites explorers, urban planners, urban sociologists and other researchers of urban life changes.

The development of photography of architecture is not only new applications of a known tool but also great changes in perception and presentation of architecture. The architect has always been required to present the design both technically – with the use of a drawing e.g. a view or a cross section, and as an idea or impression – in the form of a three-dimensional representation. Photography, especially digital photography, has become an excellent tool which is useful in preparing sketches, scale models or ultimately visualizations[7]. Today, visualizations can be treated as a kind of extension of photography and a form of portraying architecture. Today's technology enables the creation of digital models of designed buildings and faithful rendition of their shape, details, texture of used materials and context of the surrounding area. It is also possible to simulate the behavior of buildings both in respect of passing time and changing weather and climate conditions, and even in respect of the masses of people flowing through them. Along with further development of technology the virtual models will surely be more and more precise, which will make it possible to better analyze the impact of planned investments on the surrounding area and possibly on individual users as well. These types of simulations undoubtedly provide a great opportunity to test and experiment with the designed building, improving and adjusting it to meet the needs of future users.

Let's focus, however, on the purely visual aspect of the design process and the perception of digital architecture. The viewers of virtual projects often have doubts whether they see visualizations or pictures of actually existing buildings. The advantages of contemporary digital models and their visualizations include relatively short time needed to make them in comparison with such traditional techniques as sketches or scale models as well as in relation to modern techniques of 3D projection[8]. Additionally, it is relatively easy to modify them, which is their another great advantage. Undoubtedly, such an impression-oriented 'projection' significantly facilitates contact between architects and customers for whom a view or a cross-section is often too complicated to understand.

However, the creation of visualizations which are ubiquitous in today's design process is connected with a serious risk. Digital models and their final visual representation can be easily distorted. It is possible to locate the designed buildings in any place and simulate the context of their surroundings or sun exposure which is impossible in reality. Obviously, this provides unlimited design possibilities but at the same time poses a lot of threat to 'real' design. The viewers of contemporary architecture who are exposed to hundreds of colorful images seem to care less and less for the quality of architecture in respect of technical and functional aspects, focusing more on impressions and merely aesthetic perception of presented buildings. It is disturbing that this issue is also present in architectural competitions where it happens that a properly prepared visualization is a significant advantage.

As a result of introduction of computer aided techniques into the design process, the creation of architecture can be today compared to taking hundreds of photographic shots of an existing building. However, despite its graphic perfection the architectural visualization has some imperfections in comparison to photography of architecture. Visualization seems to be a contradiction of photography which in its original form tried to show the world as it is, whereas visualization has no material representation in real space. It is worth, then, considering if, when designing with the use of modern techniques of visualization, we create places worth being photographed or rather places that only seem to be worth being photographed. A question arises if such a virtual 'building' is indeed architecture, which itself has as many meanings as there are

[1] Orthophotography is used e.g. in the creation of orthophotographic maps which are terrain images obtained by processing a set of photogrammetric pictures (ortophotography) without errors connected with different scale application resulting from vertical deviation of optical axis of the photographic camera and from differences in elevation of different points of the terrain being mapped.

Source: http://encyklopedia.pwn.pl/haslo.php?id=3951990 (access date October 2010).

[2] Photogrammetry is a field of technical sciences dealing with gathering, processing, presentation and storing information (quantitative and qualitative) regarding a given building on the basis of photogrammetric images (photograms) and its digital representation.

Source: http://encyklopedia.pwn.pl/haslo.php?id=3902234 (access date October 2010.)

[3] Compare research in environmental psychology e.g. Augustyn Bańka, *Społeczna psychologia środowiskowa. Wykłady z psychologii* – volume 9, Scholar, Warszawa, 2003.

[4] Rephotography is the act of repeat and comparison photography of the same site with a time lag between the two images. The first documented project in the field of rephotography was "Second View: The Rephotographic Survey Project" by an American photographer Mark Klett in 1977.

Source: http://en.wikipedia.org/wiki/Rephotography (access date October 2010).

[5] http://repoznan2012.pl (access date October 2010).

[6] http://stevestenzel.com/portfolio/rephotography (access date October 2010).

[7] For the purpose of this article it was assumed that architectural visualization is the way of presenting an architectural design with the use of computer projection of reality with the use of three-dimensional graphics tools and software in order to present the vision of a complete project.

[8] This issue requires further explanation; the following technologies can be given as examples: 3D building projection or Virtual Building Explorer.

Source: http://www.projectiononbuildings.com/ (access date October 2010).

Source: http://www.graphisoft.com/products/virtual-building-explorer (access date October 2010).

architects. It is impossible to unequivocally claim that architecture is exclusively an art of shaping space but it is also impossible to extend that term indefinitely. As Kester Rattenbury put it [4], it is worth asking the question if architecture is what actually exists in space, which can be described and photographed, or also what exists only on paper in the form of views, cross sections, models and visualizations. Is what is not subjected to the experiment of being used also architecture? This question, just like the one included in the title, is left without an answer, provoking further deliberations about the cultural significance of images of architecture in the changing world.

References

[1] Akerman J.S., *On the origins of architectural photography,* [in:] Rattenbury K., *This Is Not Architecture,* Routledge, London 2002, pp. 26–36.
[2] Gehl J., *Życie między budynkami,* RAM, Kraków 2009.
[3] Harris M., *Professional Architectural Photography,* Focal Press, Oxford 2002.
[4] Rattenbury K., *This Is Not Architecture,* Routledge, London 2002.
[5] Robinson C., Herschman J., *Architecture Transformed: A History of Photography of Buildings from 1893 to the Present,* MIT Press, Cambridge 1988.

Po co fotografować architekturę? Od fotografii architektury do wizualizacji

Przedmiotem artykułu jest zjawisko „fotografowania" architektury. Nowoczesne metody, takie jak modele 3D i wizualizacje, mogą być pomocne w prezentacji architektury oraz komunikacji pomiędzy architektem a odbiorcą na poziomie pomysłu. Pozostaje jednak pytanie, jak na dwuwymiarowym zdjęciu przekazać to, co dzieje się w trójwymiarowej przestrzeni, a może przede wszystkim w czasie. Jak ukazać ideę dzieła w formie pojedynczego kadru i jak wykorzystać nowoczesne środki przekazu wizualnego do prezentacji architektury jako zagadnienia społecznie istotnego. Co zrobić by promować „dobrą" architekturę wśród „zwykłych" odbiorców i jak ukazać to, co niewidoczne w kontakcie z architekturą.

Keywords: architectural photography, visualization

Słowa kluczowe: fotografia architektury, wizualizacja

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Sustainable spatial policies in managing high-value cultural areas

The Polish social and economic reality, quick structural changes and intensified urban development pose a significant threat for preservation and protection of landscape. The European Landscape Convention [14] ratified by Poland in 2004 specified a definition of landscape, understood as an area integrating natural and cultural components. Polish legislation draws a thick line between regulations concerning natural environment and those dealing with cultural environment. The sole body to be responsible for implementing the Convention provisions was the State Council for Nature Conservation (Państwowa Rada Ochrony Przyrody), which prepared a proposal for amendments in the Polish nature conservation acts [2], environment protection acts [1] and spatial planning and management acts [4][1]. Then again, there is a provision set forth in the act on monuments protection and care [3] which is already offering the broadest available possibilities to protect the cultural and natural landscape in accordance with the requirements and definition of the European Landscape Convention [14] – following the concept of sustainable development and social involvement. Changes in the manner in which the cultural landscape is perceived and in the methods employed to protect its qualities are increasingly defined by factors unrelated to conservation, but connected more with present social needs or economic possibilities being treated as superior aspects in conservation undertakings[2].

At present, the only legal instrument following the ongoing developments is the culture park notion, as it is compliant with the contemporary, UNESCO recommended spatial formula, integrated landscape protection, culture and natural structures shaping the landscape [13].

The aim behind creating a cultural park is to preserve and maintain the features of areas displaying valuable landscape characteristics or their fragments, including the relevant composition and view relations as well as harmonious planning of development both within the park itself and in its surroundings [3]. It is only the cultural park form that allows for comprehensive approach to the issue of valuable area management, serving as a tool for local authorities to supervise such areas by means of protection plans, and consequently by local zoning plans [7].

A cultural park can be established by a commune council by way of a resolution, in which the borders, manner of protection as well as limitations and prohibitions are defined [7]. In today's fragmented spatial structures, delineating clear borders may benefit integration of homogenous parts of a landscape, intensifying its importance and identity, supports conscious management of the area [9], [5].

A novelty in the Polish legal system is the provision allowing for establishment of an "organizational unit for managing a park", which integrates passive protection with management of the cultural resources. These statutory provisions do not precisely define either the formula of the managing body or the range to be covered by a cultural park protection plan – hence allowing room for individual solutions, conditioned by the local characteristics and protection objectives [7].

One of the recommended forms of management with social involvement in case of complicated ownership situations is the intersectoral cooperation, which offers equal chances for sustainable development of local communities. The cultural park formula motivates local authorities to support this type of undertakings, also for the purpose of preservation and promotion of their local heritage. The public-private partnership initiative is gaining sig-

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[1] Provisions of this amendment proposal concerning definition of the landscape, broadening the definition of the landscape, landscape protection definition, implementation of landscape quality standards have not been implemented in the acts being amended [4].

[2] In view of active protection of fortress landscape, a number of primary criteria have been established concerning adaptation, and secondary criteria concerning directions of activities. The primary criteria include: the manner of use in relation to recreational functions, land management decisions, ownership forms, availability of the area in zoning plans. The secondary criteria are the historical and natural as well as other additional qualities. Auxiliary secondary criteria concern such factors as transportation issues and the surroundings [9].

nificant support the EU programmes and is of great relevance in distribution of financial means provided by the Union [5].

Informative and educational activities aiming at local communities and authorities are still insufficient, and erroneous interpretation of the cultural park as a land management form (i.e. 'a green area') and a source of limitations and prohibitions obscuring local development is a social barrier in popularising them. A document prepared in 2005 by a team of the Cracow University of Technology commissioned by the National Centre for Monument Research and Documentation (Krajowy Ośrodek Badań i Dokumentacji Zabytków) entitled *Principles for establishing and management of culture parks, preparing protection plans* [8] is a most exhaustive instruction supporting conservation professionals working on the local level. The study defined a set of criteria that cultural landscapes should meet in order to be qualified for protection when implementing the cultural park formula:

– exceptional cultural value,

– complexity of the structure,

– ability to self-regulate ('systemic' character of the landscape and the related necessity to involve local communities with the entire sphere of social policies to the protection activities).

Fulfillment of the aims facing a cultural park largely depends on the social attitude towards the very idea of protection and on effective resolution of conflicts which may emerge between different groups of space users: private owners, conservators, local governments and inhabitants. One of the principal ways to resolve conflicts and mitigate threats related to space management is to prepare appropriate solutions while drawing up a protection plan and zoning plan in consideration of the contemporary methods of encouraging local communities participation. A park cannot be created without successful liaison between the interested entities and co-financing of organizational, design and conservation related activities. Hence the guarantors of active protection of a cultural landscape in form of a cultural park are the acceptance and support of all interested parties[3]. As an indispensable part of process, up-to-date information should be provided on the benefits of a cultural park and of the related developments [7].

The commonly observed aversion of the commune authorities to passing new zoning plans, which is one of the conditions to be met in order to establish a culture park, is an obstacle to further expansion of this form of protection. According to a report by the National Centre for Monument Research and Documentation published at the end of 2009, only 20 culture parks were formally acknowledged in Poland by 2003, and a number of initiatives were blocked by rulings of administrative courts [16].

The initiative to create culture parks played a particularly important role in the experimental attainment of historical defensive complexes. The year 2003 saw the emergence of a country-wide drive to create fortress culture parks, as a formula which suits perfectly the need to protect largely dispersed and stretched defensive complexes comprising integrated functional and spatial systems characterized by exceptional cultural and natural values. The first park of this type to be created in Poland was the Srebrna Góra Fortress Cultural Park (Forteczny Park Kulturowy Twierdzy Srebrna Góra) [11][4], and next was the Kłodzko Fortress Cultural Park (Forteczny Park Kulturowy Twierdzy Kłodzko). The Srebrna Góra park is situated in Stoszowice commune, and, just like the Kłodzko Fortress, encompassed a mountain fortress in its unified borders. The communes of this region were most interested in finding solutions ensuring self-financing of the preservation initiatives located in the communal areas. For many years now, there has been some effort in creating fortress cultural parks in urban areas of large cities, where the social and ownership issues dominate the conservation formula, such as in Cracow, Toruń, Przemyśl, Zamość.

In case of the Przemyśl Fortress, the authors of conceptual design from the Cracow University of Technology proposed a complex of 14 Przemyśl Fortress Defensive Landscape Cultural Parks, conceived partly as trans-border projects in partnership with Ukraine. In Cracow in 2003, 7 Cracow Fortress Defensive Landscape Cultural Parks and one aviation park were accepted for establishment. Works on creating the Zamość Fortress Cultural Park commenced in 2006 and their aim is not only to preserve the very nucleus of the UNESCO listed fortress, but also to maintain the entire landscape surrounding it and making it possible for the structure to be properly displayed in a harmonious open landscape.

In Poland there are also several cultural parks which, despite their name, are not a form of legal protection but an example of an idea for comprehensive management of a defined area for the purposes of preservation and effective usage of highly valuable space of natural and cultural qualities: the Gdańsk City Fortress Cultural Park and the Hewelianum Centre, the Nysa Fortress Culture and Nature Park, Cracow Aviation Cultural Park. In Warsaw, advanced work on passing a resolution allowing for establishment of the 19th Century Warsaw Fortress Cultural Park has been in the pipeline since 2005 [11].

[3] Intensified informative and educational activities performed by the author between March and December 2009 brought a significant improvement in the social attitude towards the idea to create the 19th Century Warsaw Fortress Culture Park. The project was launched with a survey, which showed that in case of the selected defensive structures, the inhabitants displayed total unawareness in identification of the historic structure of the area, its history and need to preserve. Over 90% of respondents did not understand the need to preserve the area in question or its relations in composition of the larger fortress system operating at the turn of 19th century. Seminars, workshops and promotion conducted in cooperation with the city hall and owners, as well as distribution of leaflets, posters, and broadening activities beyond their local range by a website and scientific articles brought an unexpectedly strong interest of the citizens, local associations and scientific community from all over the country. The effects of the promotional activities were gathered and presented in a large publication entitled *Warsaw Fortress: 19th century fortification complex: consultations and assumptions to a protection plan for the 19th Century Warsaw Fortress Culture Park* [8].

[4] The first cultural park in Srebrna Góra was created back in 2002, before the act on historic monuments protection and care was passed (in 2003).

References

[1] Act on environmental protection of 27 April 2001 (Journal of Laws of 2008, No. 25, item 150 – unified).

[2] Act on nature protection of 16 April 2004 (Journal of Laws No. 92, item 880).

[3] Act on historic monuments protection and care of 23 July 2003 (Journal of Laws, No. 162, item 1568).

[4] Act on spatial planning and management of 27 March 2003 (Journal of Laws No. 80, item 717).

[5] Korzeń J., Myczkowski Z., Kaczyńska M., Korzeń K., Wielochowska M., *Projekt Planu Ochrony Wilanowskiego Parku Kulturowego*, typewriter copy – Fundacja Karkonowska, Jelenia Góra – Warszawa 2009, p. 89.

[6] Majchrowska A., *Realizacja zapisów Europejskiej Konwencji Krajobrazowej*, Czasopismo Techniczne, zesz. 7A, Wyd. PK, Kraków 2007, pp. 179–184.

[7] Molski P., *Postulaty utworzenia Parku Kulturowego Zespołu XIX-wiecznych Fortyfikacji Twierdzy Warszawa,* [in:] Pałubska K., *Twierdza Warszawa: zespół XIX-wiecznych fortyfikacji: konsultacje i założenia do projektu planu ochrony Parku Kulturowego Zespołu XIX-wiecznych Fortyfikacji Twierdzy Warszawa*, Miasto Stołeczne Warszawa, Warszawa 2009, pp. 9–11.

[8] Myczkowski Z. et al., *Zasady tworzenia parku kulturowego, zarządzania nim oraz sporządzania planu jego ochrony*, typewriter copy comissioned by KOBIDZ, Kraków 2005, p. 18.

[9] Myczkowski Z., *Tożsamość miejsca w ochronie i kształtowaniu krajobrazu kulturowego*, [in:] Krajobrazy, ODZ in Warsaw and ROSiOŚK in Kraków, Kraków 2000, pp. 199–214.

[10] Pałubska K., *Tereny dziewiętnastowiecznej Twierdzy Warszawa jako elementy struktury rekreacyjnej miasta*, PhD thesis at the Architecture Faculty of the Warsaw University of Technology, Warszawa 2009, p. 224.

[11] Pałubska K. (ed.), *Twierdza Warszawa: zespół XIX-wiecznych fortyfikacji: konsultacje i założenia do projektu planu ochrony Parku Kulturowego Zespołu XIX-wiecznych Fortyfikacji Twierdzy Warszawa*, Miasto Stołeczne Warszawa, Warszawa 2009, pp. 145.

[12] Pilarczyk G., Bryła S., *Program Hewelianum jako droga do rewitalizacji zespołu Fortu Grodzisko w Gdańsku*, [in:] Wilkaniec A., Wichrowski M., *Fortyfikacje w przestrzeni miasta*, Wyd. Akademii Rolniczej w Poznaniu, Poznań 2006, pp. 141–148.

[13] The Convention on the Protection of World Cultural and Natural Heritage adopted in Paris on 16.11.1972 by the UN General Conference (Journal of Laws of 1976 No. 32, item 190).

[14] The European Landscape Convention, adopted in Florence on 20 October 2000 (Journal of Laws of 2006, No. 14, item 98).

[15] Tokarczuk T., *Granice krajobrazu w przestrzeni kulturowej*, PhD thesis at the Faculty of Architecture of the Technical University of Cracow, Kraków 2006, p. 9.

[16] www.kobidz.pl/idm,871,parki-kulturowe.html

Zrównoważona polityka przestrzenna wobec obszarów o wyjątkowych wartościach kulturowych

Ochronę prawną złożonych struktur krajobrazu kulturowego oraz zrównoważone wykorzystanie jego walorów do aktywizacji gospodarczej, promocji regionu i rozwoju turystyki najskuteczniej umożliwia formuła parku kulturowego. Aktywizacja lokalnych środowisk przy określaniu zasad i granic dopuszczalnej ingerencji w planie ochrony stanowi bazę do prowadzenia polityki przestrzennej w zakresie ochrony wartości kulturowo-przyrodniczych i zagospodarowania terenu. Utworzenie jednostki zarządzającej parkiem kulturowym wspomaga budowanie partnerstwa międzysektorowego, ułatwia zdobywanie funduszy, pośrednio wpływając na poprawę jakości życia mieszkańców i kulturę przestrzeni.

Key words: sustainable planning, culture park, management

Słowa kluczowe: planowanie zrównoważone, park kulturowy, zarządzanie

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Role of architect in creation of 'culture in architecture' and new spatial forms in cultural landscape of suburban areas and rural settlement units on the territory of Western Pomerania

Fig. 1. Church in Binowo – reconstruction. Photo by author

Fig. 2. Rebuilt church in Bobolin. Photo by author

Throughout centuries, transformations of spatial forms comprising the architecture of a given place were strictly connected with the cultural landscape in which they were located. At the same time, they were subject to the strictly defined canons that were associated with the surroundings and time of their creation.

Nowadays, we can observe a decline or even disappearance of any connections between place and time on the one hand and on the other the form, which process is particularly visible in suburban areas and rural settlement centres, where the awareness of culture in architecture represented by the designer must be confronted with the wrongly understood culture of esthetics represented by the investor.

Perfect examples here are rural areas where the several centuries long tradition of the place clashes with a new, sometimes foreign, spatial form.

In this regard, some of the most significant elements which betoken the roots and maintain the faint cultural continuity of the place and at the same time testify the level of the architect's cultural awareness are architectural structures of religious cult. They ought to be perceived in historical categories and as a link between the past and the present.

After 1945 in Western Pomerania there were 168 churches. During the war they were partly damaged, moreover, in the postwar period the state authorities ordered to pull down 102 churches. Apart from refurbishments, 128 churches were rebuilt until the present times and there are 40 more which are still left as ruins[1].

The most required form of action, which strengthens the cultural continuity of the place and simultaneously maintains its tradition along with respecting the centuries long culture of these architectural structures, is the

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[1] Source: *Architektura sakralna Pomorza Zachodniego*, http://www.architektura.pomorze.pl/_index.php?link =_straty.

Fig. 3. Kindergarten building adapted to the needs of church in the Kosin village [1]

Fig. 4. Modern church structure on the rectangle plan with a separate presbytery and two towers, designed by Marek Wołoszyn, in Komarowo village [1]

Fig. 5. Church in Chomętowo village, according to the design by Jerzy Koniński. Built in 1988–1996. Photo by author

Fig. 6. Church in Gębin village, according to the design by Jerzy Koniński. Built in 1985–1992. Photo by author

reconstruction of the old form of these buildings and their original location on the basis of the preserved documentation. A good example here is St Maximilian Maria Kolbe Church in Binowo (Fig. 1)[2].

Similar activities were taken up when rebuilding Our Mother of Perpetual Help Church in Bobolin (Fig. 2)[3].

A frequent activity, which was taken up due to the lack of funds to build a new structure, was to adapt the already existing buildings to the needs of a place of worship. Unfortunately, their form, as their previous functions were totally different, was far from the canons of sacral building. Had it not been for the crosses which were placed on top of the buildings or in their vicinity, nothing would indicate that this was a place of worship.

A significant role in the process of adapting such a building is played by the designer who, while making decisions as to formal actions and employed materials, can show his sense of culture in architecture and in this way, increase the importance of the particular architectural structure. On the other hand, his incompetent actions can lead to the total degradation of the cultural landscape.

An excellent example is the village of Kosin. The local 13th century granite church which was rebuilt in 1891, by order of the state authorities[4] was demolished in 1945. On its place a kindergarten was built, which in 1991 was adapted to a church (Fig. 3). In this case, the designer's plan is inadequate to the performed function and the form is far from the typical church structure; as a consequence,

[2] Stone and brick church, Gothic, from the 13th century, erected on the quadrangle plan. In the north part, brick ogival portal; in the east part ogival window hole; eastern top with blends; in the east part, two butress pillars – added later on. After 1945 it was demolished, in 1979-1982 rebuilt. [Source: Reverend Roman Kostynowicz, *Kościoły Archidiecezji Szczecińsko-Kamieńskiej*, Szczecin 2000, p. 374].

[3] Church made of erratic stone, on the rectangle plan, with a separate presbytery closed by a semicircular apse. The small tower with an ave-bell grows from the body of the church from the west part. In the years 1945-1986 the church was in ruins (it was preserved as high as the windows). In 1986 rebuilding works were started according to the design by Stefan Kwilecki.

[4] Ks. inf. Roman Kostynowicz, *Kościoły Archidiecezji…*, op. cit., p. 70.

Fig. 7. Mierzyn village; 1 – pre-war village layout; 2 – residential estates which, administratively, are part of the village – in black, the buildings from before 1939 – own study

it is in no way consistent with the pre-war rural architecture [2].

The most important indicator of the architect's level of culture is undoubtedly the fact of designing and building new structures of sacral architecture.

New sacral buildings on the rural areas were started to be erected mainly at the beginning of the 1980s.

Unfortunately, in many cases the designers forgot about consistency of the architectural structure form with the cultural landscape of the place by creating completely alienated forms which by no means can be said to blend in with the existing local architecture (Fig. 4) [1]. By treating the structure of the church as a typical design of the repetitive nature (Figs. 3, 5, 6), they contribute to certain monotony in the landscape which is not a welcome and positive phenomenon.

The results of the negative designer's actions neglecting the proper choice of architectural form can often be observed in the areas which border the great urban agglomerations.

On the territory of Western Pomerania, due to the factors such as the low potential of agricultural land, low quality of the soils – 78% of all the arable lands contain soils which are very poor quality as regards their farmland value – the existence of numerous small farms (80% of the farms do not exceed the area of 10 hectares) as well as unsatisfactory profitability of the farms which border the great urban agglomerations, the level of agricultural activity is extensive. This situation leads to transformations of the existing suburban farmland areas. The adjoining rural settlements were to be changed into residential areas which constitute a natural social hinterland for urban cen-

Fig. 8. Office building in Przylep village near Szczecin – condition in 2004. Photo by author

Fig. 9. One-family building in Siadło Dolne village near Szczecin – condition in 2008. Photo by author

Fig. 10. Buildings at TBS at Łucznicza Street in Szczecin – condition in 2010. Photo by author

tres and this change totally distorts the postwar cultural landscape.

Very often, in the direct vicinity of a great urban agglomeration, next to rural areas which are wastelands, there are residential areas with one- and multifamily houses.

Due to intensive urban activities, rural areas after some time may become absorbed by towns not only functionally but also with regard to administration issues. However, this process is often conducted chaotically without paying attention to the harmony in the existing landscape.

We can distinguish two types of such urban activities: one is orderly and it takes into account the landscape values of the terrain as well as the existing rural system. Unfortunately, such situations take place most often only within the administrative borders of a city. The other type involves a spontaneous process of land development, both individual investments which satisfy functional requirements of an investor and these requirements are not necessarily in accordance with the idea of the spatial order (Fig. 7) as well as one family housing or small residential units which are created in between the discussed areas. Those which are built within a rural unit often create chaotic structures which have nothing in common with the typical elements of the village cultural landscape and moreover are not in accordance with the idea of city residential estates which ought to be harmonized architectonically and create a logical urban entirety (Fig. 7)[5]. Most often, these structures are completely beyond a given context, in which an architect performs the role of a machine that produces the materials which are necessary for obtaining a building permit and carrying out the future investment (Fig. 8).

We must admit that civilization progress rarely goes hand in hand with the increase of designing awareness or even more importantly, ethical awareness. This refers to a designer who creates the esthetical and cultural awareness of architecture.

Another excellent example is the process of building great residential estates such as Słoneczne, Bukowe and Majowe (Fig. 9) in Szczecin in the 1970s and 1980s. Although these estates, as well as some other similar ones in city agglomerations of Western Pomerania, employed the solutions of typical residential structures, we can notice here a new urban idea which takes into consideration creating common areas, social facilities as well as securing the needs connected with education, entertainment and trade of the future residents. Paradoxically, we must admit that despite their poor architectonic form, these estates constituted a well planned urban system with 'friendly' space enriched by green areas along with recreation terrains.

Unfortunately, nowadays when designing some residential complexes the priority is given to the maximum usage of space in order to achieve the greatest PUM[6]. The only rules which are adhered to refer to the minimum distances at which the buildings must be placed, in accordance with the relevant technical specifications. As a consequence, we are left with claustrophobic impressions without the possibility of 'breathing' in the created space. An example of such a solution is the TBS estate situated at Łucznicza Street in Szczecin, where we can observe the situation that is contrary to the 1970s and 1980s estates. Attractive spatial form that is created by the particular buildings is located on a very small area which is the property of a cooperative (Fig. 10).

In this situation, the designer is faced with the dilemma: he must make a compromise between the two ways of understanding new space. As a result, we often deal with the total lack of respecting place and time and dis-

[5] In the close vicinity of the prewar buildings, some new multi-family houses were erected as part of the estate 'Za wiatrakiem', which was an example of typical city buildings as regards their size and form (absorption of village by city). There are also areas of one-family housing estate, but still there is no reference whatsoever to the old tradition. Prevailing here are the structures built on the basis of 'typical designs' and pseudo-residential buildings which are completely not integrated with the existing buildings.

[6] PUM – abbreviation: *powierzchnia użytkowo-mieszkalna* (usable and residential area).

torting the cultural landscape in which some new spatial forms appear and they have nothing to do with 'culture of architecture'.

To sum up, we must ask the following question: what is the role of an architect in a frequently distorted way of understanding the newly created space by an investor and the desire to maintain an appropriate level of architecture which ought to correspond with the historical as well as the existing cultural landscape of the particular place? We must say that the designer's vision as well as his perseverance in defending his own concepts and ability to conduct talks with the investor are extremely important in shaping the future landscape which for the future generations shall be a testimony of our level of culture in architecture.

References

[1] Kostynowicz R., *Kościoły Archidiecezji Szczecińsko-Kamieńskiej*, Szczecin 2000.

[2] Piskorski J.M., *Pomorze Zachodnie przez wieki*, Zamek Książąt Pomorskich w Szczecinie, 1999.

Rola architekta w kreowaniu „kultury w architekturze" a nowe formy przestrzenne w krajobrazie kulturowym terenów podmiejskich oraz wiejskich jednostek osadniczych terenu Pomorza Zachodniego

Na przestrzeni wieków przekształcenia form przestrzennych tworzących architekturę miejsca były ściśle powiązane z krajobrazem kulturowym, w jakim były lokowane. Jednocześnie były one poddane ściśle określonym kanonom osadzonym w miejscu i czasie swego powstania.

W obecnej chwili można zaobserwować zanikanie związku pomiędzy miejscem i czasem a kanonem formy, szczególnie w przestrzeniach podmiejskich oraz wiejskich ośrodkach osadniczych, gdzie świadomość kultury architektury reprezentowana przez projektanta musi zmierzyć się z błędnie pojętą kulturą estetyki reprezentowaną przez inwestora.

W tak zastanej sytuacji powstaje moralny dylemat architekta, polegający na stworzeniu kompromisu pomiędzy tymi dwoma stanowiskami pojmowania nowej przestrzeni, którego efektem niejednokrotnie jest całkowity brak poszanowania miejsca i czasu, z zaburzeniem krajobrazu kulturowego, w którym pojawiają się nowe formy przestrzenne niemające nic wspólnego z „kulturą architektury".

Mając na uwadze powyższe, powstaje pytanie co do roli architekta w powiązaniu z niejednokrotnie wypaczonym sposobem pojmowania nowo projektowanej przestrzeni przez inwestora a możliwością utrzymania odpowiedniego poziomu architektury korespondującego z tak historycznym, jak i zastanym krajobrazem kulturowym miejsca.

Key words: cultural landscape, settlement, Western Pomerania

Słowa kluczowe: krajobraz kulturowy, osadnictwo, Pomorze Zachodnie

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Architecture of industrial complexes of the Central Industrial Region (COP) in south-east Poland

Introduction. Economic conditions of the Second Polish Republic

The process of building the Central Industrial Region (COP) was preceded by a period of intensive investments aimed at improving the living conditions of the citizens of the reborn state. The period from November 1918 until 1922 can be described as the time of building the economic basis of new Poland. It was during this difficult time that the administration and army were created from scratch, provision control was organized by the state and the agriculture and industry were reconstructed after the war destruction. The basis for the state development policy was formed. New migration processes from rural areas to cities occurred. Despite all these activities, not all the regions of the state developed equally. The first problems with the balanced level of life on the whole territory of Poland began to appear. The basic components of a change in the image of Poland were the agricultural reforms and the reconstruction of the Polish industry. The year 1923 can be treated as the end of the postwar industrial reconstruction. The years of hyperinflation slowed down these reconstruction processes, but very soon a stabilization was achieved due to the fiscal reforms. In 1927 the government exempted the enterprises created or developed in Gdynia harbor from taxes and fees. In 1928 Poland reached the highest level of the industrial production and the lowest unemployment.

The successful development of the country was interrupted by the world economic crisis which appeared in Poland in 1929. Starting from 1932 we can observe a gradual growth in factory production whereas after 1935 there was a visible acceleration in production.

After the experiences of the Polish-Soviet war, in 1921 General Kazimierz Sosnkowski came up with the proposal to locate the Polish arms industry in the so called security triangle, i.e. in the area of Sandomierz in the forking between the Vistula and San rivers. The years 1923–1929 saw the newly erected arms industry plants on the areas of the Old-Polish industrial region (Skarżysko, Radom, Starachowice, Ostrowiec Świętokrzyski, Pionki).

Central Industrial Region

In 1928 the concept of creating the central industrial region was taken up again. It was then that special tax reliefs for the enterprises created and acting in the so called security triangle were granted. The COP was divided into three regions: 'A' – Kielce resource region, 'B' – Lublin provision region, 'C' – Sandomierz processing region – the area in the forking between the Vistula and San rivers. The planned borders of the COP underwent some changes and finally they included forty four counties within the area of four districts: Kielce, Kraków, Lublin and Lvov and comprised them only partially (Fig. 1, see p. 156) [2, 6].

Location of the COP resulted from a relatively great geographical distance from Germany and USSR as well as from the willingness to eradicate the geographical differences between the territories of west and central Poland (the so called Poland A) and under-developed territories of east and south Poland (the so called Poland B).

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Fig. 1. Central Industrial Region (COP) boundaries.
Photo by author, 2009

The area of the region comprised 15% of the country's territory and 18% of the population. This idea could not be quickly carried out due to the world economic crisis.

Its implementation was not possible until 1937 when a new Treasury Minister Eugeniusz Kwiatkowski was appointed. Poland had to develop its own industrial sector because only thanks to the own modern national industry was it possible to provide the army with the necessary technical equipment as importing the arms always depended on the international political situation; on the other hand, it was necessary to create working conditions for the young people who were growing in number and solve unemployment problems in towns as well as problems with rural agrarian overpopulation. Therefore, new workplaces were constantly in great demand.

Eugeniusz Kwiatkowski prepared a four-year economic plan comprising the period from 1936 to April 1940, which assumed the funding of investments mainly in the scope of the infrastructure.

Within the framework of the COP, many architectural objects were started or accomplished. As for the power industry, construction works on the water power plant in Rożnów were started as well as on the power plants in Stalowa Wola, Mościce, Poręba, Starachowice and Lublin. The power system was to be supported by the local water power plants. At the same time, high voltage lines connecting the particular COP plants with one another and with Warsaw were developed. Also, a network of gas piping was created. New railways were started to be built, traffic capacity of 69 railway stations was increased and ten new railway station halls were built. 1300 km of new telecommunication connections were constructed, roads were improved and works were begun in a water connection between Silesia, Sandomierz and Stalowa Wola.

While carrying out the program of the COP, many industrial plants were started and completed. In Starachowice, the factory producing cannons and ammunition was developed (Fig. 2), in Radom an arms factory was built, in Rzeszów H. Cegielski Machine Tool Factory which was also supposed to produce 37 and 40 mm cannons, Aircraft Engine Factory, Leszczyński light alloy foundry and head-light factory. In Sanok M. Zieleniewski Arms and Machine Tool Factory was built. A plane factory was built in Mielec. In Dębica 'Stomil' Tyre Factory, Artificial Rubber Factory and Meat Processing Factory were built. In Pustków an explosives, igniting devices and modelling paste factory was built and in Pionki Gunpowder and Crushing Materials Factory was erected. A gunpowder factory was built in Krajowice, semi-precious metals foundry in Gorzyce, colour metals rolling mill in Pustynia, ammunition factories in Majdan-Dąb and Jawidz,

Fig. 2. Starachowice, factory of ammunition.
Photo by author, 2009

Fig. 3. Stalowa Wola, the management building. Photo by author, 2009

Fig. 4. Ostrowiec Świętokrzyski, the foundry of armored towers building. Photo by author, 2009

chemical works 'Nitroza' in Sarzyn, cellulose factory in Niedomice and a sawmill in Sędziszów Małopolski. In Mościce Nitrogen Plant was developed. In Stalowa Wola works on Steel Plant along with a cannon factory were commenced (Fig. 3) [13].

In Tarnobrzeg a copper refinery was built. Military Rocket Factory and magnet factory were created in Bliżyn. A porcelain factory was built in Boguchwał. In Sanok a factory producing storage batteries was built. Such factories producing storage batteries were also built in Łańcut and Tarnobrzeg. In Lublin a plane factory 'Plage i Laśkiewicz' was created as well as a gas mask and barbed wire factory and works on a truck factory licenced by General Motors were started [12]. In Kraśnik a bearing factory was built and in Kurów a leather plant was erected. An armoured tower foundry was built in Ostrowiec Świętokrzyski (Fig. 4).

Near Dębica works were started on a copper and aluminum rolling mill while in Poniatowa a technical materials and apparatuses factory was commenced.

In all of these places, the speed of carrying out the investments was impressive. In the so called Southern Works (Stalowa Wola) at the end of March workers started cutting down trees at the place of the future investment

Fig. 5. Stalowa Wola. Factory workers district. Photo by author, 2009

and already in December 1937 the first machine tool was produced, in April 1938 the first cannon fired at the plant shooting range and in December 1938 the first precious steel was melted down.

The building of the so called COP became the greatest economic enterprise of the Second Republic. Today, when assessing the implementation of these projects, we can state that some structures which survived until today reflect the process of a comprehensive change in lifestyles of many people. We cannot analyse the industrial buildings with no reference to the accompanying processes of erecting residential estates, usually called colonies, along with the necessary infrastructure.

The building of factories in the COP was accompanied by residential buildings for the employees. In total, about 7100 residential buildings were started or accomplished. Residential colonies for physical workers as well as estates for office workers were built (Fig. 5).

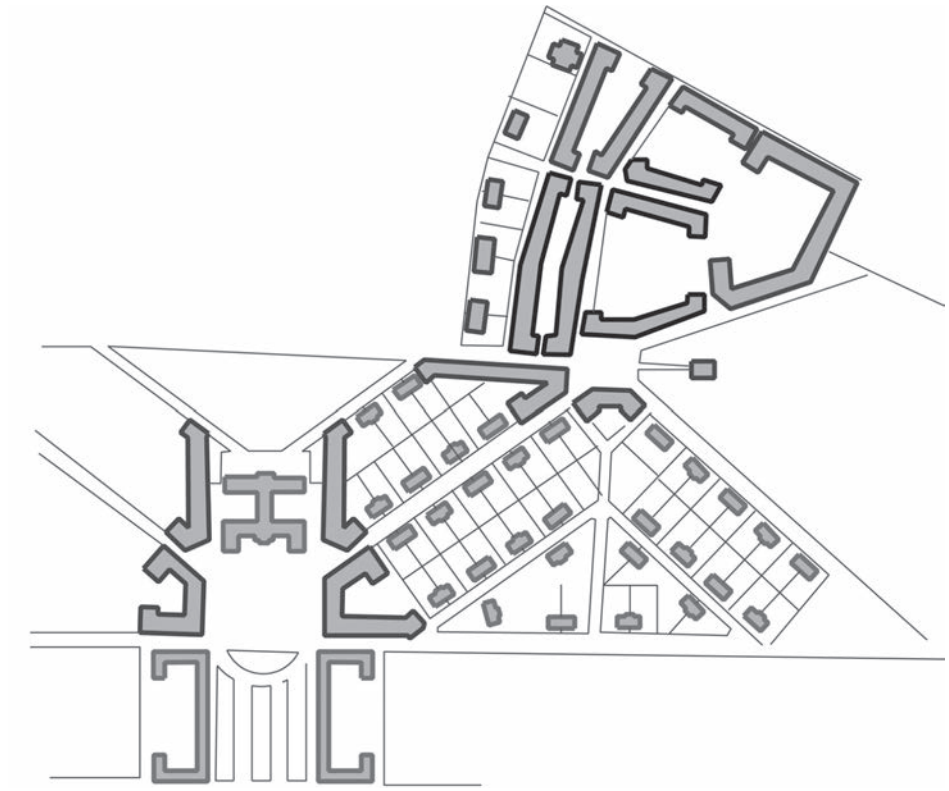

Fig. 6. Chełm. "The New City" design, area 430 ha (arch. Adam Kuncewicz, Adam Paprocki), so called "The management" for the railway workers which were supposed to move there from Radom (realisation 1926–1939). Drawn by author [7]

Chełm

Fig. 7. Chełm, building of "the management of the state railways" (1938) designed by Henryk Gay. Photo by author, 2009

Fig. 8. Chełm, a residential colony (1938). Photo by author, 2009

In 1926 the Polish authorities decided to transfer the Polish State Railways Headquarters from Radom to Chełm as it was situated more centrally within the present state borders. Consequently, the local authorities ordered a land development concept of a new railway district. The project of 'New Town' was prepared by the architects Adam Kuncewicz and Adam Paprocki for the area of 430 hectares[1]. The project implementation was started with building a colony for office workers, the so called 'Head Office' for the railway workers who were to move in here from Radom (Fig. 6) [5, 7].

Lack of funds caused by the economic crisis and a change of the government decision as to locating the Railways Headquarters on the territory of Chełm significantly extended the project. It was only in 1938 that a modern estate was built with an explicit urban composition with residential buildings in the style of 'eclectic modernism' mixed with national motifs. The develop-

[1] Kuncewicz A., Paprocki A., *Opis techniczny do szkicu rozbudowy miasta Chełma*, 1926.

ment plan of New Chełmno which was carried out from 1926 until the outbreak of the World War II was accomplished only partially. In accordance with the program of the Ministry of Transportation, the area of 50 hectares, situated east of the old town, was designated for the needs of the investment; the land was given by land owners for the benefit of the state treasury. The axis of the architectural structure was the Edifice of 'Head Office' designed by Henryk Gay. Its modern form was very different from the residential buildings which had been erected some time before. It was designed on the projection of the letter H closing the axis of the main avenue which connected the railway station with the town (Fig. 7) [9].

The residential colony consists of one-storey houses with a utility attic and two-family houses whose form refer to the Polish mansions as well as two-storey multifamily houses and 3-storey blocks of flats situated in the frontages of the main avenue[2]. All the residential buildings are equipped with characteristic high mansard roofs covered with ceramic tiles having various fronton solutions[3] (Fig. 8) [11].

[2] According to the project, there were plans to build 533 flats in dense development with an average flat size of 94,5 m^2 (the smallest were two-room flats of the area of 70 m^2, then three-room flats of the area of 90 m^2 and the biggest ones – four-room flats of the area of 120 m^2). In addition to this, in 30 twin houses there were designs of 60 five-room flats of the area of 150 m^2 while in 3 twin houses 6 six-room flats of the area of 175 m^2. Together with the chairman's house (not completed), 600 flats were planned to be built (State Railways Head Office Development 1929). Despite the numerous financial difficulties, the program of the railway estate was carried out almost in full.

[3] Przesmycka E., Pytlarz E., *Chełm – „Nowe miasto", modernistyczne założenie urbanistyczne*, Teka Komisji Architektury, Urbanistyki i Studiów Krajobrazowych, PAN/O Lublin, tom IVA, Lublin 2008, pp. 244–260.

Lublin

Fig. 9. Lublin.
The office building of the city slaughterhouse from 30-ties.
Photo by author, 2010

The fact of including the southern part of Lublin Province as a provision region into the program of the Central Industrial Region in 1936 contributed to the development of the agriculture and food industry plants existing in Lublin (mills were extended, a new slaughterhouse was built and cold storage and tobacco plants were erected. From 1930 the slaughterhouse facilities were partly taken on lease by the company Poels & Co – producers of tinned food. Due to this action, the slaughterhouse was extended by another facility in the years 1936–1938 (Fig. 9).

Apart from the agriculture and food industry plants, also various military sector works were built in Lublin.

The most important plant in Lublin was the Aeroplane Factory (which continued the activities of the liquidated plant Plage i Laśkiewicz. The first planes were produced on the Italian licence. They were monoplane fighters 'Balilla' – about 100 pieces were made and line biplanes 'Ansaldo' – about 120 pieces were produced. They were made for the army. These planes were infamous because they were very accident-prone. The airport, air-sheds and new production halls covered the area of about 14 hectares. The plane factory was situated at the junction of the transit road to Zamość and the railway line on the route Warsaw –Kowel and comprised more than 20 structures, among other things: four brick air-sheds, one wooden air-shed,

workshops, warehouses, office buildings and auxiliary facilities[4].

The factory had its own railway side-tracks. In 1935 the company was nationalized and transformed into Lublin Plane Factory producing mainly RWD-14 planes. A few factory facilities are preserved until today: air-sheds, workers' residential building and construction office dating back to the 1930s (according to the design by Tadeusz Paprocki).

The air-shed buildings are especially interesting. Due to their particular function, large size constructions had to be employed. Therefore, the most recent technological ideas appeared and they were characterized by simplicity and fineness of technological solutions. The most characteristic one is the air-shed building preserved until today in the reinforced concrete construction[5] [10, 12].

[4] Kierek A., *Rozwój gospodarczy Lublina w latach 1918–1939*, [in:] *Dzieje Lublina*, t. II, S. Krzykała (ed.), Wydawnictwo Lubelskie, Lublin 1975.

[5] Radzik T., *W latach dwudziestolecia międzywojennego*, [in:] *Lublin dzieje miasta*, t. II, Lublin 2000.

Skarżysko-Kamienna

In 1922 in Warsaw the Design Bureau of Military Production Central Management was created. This institution's task was, among other things, preparation of design documentations of the three big modern ammunition factories based on the modern technologies; they were completed thanks to receiving a financial loan from the French government. These factories were: Ammunition Factory in Skarżysko, Gunpowder Factory in Pionki and arms factories in Radom. This region was referred to as the security triangle[6]. In the subsequent years, the main role in creating military sector factories was played by the Military Production Central Management in Warsaw. The budget of this institution was decided by the Minister of Military Affairs in cooperation with the Treasury Minister in form of the so called additional budget[7] [2, 8].

The location of the Ammunition Factory in Skarżysko was decided long before the creation of the COP. It resulted from the analyses of the results of using military planes during the First World War. That is why the factories were located in hidden places in forests, but close to the railway tracks. At the same time, these objects were perfectly masked in case of air raids because the factory buildings were specifically planned in a form that was similar to the urban systems of residential estates with streets and additionally planted trees if necessary as well as with roofs that were masked by various plants growing there. There was even a plant cultivation department with a gardener[8] [4].

[6] Juchnowicz B., *Szkice o państwowej Fabryce Amunicji w Skarżysku-Kamiennej w latach 1922–1939*, typescript.

[7] Dziennik Nr 21 Rozkazów Ministerstwa Spraw Wojskowych z dnia 5 czerwca 1923 roku.

[8] Kotarba Z.P., *1924–2004 Monografia Zakładów Metalowych MESKO S.A.*, Skarżysko-Kamienna, 2004.

Fig. 10. Skarżysko-Kamienna. The remains of postindustrial buildings of State Factory of Ammunition (PFA) localized in the forest. Its urban layout is specific for residential with street planted with trees and roofs covered by greenery. Photo by author, 2010

Fig. 11. Skarżysko-Kamienna. A housing district built in the steel frame construction system. Photo by author, 2010

Fig. 12. Skarżysko-Kamienna. Different types of housing estate – Skałka (1934) and Official Colony (1924, 1925). Photo by author, 2010

The factory buildings were erected by means of a frame construction with the use of a steel girders. The most often used material was sand brick and in the buildings with the supporting structure of reinforced concrete the walls were made of sand brick and joint sandstone plates (which is identical with the façade finishing technologies employed in residential buildings) (Figs. 10, 11).

The residential estates accompanying the factories were located in their vicinity so that the employees did not have to commute long to get to work. The urban system forms of these estates as well as their architectonic expression referred to the factory complexes.

In these factories, apart from military sector production, civil products were also made because the factory capacities were higher than the demands from the army. Until 1939 in Skarżysko the factory produced machines, market devices and articles as well as car parts for Polish Fiat[9].

In the years 1938–1939 also ammunition, detonators and air bombs were produced. Shooting took place in a special closed factory shooting range.

[9] In Radom bicycles were produced, a gun factory additionally produced typewriters and in Stalowa Wola turbines were produced.

In 1923 construction works were started on residential houses for the management members in Kolonia Górna. In 1924 the building of the first barrack was finished on Armii Ludowej Street – this served as the director's office. At the same time, building works were conducted on an office, fire-station and factory buildings of the Military Rocket Plant. In the distance of circa 1 kilometer from the factory residential estates were built – Office Workers' Colony[10] and Workers' Colony[11]. In the subsequent years, several more barracks and residential houses were erected (Fig. 12).

Most of the buildings were made of sand brick with the employment of joint sandstone plates for finishing façades. Their architectonic form resembled 'modernised' tenement houses, while the smaller ones referred to the national forms. A very interesting form can be seen in the complex Kolonia Rejów built as barracks situated on a hill slope[12].

In 1934 next to the Military Rocket Plant which was built in 1929 a residential estate was built and it was called Skałka. The factory and the estate were surrounded by a high barbed wire fence.

Concurrently with the factory and residential houses, other building were also erected such as schools, kindergartens, outpatient clinics, clubs, cinemas, sports centres and Roman Catholic churches [3].

[10] *Estate for Office Workers* (1924–1925) consisted of 10 two-storey houses made of brick, in total 24 four-room flats, 18 five-room flats, 8 six-room flats and 1 nine-room flat.

[11] In 1923 in Factory Workers' Colony there were already 34 one-storey houses with tiled roofs, equipped with running water, WC, basements and gardens. In ten houses there were 19 one-room flats, 210 two-room flats, 19 three-room flats, 24 four-room flats (in total 272 flats).

[12] Kolonia Rejów (*Colony Rejów*) consisted of ten barracks, each with 8 two-room flats, two one-storey brick houses with 5 three-room flats and one four-room wooden house.

Stalowa Wola

An example of a newly created plant is the so called Zakłady Południowe – Southern Works Limited in Nisko – a factory centre in Stalowa Wola erected on the territory of the former village Pławno (in the northern part of Sandomierz Forest between Nisko and Rozwadów on the river San). The owners of the shares in the company were Huta Pokój (Ironworks) and Starachowice. The reasons for such location of the metallurgical and mechanical works were economical and social conditions as well as security.

The entire project of the works was prepared by a specially appointed team of experts supervised by Engineer Roman Juszkiewicz. The factory buildings were designed in the frame and steel construction. Pile foundations made of reinforced concrete under the factory structures were made already in May 1937. It was already during the winter of 1937/38 that the first steel constructions produced in Huta Pokój were fixed. The building works were accompanied by laying railway side-tracks thanks to which building materials could be delivered, building access roads, execution of water supply system, canals and power network. The first steel was cast on 5 September 1938 and the whole investment was accomplished in March 1939 (open-hearth furnace, two arc furnaces). The total area of all the factory industrial facilities amounted to 89.868 m². Officially, the Southern Works (ZP) started work at the end of February and at the beginning of March 1939 – all the production departments worked in full swing then (Fig. 13) .

In spring 1938 in the vicinity of the ZP, building works on a power station were started where the first 20 KW turbine started working on 1 May 1938. The second turbine and two boilers started work in August 1939.

In January 1937 a decision was made as to building aluminum works near the ZP but it did not come to pass until the outbreak of the war.

At the beginning the builders of the ZP as well as its employees lived in various towns and villages in the

Fig. 13. Stalowa Wola, industrial halls of Metal Factory in the steel frame construction system. Photo by author, 2010

Fig. 14. Stalowa Wola, the building complex of the Management Colony (1937–1939). Photo by author, 2010

area. In 1937 first six barracks adapted for living purposes equipped with sewage system and water supply system were built for employees and in June 1937 works on the first residential houses were begun according to the approved urban plan elaborated by Architect Rudziński. The estate was for 20 thousand residents and later this number was to be increased to 50 thousand people. The construction works on the houses were to be supervised by the Military Quartering Fund. Later on, the building works were to be financed by the Social Security Institution (houses already erected) and the Working Estates Association (workers' districts and two-family houses). In the beginning the residential estate consisted of two colonies: one for physical workers and one for office workers and they were divided by railway tracks. The estate was managed by Estate Administration and Forest and Agricultural Economy. Cutting down the trees at the estate and in the ZP required a permit from the Forest Farm.

The houses were erected 'in series' – several residential houses were opened for residents' use at a time. In total, within the period of three years until the outbreak of the war 970 flats were built. In the course of time, the following colonies were created: Workers', Masters', Office Workers' and Directors' (Fig. 14) [13].

In 1938 two more hotels were built with 90 rooms, later on one more hotel with 30 rooms was built.

Also in 1938 a multi-story wooden building was erected which was to serve as a temporary outpatient clinic and in 1939 construction works on a hospital for 400 beds were started. In mid April 1939 the building site for a lower secondary school was marked out and the school year could begin already on 17 September 1938. The project of a social club was prepared at the beginning of 1939 but its construction was not started before the outbreak of the war. In March 1939 W. Kubicki began building works on a cinema but they were not accomplished before 1 September 1939.

The building of a playing field was commenced in the autumn of 1937 and the stadium was completed in the spring of 1939. In the summer of 1937 tennis courts were started. At the end of 1938 four tennis courts were ready. These investments were financed by the FKW.

We can state that Stalowa Wola residential buildings are the most stylistically consistent, with some features of functionalism. The materials employed in the particular buildings are similar, i.e. finishing façades with mineral plaster, clinker faced pedestals, flashing sheet elements, grating, interior terrazzo, floors and woodwork gave the estates their consistent elegant character. The structures, minimalist in their form and mass, create the late modernism architecture. Similar forms, although on a larger scale, can also be noticed in the power station and metallurgical works. [10]

Summary

The end of the war in 1918 and the rebirth of the Polish state initiated the process of the economic development of the country. It resulted in intensive investment and building activity and this influenced the spatial development of towns.

In most of the cases, the industrial and communal investments of that time performed their function for many years in the future. The architectural structures located on the outskirts of towns in the 1920s are now gradually absorbed into the downtown zone. Economical, political

and legal conditions of the recent years made these factories stop production processes and change their functions and if there is no interest in further investment activity of a given structure, it is abandoned which leads to its technical death. This is what happens with the majority of the industrial complexes discussed here. Fragmentation of these complexes which is introduced in order to create new consistent forms of usage mostly leads to uncontrolled devastation of the buildings and physical destruction of those which are not needed at a given point in time [10].

The residential buildings which accompany the factories change owners and forms of management. They undergo thermo-renovation processes; roof covers as well as window woodwork are replaced with the materials which do not belong to the time at which the buildings were erected. Divisions of windows are changed, risalits and other architectural elements that are covered with heat insulation materials disappear. Through the employment of modern colours, facades of many buildings change their articulation.

During the recent decades, right before our eyes, the Polish architectonic style of the interwar modernism in its regional variants has been disappearing. The architecture of such structures, diverse as regards their size, form and finishing materials, frequently associated with the features of native 'national' architectural art, is changing its appearance and function, with no sign of respect from the local communities.

In my opinion, it is high time we took some system actions aimed at protecting our architectural heritage dating to the time of the rebirth of Poland. The technical condition of the interwar buildings, despite the fact that they are already seventy years old, is evidence of the high level of building culture (which was lost under the Communist regime), high technological quality as well as the employment of innovative functional and spatial solutions which can still serve as a model of rational space formation until today.

References

[1] *Dzieje Lublina,* Vol. II, S. Krzykała (ed.), Wydawnictwo Lubelskie, Lublin 1975.

[2] *Dziennik Nr 21 Rozkazów Ministerstwa Spraw Wojskowych z dnia 5 czerwca 1923 roku.*

[3] Garbacz D., *Narodziny, Stalowa Wola 1937–1939,* Stalowa Wola 2005.

[4] Juchnowicz B.*, Szkice o państwowej Fabryce Amunicji w Skarżysku-Kamiennej w latach 1922–1939,* typescript.

[5] KaczuraW., *Struktura przestrzenna miasta Chełma*, Chełm 1997.

[6] Kierek A., *Rozwój gospodarczy Lublina w latach 1918–1939,* [in:] Dzieje Lublina, Vol. II, S. Krzykała (ed.), Wydawnictwo Lubelskie, Lublin 1975.

[7] Kuncewicz A., Paprocki A., *Opis techniczny do szkicu rozbudowy miasta Chełma,* 1926.

[8] Kotarba Z.P., *1924–2004. Monografia Zakładów Metalowych MESKO S.A.*, Skarżysko-Kamienna 2004.

[9] Koziejowski W., *Chełm – „Dyrekcja", Studium historyczno-urbanistyczne*, Vol. I., 1988.

[10] Przesmycka E., *Problemy konserwacji architektury modernistycznej w Polsce*, Wiadomości Konserwatorskie nr 26/2009, Warszawa 2009, pp. 415–426.

[11] Przesmycka E., Pytlarz E., *Chełm – „Nowe miasto", modernistyczne założenie urbanistyczne*, Teka Komisji Architektury, Urbanistyki i Studiów Krajobrazowych, PAN/O Lublin, Vol. IVA, Lublin 2008, pp. 244–260.

[12] Radzik T., *W latach dwudziestolecia międzywojennego*, [in:] Lublin dzieje miasta, Vol. II. XIX i XX wiek., Lublin 2000.

[13] Stańkowski M., Myśliwiec M., *Stalowa Wola, Architektura sztandarowej Inwestycji COP-u,* Libra 2008, p. 28.

Architektura zespołów przemysłowych Centralnego Okręgu Przemysłowego (COP) w Polsce południowo-wschodniej

W artykule przybliżono niektóre wybrane realizacje z obszaru Centralnego Okręgu Przemysłowego (COP) i pokazano charakterystyczne cechy zarówno ich form architektonicznych, techniki wznoszenia, jak i układów urbanistycznych. Do analizy wybrano reprezentatywne przykłady z miast obszarów A, B, C, tj. z Lublina, Skarżyska-Kamiennej, Ostrowca Świętokrzyskiego, Chełma Lubelskiego i Stalowej Woli.

Omówiono wybrane przykłady zabudowy związanej z tworzącym się okręgiem przemysłowym w okresie 1918–1939. Realizując program COP, w Polsce międzywojennej rozpoczęto i dokończono budowę wielu zakładów przemysłowych. Po doświadczeniach wojny polsko-sowieckiej, w roku 1921 powstała koncepcja zlokalizowania polskiego przemysłu zbrojeniowego w tzw. trójkącie bezpieczeństwa – w widłach Wisły i Sanu. W latach 1923–1929 w Polsce udało się zbudować kilka zakładów przemysłu zbrojeniowego na terenach staropolskiego zagłębia przemysłowego. Budowa tzw. COP stała się największym przedsięwzięciem gospodarczym Rzeczpospolitej. Oceniając dziś realizację tych zamierzeń, można stwierdzić na wielu przykładach pozostałych jeszcze obiektów, iż był to proces kompleksowej przebudowy sposobu życia wielu mieszkańców. Budowie zakładów przemysłowych w COP towarzyszyło budownictwo mieszkaniowe dla ich pracowników. Łącznie zbudowano lub rozpoczęto budowę około 7100 budynków mieszkalnych. Wznoszono zarówno kolonie mieszkaniowe dla robotników, jak też osiedla dla kadry urzędniczej. Towarzyszące fabrykom osiedla mieszkaniowe lokalizowano w ich pobliżu tak, aby pracownicy mieli blisko do pracy. Formy układów urbanistycznych osiedli i ich wyraz architektoniczny nawiązywał do zespołów fabrycznych. Techniki wznoszenia uwzględniały najnowsze rozwiązania konstrukcyjne, ale jednocześnie respektowały miejscowe tradycje i materiały budowlane. W artykule omawiono przykłady zabudowy COP powstałe w Polsce południowo-wschodniej oraz przedstawiono ich stan zachowania.

Key words: Central Industrial Region (COP), industrial architecture, housing, modernism

Słowa kluczowe: Centralny Okręg Przemysłowy (COP), architektura przemysłowa, budownictwo mieszkaniowe, modernizm

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Housing estates and culture of architecture

Introduction

Fig. 1. LSM Housing Cooperative in Lublin. Elaborated by author

The first housing estates in Lublin after the Second World War were created as part of ZOR (Working Estates Factories – Tatary, Bronowice) and as the first postwar Housing Cooperatives.

The greatest cooperative was the Lublin Housing Cooperative (LSM) which was created in 1957[1]. In the years 1954–1968 the city was greatly industrialized which caused an influx of migration from the surrounding areas.

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[1] LSM included the following estates: Mickiewicz (1958), Słowacki (1964), Piastowskie (1966), Krasiński (1970), Sienkiewicz (1973), Konopnicka (1974), and Prus (1975).

During ten years the population of the city doubled. On 25 April 1957 the first meeting of the founding members of the cooperative took place. The city authorities designated the area of about 42 hectares situated in the district 'Rury' within circa 5 kilometers from the city centre for the construction of a new Cooperative housing estate [15, 16].

Adam Mickiewicz Estate

Fig. 2. The Mickiewicz Estate in the 1980s [5]

Fig. 3. Fountain on the Mickiewicz Estate in the 1980s (a). The same fountain in 2008, photo by M. Sosnowska, 2008 (b)

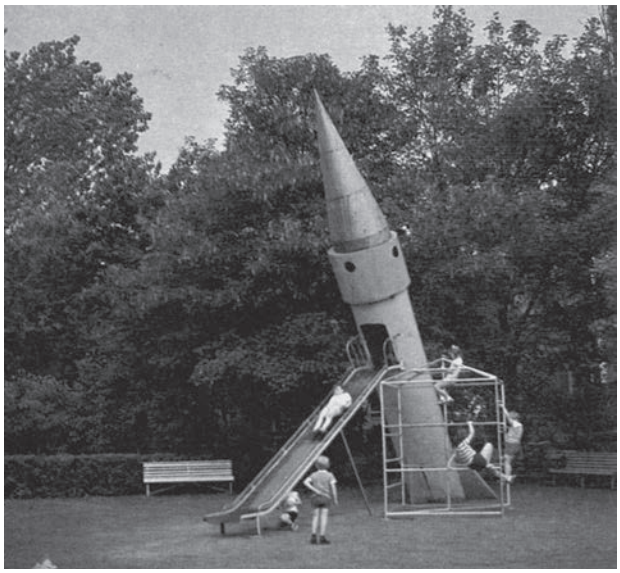

Fig. 4. Playground on the Mickiewicz Estate in the 1980s and today. Photo by E. Przesmycka, 2010[3]

The first housing estate to be built within the framework of the Lublin Housing Cooperative was Adam Mickiewicz Estate[2]. At the same time, social and technical infrastructure was created, including shopping and service centres, outpatient clinics, schools, kindergartens, social clubs and libraries [3, 4, 11].

The transportation system of the estate was arranged in a way that separated pedestrian traffic and vehicular traffic. Simultaneously, the intra-estate areas were developed by creating recreation places for residents accompanied by planting high green fields, plants and characteristic for this estate numerous rock gardens. Urban planning of the estate was not distinguished in any particular way, however, the green areas covered more than 20 hectares [5, 9].

[2] The design author was Feliks Haczewski. Construction works were started in June 1958 and the first flats were given to the residents in December 1959.

[3] Figures 1–4 from the 1980s were taken from the Cooperative folder: Gnot L., *Nowy Lublin, Osiedla Lubelskiej Spółdzielni Mieszkaniowej*, Wojewódzki Ośrodek Informacji Turystycznej w Lublinie, Lublin 1987.

Fig. 5. Remains of the rock gardens on the Mickiewicz Estate, photo by E. Przesmycka 2010, M. Sosnowska, 2007

Juliusz Słowacki Estate

Fig .6. Słowacki Estate in the 1980s[4] [8]

Fig. 7. Band type buildings of Słowacki Estate, photo by M. Sosnowska, 2007 (a). The state from 2007, photo by E. Przesmycka, 2010 (b)

It was built as the second estate within the framework of the Lublin Housing Cooperative. The authors of the design were Zofia and Oskar Hansen [1]. The estate was built in the years 1964–1970 according to the concept of 'Open Form', which was elaborated by Oskar Hansen[5] [2].

In the transportation system of the Juliusz Słowacki estate, some innovative solutions were employed with regard to the segregation of pedestrian traffic and vehicular traffic. Vehicular traffic was excluded from the interior areas of the estate, while garages and car parks were located on the outskirts of the estate. The estate access roads were designed from the northern side of the whole complex. The basis of the estate composition constituted three long, segmented, five-storey residential buildings (Fig. 7). Perpendicular to them, there are three shorter five-storey buildings. The entire complex opens up to the south where there are recreation areas of the estate. These buildings are completed by eleven-story buildings. The social and technical infrastructure was created at the same time as the residential buildings. With reference to the idea of the Linear Continuous System, the estate system is divided into bands: serviced zone – flats, northern servicing zone – vehicular traffic, southern servicing zone – recreation,

[4] Source: *Lublin trzech pokoleń*, Lublin 1987.

[5] The idea of 'Open Form' was formulated and proclaimed by Hansen in 1959 during the congress of CIAM in Otterlo, where it was met with great interest of architects. The idea assumed a possibility of residential and urban environment formation by every single resident, space forming through various human activities and resignation from the artist's superiority in the design process. In 1966 Hansen elaborated the theory of Linear Continuous System (LSC). It transposed the Open Form into the urban scale. The LSC ideas assumed a band division of space into zones with various functions and resignation from the traditional division into the centre and suburbs. This idea was employed when designing the Juliusz Słowacki Estate where residential parts were divided by service zones and green zones. The project assumed that each place of the residential zone had a different relation with green and service zones, but the relation was the same as regards distance and access.

relaxation. In the northern zone, the Hansens designed most of such laborious functions as garages, car parks, rubbish places, transformer stations, utility areas, shops, etc. In the southern zone situated in the interior part of the estate there were playgrounds and recreation places, social club, kindergarten and estate park. While implementing the idea of 'Open Form', the designers assumed the possibility of various processes of merging residential interiors and at the same time individual creation of space by the residents.

Piastowskie Estate

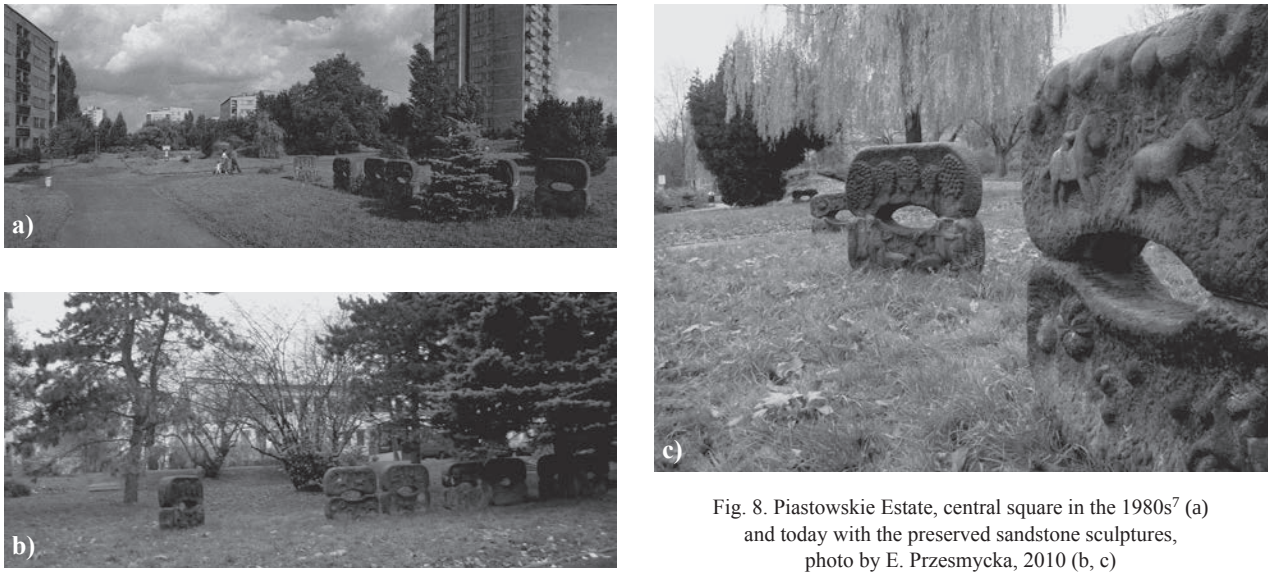

Fig. 8. Piastowskie Estate, central square in the 1980s[7] (a) and today with the preserved sandstone sculptures, photo by E. Przesmycka, 2010 (b, c)

Design works on the Piastowskie Estate started in 1966 and the building process commenced one year later. In this estate, some ready-made architectonic projects of residential buildings were used[6]. Similarly to the previous estates, a very important role was played by green areas and the rich program of associated infrastructure.

A characteristic feature of the central part of the estate is the sculptures made in sandstone[8] [7]. The sculptures are covered with the reliefs made on the basis of children's drawings.

[6] The arrangement of the buildings and land development project were made by a Lublin architect Antoni Herman.

[7] Source: L. Gnot, *Nowy Lublin, Osiedla Lubelskiej Spółdzielni Mieszkaniowej*, Wojewódzki Ośrodek Informacji Turystycznej w Lublinie, Lublin 1987.

[8] The sculptures were made during the Lublin Artistic Meetings which were organized in the years 1976–1978; the authors were: Barbara Zbrożyna, Jadwiga Janus and Michał Leszczyński.

Characteristics of the LSM estate spaces

The LSM, similarly to the majority of the housing estates which were built in Poland in the postwar period, was characterized by large inter-estate areas and minimalist solutions of the buildings' structures and the great empty facades were conducive towards the free process of engaging into various artistic activities. The Lublin Housing Cooperative was one of the few institutions existing then in Poland which paid particular attention to the estate formation process.

In the 1970s in the LSM estate spaces there appeared many elements of small architecture, including numerous sculptures. Along the lanes and on the squares modern sculptures were placed, some of which exist until today; they are often forgotten, damaged and not restored (Fig. 9).

On many squares fountains were built along, with special playgrounds for children and benches to sit on, all surrounded by well planned green areas. All this helped the residents live in friendly surroundings which were characterised by a relatively high level of 'culture of architecture', despite the times of the industrial uniformed building technologies and many drawbacks in the existing town planning solutions. One of the examples of activities undertaken in order to improve the socialist estates image was the organization of artists' meetings at which the issues of graphic setting of urban spaces were discussed.

In the years 1976–1978 within the framework of the Lublin Housing Cooperative (LSM) [7], Lublin Artistic Meetings were organized. A number of graphic artists as

Fig. 9. Remnants of numerous sculptures exhibited on the LSM estates[9] [7]

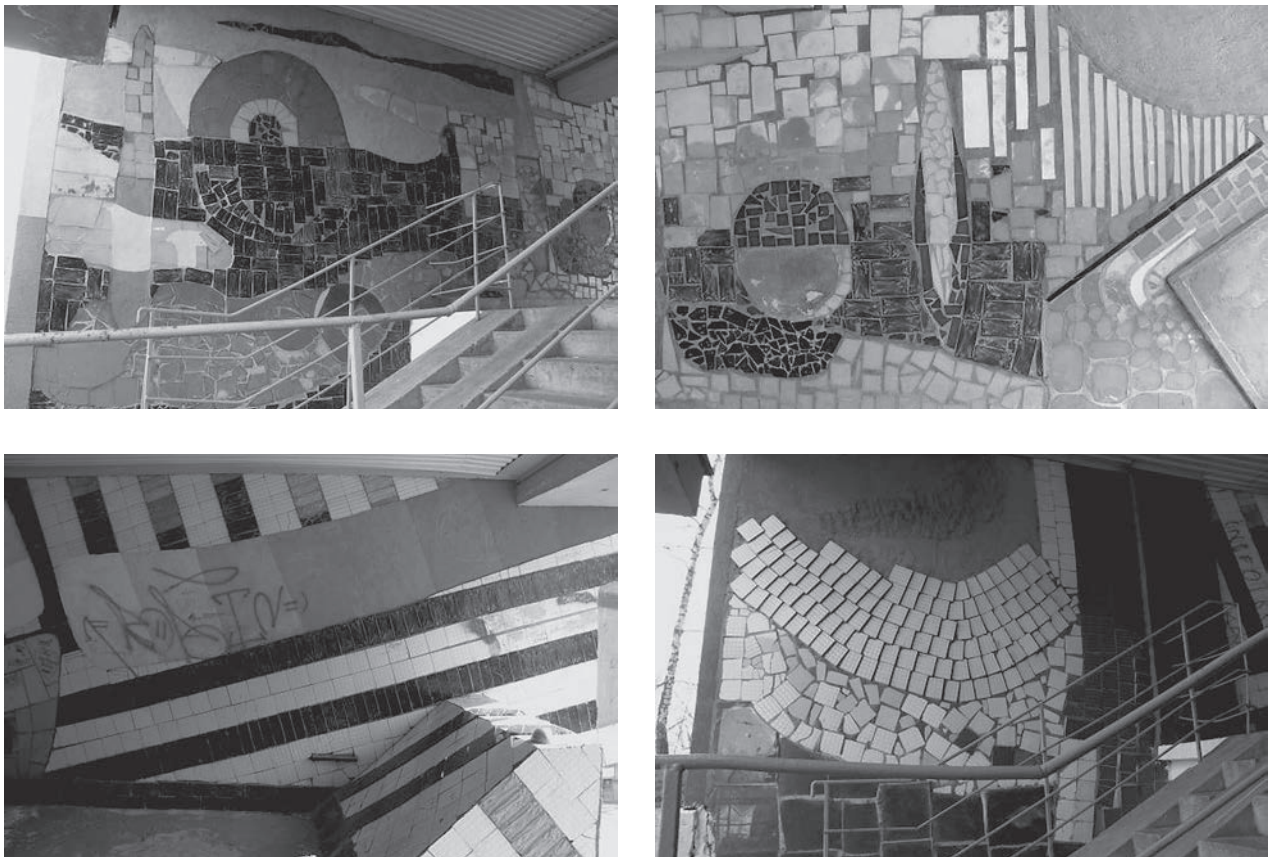

Fig. 10. Mosaics made during the Meetings of Artists in 1976 in the passage of residential buildings in the Słowacki Housing Estate LSM in Lublin. Photo by M. Sosnowska, 2008

[9] The sculptures were made during the Lublin Artistic Meetings, among other by B. Zbrożyna, J. Janus oraz M. Leszczyński, I.J. Kamiński, *O sztuce w Lublinie*, [in:] T. Radzik, A.A. Witusik, *Lublin w dziejach i kulturze Polski*, Lublin 2000.

Fig. 11. The painting composition (it does not exist now) on the gable of the building on the Krasiński Estate. Source: Gnot L., *Nowy Lublin, Osiedla LSM*, Wojewódzki Ośrodek Informacji Turystycznej w Lublinie, Lublin 1977

well as architects from all over Poland and students of fine arts academies took part in this meeting. The goal of these meetings was the integration of graphic arts within the urban environment. As a result, a number of sculptural works were realized as well as paintings and mosaics on gables and in entrance areas of buildings. Before they were completed, these works were discussed with the residents of the LSM estates and then presented at numerous exhibitions and meetings in the artistic circles. These works added splendour to various places within the estates for almost fifty years. Now, most of these paintings and mosaics are destroyed due to insulation works carried out on the residential building and restoration of the public utility buildings. The only ones which are preserved until today are the mosaics in the passages between buildings on the Juliusz Słowacki Estate (Fig. 10).

Social infrastructure of the LSM

Fig. 12. Shopping centres designed by Oskar Hansen on the Słowacki Housing Estate, LSM Cooperative in Lublin

The estate spaces were complemented by numerous shopping and service centres, social clubs, kindergartens, nurseries, passages and market squares. Amphitheatres, sleighing hills as well as other forms of small architecture were constructed on some estates. While carrying out such realizations, architects had a chance to demonstrate their professional skills as they were not forced to design buildings with the use of the large concrete slab technologies. These small complexes and separate buildings often situated in the central parts of the estates presented a high level of architectural culture.

The realized structures were covered up with natural stones, i.e. common granite, fashionable porphyry or sandstone facing. Shopping arcades were often covered up with clinker or brick slabs or they had walls made of glass bricks. A good example here is the shopping centre designed by Oskar Hansen situated on Zana Street or buildings of kindergartens and schools on the Piastowskie Estate.

The period of political transformations brought about some significant changes in the urban and architectonic expression of the majority of the estates. Paradoxically, it is only on the most neglected estates that we are still able to identify the art of architecture of those past years. Due to the commonly executed thermal insulation of buildings, many of their specific features were lost, for example kindergartens or nurseries. At the same time, changes of ownership or alteration in the purpose of the particular buildings led to many conversions. Social clubs and trading centres changed owners which in many cases resulted in changes of their original purpose[10] [12].

[10] A famous case was when a private entrepreneur illegally added a storey to one of the shopping centre buildings designed by O. Hansen; this action did not take into account the ownership rights and the whole scale of the market complex. This situation caused a discussion among Lublin artists on the need to protect the valuable architecture of the 20th century which is not listed in the official monument register. A similar discussion on the protection of the contemporary urban systems took place when the Blessed Piotr Jerzy Frassati church was to be built in the centre of this estate.

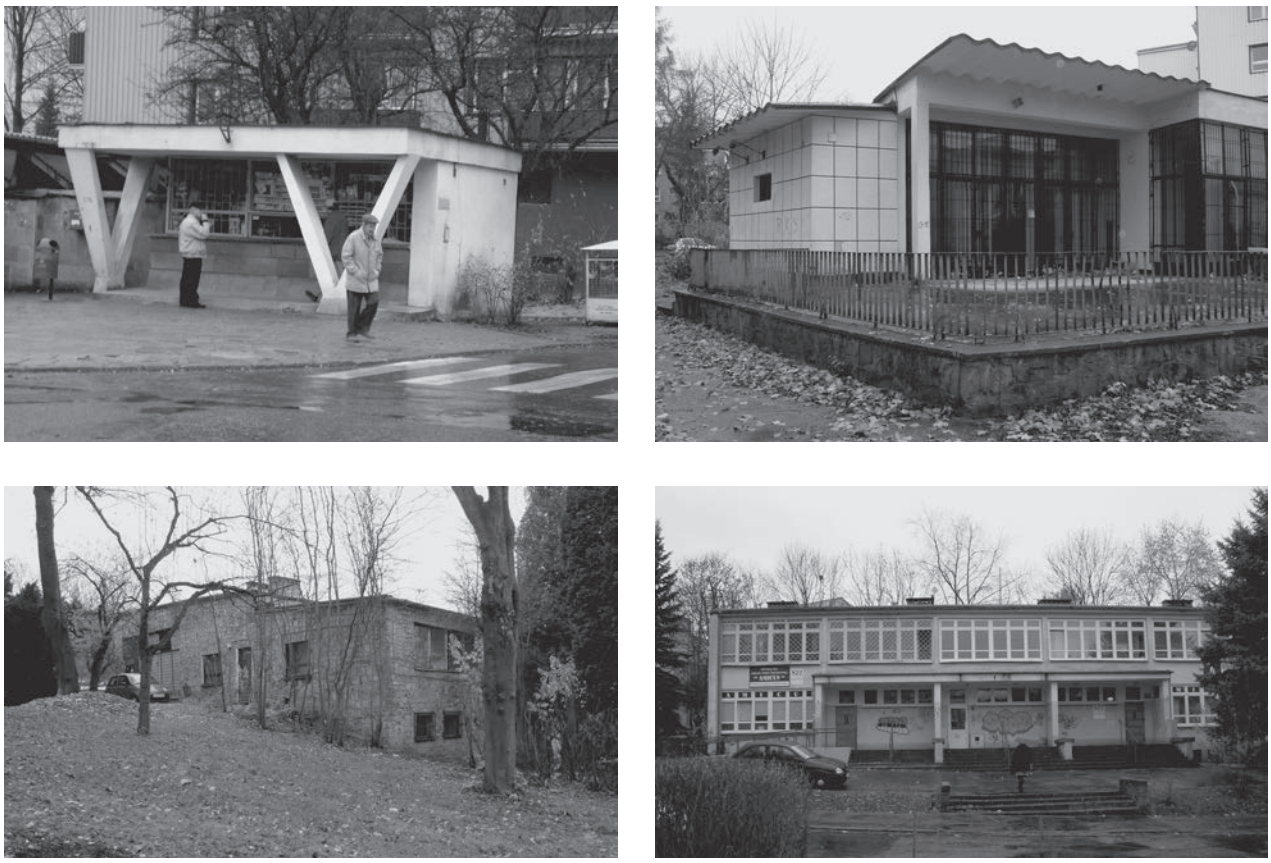

Fig. 13. LSM estate shopping centres. Photo by E. Przesmycka, 2010

Current activities of the Cooperative and culture of architecture

The actions which have been carried out in the recent years aimed at improving the esthetics of the housing estates in Lublin, similarly to the majority of other Polish cities, are mostly limited to thermal insulation of the buildings and colour renovation of the façades. Thermal insulation of the buildings is met with great approval of the estate residents as it contributes to the reduction of utilization costs of the flats. The quality of the proposed solutions in terms of colours which are introduced while insulating the buildings seems to be less important for the residents. Usually, the choice is made by the administration workers and the residents have nothing to say. There is no social discussion on the esthetics of the proposed designs. The projects of colour renovation do not refer in any way to the original colours or to the employed finishing materials. In many of the buildings the original façades were covered with mineral plaster work, sometimes with various texture. After the thermal insulation with foamed polystyrene or mineral wool, the building lost their modernistic form and the deeply placed window openings complement this image of the modern residential architecture. On the Juliusz Słowacki Estate of the Lublin Housing Cooperative, where the process of thermal insulation of the buildings has not been carried out on a comprehensive scale yet, we can still see the original façades which were designed by Oskar Hansen (Fig. 10) [8, 10].

Actions initiated by the residents

The residents of the housing estates also feel the need for artistic expression and they wish to mark their presence in the estate space. The residents' activities may be spontaneous or they can be initiated by the local cultural centres, culture animators or people with a passion. In July 2009 the young activists of the Culture Animation Incubator at the Lublin Cultural Centre organized a festival named 'Osiedlówka' on the Tatary Estate. As part of this festival, a workshop was organised on street art combined with graffiti lessons. During the workshop, the residents themselves could make graffiti and murals. These activities were met with great approval of the young residents of the estate. In 2010 some anonymous artists made graffiti works on the back walls of the public utility buildings (Fig. 14). Although graffiti art is commonly regarded as vandalism, these anonymous works were warmly received by the local youth as well as by the elderly residents of the estate.

Fig 14. The back elevation of the service centre on the 'Tatary' Housing Estate. Graffiti made by the young residents of the estate

Conclusions

The so called housing estate culture of architecture comprises many elements.

Apart from the quality of the buildings which undergo aging processes on the one hand, while on the other hand they are modernized and revitalized with various esthetic effects, we also have to take into account the elements of estate territory development. Shortly after the estates were built, various actions were taken in order to form esthetics of the housing estates and their architecture. Presented in our article, the small architecture structures or estate shopping centres which have been preserved until today, were supposed to make the industrial housing estate forms and typical residential buildings look more beautiful and they also complemented the employed urban planning solutions. Some of the preserved elements of the façade decorations or entries to the buildings are often the only remnants of the 1950s and 1960s architecture. Therefore, it seems necessary to protect them [13, 14].

References

[1] 5*0 lat Lubelskiej Spółdzielni Mieszkaniowej*, Lublin 2007.
[2] *Architektura modernizmu, Kraków, Lublin, Otwock,* E. Przesmycka (ed.), Wydawnictwo Politechniki Lubelskiej, Lublin 2008.
[3] Dębiec-Kalinowska B. (ed.)*, Lubelska Spółdzielnia Mieszkaniowa*, ZW CRS, Warszawa 1968.
[4] Gawarecki H., Gawdzik C, *Ulicami Lublina*, Lublin 1976.
[5] Gnot L., *Nowy Lublin, Osiedla LSM*, Wojewódzki Ośrodek Informacji Turystycznej w Lublinie, Lublin 1977.
[6] Gnot L., *Nowy Lublin, Osiedla Lubelskiej Spółdzielni Mieszkaniowej*, Wojewódzki Ośrodek Informacji Turystycznej w Lublinie, Lublin 1987.
[7] Kamiński I.J., *O sztuce w Lublinie*, [in:] Radzik T., Witusik A.A., *Lublin w dziejach i kulturze Polski*, Lublin 2000.
[8] *Lublin trzech pokoleń,* Wydawnictwo Krajowa Agencja Wydawnicza. Lublin 1987.
[9] Przesmycka E., Sosnowska M.*, Przeobrażenia układów zieleni osiedlowej na przykładzie zespołu im. Adama Mickiewicz Lubelskiej Spółdzielni Mieszkaniowej*, [in:] Czasopismo Techniczne. Architektura*,* 10/2007, Wydawnictwo Politechniki Krakowskiej 2007.
[10] Radzik T., Witusik A. A., *Lublin w dziejach i kulturze Polski*, Lublin 2000.
[11] Rozenberg I., *Rozbudowa Lublina*, Architektura, 4/1959, ZG SARP.
[12] Sosnowska M., *Modernizm powojenny na przykładzie wybranych lubelskich spółdzielczych osiedli mieszkaniowych z lat 60 i 70 XX wieku*, [in:] E. Przesmycka (ed.), Teka Komisji Architektury, Urbanistyki i Studiów Krajobrazowych O/PAN Lublin, Volume IV B, Lublin 2008, pp. 203–211.
[13] Śliwa Z., *Spółdzielczość mieszkaniowa w Polsce*, Bydgoszcz 2004
[14] Urbanik J., *Granice modernizmu – niechciane dziedzictwo Problemy dotyczące rewaloryzacji architektury powstałej po II wojnie światowej w Polsce,* [in:] E. Przesmycka (ed.), Teka Komisji Architektury, Urbanistyki i Studiów Krajobrazowych O/PAN Lublin, Volume IV A, Lublin 2008, pp. 62–74.
[15] Wojtkun G., *Osiedle mieszkaniowe w strukturze miasta XX wieku*, Szczecin 2004.
[16] Zdunek A. (ed.)*, 50 lat Lubelskiej Spółdzielni Mieszkaniowej*, Lublin 2007.

Osiedla mieszkaniowe a kultura architektury

W artykule poruszono problematykę kultury architektury wybranych osiedli mieszkaniowych Lublina. Opisywane osiedla powstały w okresie od końca lat 50. do początku lat 80. ubiegłego stulecia. Już na etapie projektów lub krótko po ich powstaniu w osiedlach prowadzono działania mające na celu poprawę estetyki przestrzeni osiedlowych oraz samej architektury, angażując do tego celu specjalistów: artystów plastyków, urbanistów, architektów i ogrodników. Zaproponowane przez nich rozwiązania upiększały formę architektoniczną uprzemysłowionej, typowej zabudowy mieszkaniowej i dopełniały małą architekturą rozwiązania urbanistyczne. Obecnie zachowały się jeszcze elementy wystroju elewacji, wejść do budynków i pozostałości małej architektury. Konieczna jest ochrona tych nielicznych już zabytków kultury osiedlowej. Niestety, prowadzone powszechnie działania termorenowacyjne budynków i rewitalizacyjne przestrzeni osiedlowych nie biorą pod uwagę możliwości ich zachowania.

Key words: Lublin, culture of housing estates

Słowa kluczowe: Lublin, kultura osiedli mieszkaniowych

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Architecture of the contemporary museum as the art of transmission of material and spiritual cultural values

A term 'museum' originates from ancient Greece. Museions (museion – temple of Muses) were the institutions whose patrons were Muses – mythological daughters of Zeus and Mnemosyne – guardians of liberal arts[1]. Libraries, which contained collections of researches, constituted the main part of them. As a kind of academy of science they provided scientists with places for meetings and discussions as well as with flats, costs of living and workplaces at the expense of the state. Fine arts such as architecture, sculpture, painting, and decorative art were regarded as handicraft and the places on which they were exhibited were named according to the exhibit kind: thesaurus (treasure-house), sculpture collection, collection of cameos and gems or collection of paintings [19]. The Ancient Greeks, and later also Romans, were in the habit of making works of art accessible for the public. They were exhibited in temples and public buildings (such as porticos, gates, theatres, odeons, nympheaums, thermaes) as well as on squares (agoras, fora, stadiums, hippodromes) [13]. Private collections of art were very popular in the Roman Empire times. According to Vitruvius, pinacothecas often constituted a part of the Hellenic house [18].

The cradle of museology in modern Europe is considered to be the Renaissance Italy where a humanistic movement started to develop as a result of the fascination with the ancient world. During the Renaissance the notion of museum meant *collection of objects of a certain class, appropriately ordered and made accessible. This meaning has prevailed until today.* [19]. In Italy of the 15th and 16th centuries there appeared first modern buildings for museum purposes such as The Vatican Pinacotheca (A. Bramante), The Gonzaga Pinacotheca (V. Scamozzi) in the ideal town Sabbioneta or the Museum in Como. However, most of the rooms, which served the purpose of exhibitions places, belonged to castles, palaces, patrician and middle-class houses, church and cloister buildings. At that time, there used to be a custom of building in palaces *huge, elongated halls with side lighting which firstly constituted the place of meetings and receptions. Galleries, which showed wealth of the house, began to be fulfilled with works of art and as the collector's interest increased, the galleries were decorated with paintings and sculptures according to the program* [13]. The gallery of Farnese Palace (later imitated in the Louvre Museum and Versailles) and the Medicean gallery Uffizi in Florence (G. Vasari – 1560, B. Buontalenti – 1581) whose spatial arrangements such as the central yard with colonnade surrounded by loggias, the arrangement of exhibition rooms with galleries on one side and small rooms on the other, and a culmination point in form of orthogonal Tribune with top lighting (on the model of Florence baptistery), were the most famous galleries and constituted a standard for the neo-Renaissance architecture. From Italy humanism spread to other European countries. From the 17th century, painting or sculpture galleries which were situated at residences became popular in the whole European palace architecture.

The ancient idea of making works of art accessible for the general public was also revived in Italy. In 1471 the Pope handed over the Capitoline Museum in Rome to the Roman people and in 1581 the Medicean collection of sculptures in Loggia dei Lanzi on Piazza della Signoria in Florence was opened. Some time later in 1681 in the Mediaeval castle Louvre converted to the museum, the royal collections were made accessible to the members of Academy and the talented youth, while in 1683 in England the Ashmolean Museum collections were made accessible to the scientist and students of Oxford [17].

From the 18th century on, separate buildings were erected independently of palace complexes whose found-

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[1] Muses were patrons and guardians of liberal arts such as Erato – love poetry, Euterpe – lyric poetry, Calliope – epic poetry, Clio – history, Melpomene – tragedy, Polyhymnia – choir poetry, Thalia – comedy, Terpsichore – dance, Urania – astronomy and geometry.

ers were mainly governors. They had elongated shapes and side lighting, which was typical of galleries. The spatial form was so popular that it became a synonym of the building which exhibits works of art [9] (Dresden Gallery of Wettins family – F. Algarotti, 1745–1746 or Sansoucci Gallery in Potsdam – J.G. Büring, 1756–1763). Gradually, museums acquired a more monumental character and were modelled after the palace architecture as well as on the ancient forms and arrangements thanks to which they got the shape of the art temple. Their interiors were based on spatial gallery forms which were connected in one or multi-nave halls and in this way they formed closed arrangements with inner yards or open arrangements with perpendicular wings. A room with the central arrangement accompanied with top lighting and covered with a copula, which referred to Greek and Hellenistic buildings whose most perfect example constitutes the Roman Pantheon (e.g. the Fridericianum Museum in Kassel – Simon du Ry 1769–1779 or the Vatican Museo Pio-Clementino since 1773, which was built by G. Marini, M. Simonetti and G. Camporese respectively), was used as a culmination space. Apart from the classicistic designing style of museums a romantic trend appeared in England which referred to the Gothic architecture (e.g. 'Strawberry Hill' near Twickenham – Sir H. Walpole, 1747). The age of Enlightenment defined the role of museum as a public and citizen institution which was supposed to be an educational place of the society. In 1759 the British Museum in London was opened as the first public museum. In 1791 by Act of the French Revolution and the French National Assembly a decision was reached concerning the creation of the National Museum in Louvre [19].

The 19th century was a period of development of museology all over the world. The first half of the 19th century continued the trend of museum buildings designing based on the ancient standards, for instance, a complex of museums at the Royal Square in Munich (L. von Klenze) built on the model of Athenian Acropolis. Altes Museum in Berlin (K.F. Schinkel – 1823–1830) determined an important monumental museum archetype which was based on the neo-classicistic stylistics with rich allegoric ornaments. The most important and culminating role, among a multi-storey series of galleries, was performed by the rotunda space covered with a copula and having top lighting on the model of the Roman Pantheon. This model was widespread in Europe and in the United States of America where it was still popular in the first half of the 20th century [19]. Also a new building of the British Museum (R. Smirke – 1823), which constituted a copy of Athenian Parthenon in its central part, became the model for hundreds of museums built all over the world [20]. A rationalistic approach towards designing museums, which originated from the Enlightenment and aimed at creating optimal conditions for exhibitions, was continued in England. Dulwich Gallery in London (Sir J. Soane – 1811–1814) with exhibition rooms lit by means of central lanterns with vertical windows became the exemplar which was met with general acceptance.

Models of the Italian and French Renaissance palaces and galleries of art as well as the Baroque palaces and churches began to dominate since the middle of the 19th century under the influence of historicism. The old Pinacotheca (Alte Pinakothek) in Munich (L. von Klenze – 1822–1836) is considered to be the first European great museum built in the neo-Renaissance style. This style dominated almost till the end of the 19th century and its most excellent examples are the buildings of the National Museum in Prague and new tsar museums in Vienna (G. Semper i K. Hasenauer – 1872–1889).

The modernist avant-garde movement rejected the tradition of the museum as a temple and palace of art and it also rejected decorativeness with symbolic and allegoric significance. The museum architecture was supposed to express formal and ethical ideas of modernism such as transparency, 'open' plan, functionalism and universalism of space, technological precision as well as lack of dialog between space and exhibited objects. The problem of expressing the idea of museum was the subject of studies of the most remarkable creators of the movement like Le Corbusier (a design of the world museum 'Mundaneum' in Geneva – 1929, the 'Museum of unlimited growth' – 1931) or Mies van der Rohe ('Museum for a small town' – 1942). Only after World War II could the principles of architectural avant-garde be applied. The Museum of Modern Art in Sao Paulo (L. Bo Bardi – 1957) and the New National Gallery (Neue Nationalgalerie) in Berlin (Mies van der Rohe – 1962–1968) belong to the spectacular examples of free articulation of the exhibit space which 'intermingles' with the surroundings. Big, glass surfaces – in spite of the fact that they caused problems in the case of exhibitions – expressed a symbolic meaning of transparency, which gave the space a public character by means of 'great freedom of access' [14]. The open space and greenery of the landscape were recognized as the most favourable surroundings for exhibiting modern art. An idea of combining modern art with the beauty of nature found its most perfect reflection in the Louisiana Museum in Humlebaek situated at the seaside near Copenhagen (J. Bo and V. Wohlert – 1958–59). A spiral shape of the 'Museum of unlimited growth' by Le Corbusier can be found in R. Guggenheim Edifice of Salomon Foundation Museum in New York (F.L. Wright – 1943–1959). The owner of the radical forms of modern art collection intended to exhibit it in a completely new space and to build a monument which would be a symbol of the institution. Georges Pompidou National Centre of Culture and Art in Paris (R. Piano and R. Rogers – 1972–1977) perfectly reflects ideological declarations of modernism and at the same time it constitutes the first example of 'high – tech' philosophy which assumes that *a building should function like a catalyst: it should be a casing which provides technical possibilities, stimulates processes but it does not preserve them* [16].

A rational direction of designing museums in search of the most economic lighting systems of exhibitions was created by the Saeger system – a combination of a vertical window with a concave lamp which reflects and models light [17]. The rhythm of repeated round lanterns shaped the museum form and in this way it expressed the idea of functionalism. Possibilities of flexible usage of different sets and arrangements of this system made it very popu-

lar in the second half of the 20th century (e.g. Joan Miro Foundation in Barcelona, J.L. Sert – 1972–1975, Bauhaus Museum in Berlinie, W. Gropius – 1964–1979, Ludwig Museum in Koln – P. Busmann and G. Haberer – 1986). Kimbell Art Museum (L. Kahn, 1967–1972) undoubtedly constitutes a gem in the history of museums. A unique atmosphere of the interior ('sacrum') was achieved through a harmonic combination of the structure, light and space by means of traditional forms and materials and thanks to the application of a modern light technique in the process of designing.

At the end of the 20th century, museums experienced significant development as public institutions. In response to the public needs connected with the development of mass tourism and popularisation of the so called *culture of celebration* [16], a new type of museums appeared called *a trade centre of culture* or *cultural mall* [3] because its main activity consisted in generating income through stimulating consumption. Increasing needs for additional spaces functioning as educational, relaxing, entertaining places as well as commercial zones of trade and services became a characteristic feature of the museum. Museums as cultural centres and institutions dealing with research on art were supposed to function as places of cultural and social meetings, educational resources and marketing places as well as providers of pleasure coming from contacts with culture. Architects responded by designing buildings which were representative, stylistically diverse, expressing their attitude towards architecture and art and reflecting artistic ambitions of the collections' owners. V.M. Lampugnani named them *'seismographs of architectural culture'* because they gave quick answers to changing architectural trends [10]. Thanks to the functional development, the role of museums in solving urban, social and economical problems of cities increased. Museums designed as works of art influenced the attractiveness of the city surroundings by performing the role of 'urban signposts' and symbols of cultural identity.

Since the 1980s design orders regarding museums or other centres of culture have been considered to be the most prestigious and met with great acceptance in the architects' environment.

Architecture of the advanced technology, which treats natural light as indispensable in the museum space, fascinates with possibilities of its transmission to inner parts of the building by means of reflections from mirror surfaces, shafts and light channels as well as through the use of structural glass in horizontal divisions (Sackler Wing Royal Academy of Arts and Crescent Wing in Sainsbury Centre for Visual Arts of East England University in Norwich – N. Foster, 1991, National Gallery of Canada in Ottawa – M. Safdie, 1983–1988). Renzo Piano worked on more and more sophisticated solutions of flat glass roofs above the museum exhibition in order to achieve ideal light conditions (De Menil Collection – 1981–1986 and Cy Twombly – 1992 in Houston; Beyeler Museum in Riehen –1992–1997; development of High Museum in Atlanta – 1999–2005).

Postmodernist architecture, which opposed to the monotony of the international style, referred to historical typological elements of the museum as a form of a temple or treasury, rotunda covered with a copula, spatial arrangement of a gallery, rooms en suite, elements of architectural styles and orders as well as methods of lighting: gallery windows, a copula oculus, lanterns, skylights, etc. This did not mean direct copying of historical forms but applying them in a different way aiming at presenting messages with symbolic meanings and emphasizing differences between the past and presence (e.g. development of Staatsgalerie in Stuttgard, J. Sterling & M. Wilford – 1977–1984).

Fatigue with historicizing forms of postmodernism again resulted in their total negation and in architecture which denied their – as it seemed so far – inalienable rights and reached constructivist Soviet utopias and Jacques Derridy's philosophy [11]. Deconstruction in the museum architecture destroys originally created regularity and typology on purpose. The way of treating the form of a building resembles the work on a sculpture and its relations with the surroundings are unconventional (e.g. Weisman Museum of Art in Minneapolis, 1990–1993 and Guggenheim Museum in Bilbao, 1991–1997 – F.O. Gehry, Judish Museum in Berlin – D. Libeskind, 1989–2001). Expressionistic and deconstructivist designs by Zaha Hadid treat the gallery as a stage for art and architecture. They constitute a multiple and multi-planar transformation of space (e.g. Centre of Modern Art in Rome, 1999–2005) and aim at expressing the idea of museum's public accessibility (e.g. Centre of Modern Art in Cincinnati, 1998–2003 – 'urban carpet' entering the building) [5]. Rem Koolhaas' architecture on the fringes of deconstructionism, postmodernism and commercialism aims at lack of stability and shocking the recipient by using collages of contrary forms and materials [12] (e.g. Guggenheim Museum in Las Vegas, 2001).

Apart from the trends, which create the museum architecture as a show or complicated technical device, also other structures are erected such as architectural works of art in the convention of rationalism, neo-realism, classicist modernism or regionalism. Italian architects could combine modernism with tradition in a creative way. *According to Rossi, no époque should create a completely new architecture but a traditional canon should be adapted to the current requirements and 'interpreted' in a new way.* [16]. According to Álvaro Siza, *the museum architecture can be classical only* (…) *distanced or careful in relation to history and geography* [2]. The complex of buildings of J.P. Getty Centre of Art in Los Angeles (R. Meier, 1984–1997) has a classical (Greek and Roman) and modernist origin with references to the Roman forum – Acropolis, Hadrian's villa and Le Corbusier's creative activity. The concept of Gegenwart Gallery in Hamburg (O.M. Ungers, 1986–1996) was based on the form of a square and its geometric repetitions, which had their roots in the Renaissance (works of art by Palladio and Ledoux). In the Museum of Modern Art in San Francisco (M. Botta, 1989–1995) a cylindrical form, which is situated on the axis and includes a central yard, creates a monumental atmosphere and the heart of the building. The restraint of minimalism, whose founding father is con-

sidered to be Mies van der Rohe, expresses architecture's respect towards art. Achieving excellent effects by using simple means becomes possible thanks to the following elements: a thorough analysis of the subject and location, simple and well-proportioned structure, carefully elaborated details and innovative technical solutions (e.g. Kunsthaus in Bregenz, P. Zumthor – 1990–1997, Museum in Fort Worth, T. Ando – 1997–2002).

A diversity of theories and styles is a feature which results from tolerance for various views and needs. Multithread character of the modern art which attempts to refer to the current problems of the world and to follow the changing reality, progress in building technologies and the pursuit of originality do not allow defining the canon of beauty in an unambiguous and permanent way and make it impossible to adhere to the principles of one prevailing theory. Classicism determined models and archetypes existing throughout the centuries, which entered the language of architecture permanently. The modern architectural thought must have its own attitude towards these models by either accepting or rejecting them. Apart from the solutions which consciously combine modernity with tradition, we can find references to classical archetypes even in the most avant-garde designs.

References

[1] Van Bruggen C., *F.O. Gehry, Guggenheim Museum Bilbao*, Guggenheim Museum Publications, New York 1999.
[2] Bulanda-Jansen A., *Idealne muzeum... jakie?*, A&B styczeń 2002
[3] Ghirardo D., Architektura po modernizmie, Wydawnictwo VIA, Toruń, Wrocław 1999.
[4] Gössel P., Leuthäuser G., *Architecture In the Twentieth Century*, Taschen, Köln 1990.
[5] Hadid Z., *Architektur*, Hatje Cantz, New York, London 2004.
[6] Henderson J., *Museum architecture*, Rockport Publishers, Gloucester Massachusetts 1998.
[7] Jencks Ch., *Architektura postmodernistyczna*, Arkady, Warszawa 1987.
[8] Jencks Ch., *Architektura późnego modernizmu*, Arkady, Warszawa 1989.
[9] Kiciński A., *Racjonalizm i romantyzm w oświetleniu naturalnym muzeów i galerii sztuki*, Muzealnictwo 40, 1998.
[10] Lampugnani V. M., Sachs A., *Museums for a New Millennium: Concepts, Projects, Buildings*, Prestel Verlag, Munich, London, New York, Art Center, Basel 1999.
[11] Leśniak D., *Wolf Prix w centrum Manggha*, www.w-a.pl/2004/wolf_prix.htm.
[12] Leśnikowski W., *Projekty Rema Koolhaasa*, A&B 7/8 2003.
[13] *Muzealnictwo*, praca zbiorowa pod red. S. Komornickiego i T. Dobrowolskiego, Wydawnictwo Związku Muzeów w Polsce, Kraków 1947.
[14] Norberg-Schulz Ch., *Znaczenie w architekturze Zachodu*, Wyd. Murator, Warszawa 1999.
[15] Sochańska B., *Krajobraz Architektura Sztuka*, Muzeum Sztuki Nowoczesnej Louisiana, Archivolta 4/2001, p. 27.
[16] J. Tietz, *Historia architektury XX wieku*, Könemann, Koln 1998
[17] Wierzbicki J., *Muzea i biblioteki*, Arkady, Warszawa 1961.
[18] Witruwiusz, *O architekturze ksiąg dziesięć*, Prószyński i S-ka, Warszawa 1999.
[19] Żygulski Z. jun., *Muzea na świecie: wstęp do muzealnictwa*, PWN, Warszawa 1982.
[20] Żygulski Z. jun., *Przemiany architektury muzeów*, Muzealnictwo 45, pp. 106–124.

Architektura współczesnego muzeum jako sztuka przekazu kulturowych wartości materialnych i duchowych

W pojęciu kultury, rozumianej jako całokształt duchowego i materialnego dorobku społeczeństwa, miejsce szczególne zajmuje sztuka, jako twórczość artystyczna wywołana wewnętrznym przymusem, potrzebą wyrażania uczuć, komunikacji, rozwiązywania problemów ogólnoludzkich. Artykuł dotyczy muzeum jako miejsca, które służy zaspokajaniu potrzeb związanych z obcowaniem ze sztuką. Począwszy od drugiej połowy XX wieku nastąpił rozwój architektury muzeów pod względem funkcjonalno-przestrzennym i estetyczno-kulturowym. Służąc ekspozycji, badaniom i konserwacji sztuki, muzea stały się również miejscem spotkań kulturalno-społecznych, marketingu, rekreacji i rozrywki, edukacji. Projekty nowoczesnych muzeów, jako najbardziej prestiżowe, tworzone są przez najwybitniejszych architektów, reprezentują aktualne oraz awangardowe nurty architektoniczne. Swobodzie wyrażania nowatorskich artystycznych idei towarzyszy konieczność rozwiązywania złożonych problemów funkcjonalno-przestrzennych oraz wymogów użytkowych. Rezultatem jest architektura konkurencyjna w stosunku do wystawianej w niej sztuki. Stosowane środki artystyczne oraz nowoczesna technologia mają na celu przyciąganie widzów, dostarczanie im przyjemności estetycznych oraz przekazywanie treści materialnych i duchowych związanych z ideą muzealnictwa.

Key words: contemporary museum

Słowa kluczowe: współczesne muzeum

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Revitalisation without revolution. Initial adaptation of post-industrial buildings for artistic purposes

Introduction

The areas of the European cities which were industrialised during the 19th century cover really large terrains. In the past, factories, mainly located in the suburbs of big cities, as a result of those cities development, now constitute the elements of their developing centres. The appearance of those factories, which was in their majority worsened by their bad technical condition, from the perspective of a contemporary man may seem austere. Factory was and still is a symbol of dynamic civilisation development and the 19th-century social system. In spite of the fact that factory has a significant material and social meaning as a symbol, it undergoes degradation because it has not been used. In the 21st century – at the time of growing culture globalisation – this symbol requires protection. Giving a new function to post-industrial buildings may contribute to the individualisation of city agglomeration spaces which become similar to one another.

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Fig. 1. Neutral interior MS2 of Museum of Modern Art department at Ogrodowa Street. Photo by M. Rusnak, 2010

Fig. 2. Fragment of exhibition in Oskar Schindler Factory in the department of Cracow Museum of History. Exhibition scenario is constructed with the use of the multi-media presentations and many other viewer-attracting details. Photo by M. Rusnak, 2010

Cultural revitalisation

Cultural revitalisation constitutes one of the very popular models of reviving industrial heritage [1]. Within the last two decades in Poland, art has become an element which supports the processes of degraded terrains transformations. In the colloquial understanding, the combination of new buildings or functions with a rough historical tissue has become very fashionable among different social groups. Among adaptations of old factories, which were made in Poland for the purpose of performing culture functions, we can mention 'Stary Browar' (Old Brewery) in Poznań, the Museum of Modern Art – MS2 (Fig. 1), revitalisation of Oskar Shindler factory in Zabłocie district in Cracow (Fig. 2) or rebuilding of a closed down tram generating station for the need of the Warsaw Uprising Museum [7]. These are the most famous and frequently rewarded enterprises[1] and they are very popular. Recently, they have become widely known and even recognized by some people as icons of the Polish culture, architecture and museology development[2].

The introduction of culture function into the building of a closed down factory may assume an expression which is different from the commercial one. The above mentioned publicized enterprises required a lot of financial investments. Their designs caused a lot of emotions, particularly in architectural environments. Decisions and actions taken by decision makers (investors, designers and office workers) during the execution of construction works of these enterprises made many of the introduced in this way changes look controversial. It is even more alarming that there are no steps whatsoever taken in order to preserve the 19th-century industrial heritage.

Taking into account the above mentioned examples, it is really worth describing the phenomenon of preliminary adaptation of unknown architectural and building intervention. Lack of spectacular changes in the shape of reorganized building results in the situation in which these transformations – in spite of their significant meaning – can be easily omitted in the revitalization characteristics of post-industrial spaces. In the article we presented three Polish realizations of preliminary adaptations of post-industrial buildings as follows: Łódź Art Center, Art Gallery in Bydgoszcz and 'Artists Colony' in the territory of the old Stocznia Gdańska (Gdańsk Shipyard).

The activities carried out by an informal photographic gallery are also presented further.

[1] The Warsaw Uprising Museum: 'The best revitalisation design in central-east Europe 2008', a modern icon of Warsaw – a reward in the plebiscite of Gazeta Wyborcza, 3rd prize in the Competition Museum Events of the Year 'Sybilla' 2006, a special reward SARP 2005, Museum Event of the year 'Sybilla 2004', Grand Prix of the Museum of Modern Art MS2: Grand Prix 29th edition of the Competition 'Sybilla' for the Museum Event of the Year, a reward 'Seven Miracles of European Funds', a reward in the Competition of General Monuments Conservator 'Well-groomed Monument', 1st place in 19th edition of the Competition "Best Interior of the Year' 2008, the City Museum of Cracow, department of Schindler's Factory: 'Best Overseas Tourism Project' 2010. The author, who refers to the rewards received by the above mentioned institutions, does not aim to assess their values. Presenting the rewards is supposed to emphasize people's desires, who are connected with these buildings (investors, politicians and architects), to engage in their wide social promotion.

[2] Limited financial resources and differentiated social needs contribute to the fact that not all the deserted structures can become museums, galleries or other service or culture institutions. There are still many buildings which are waiting for a new concept of their use.

Fig. 3. Production hall interior at Tymieniecki Street during preparations of Katarzyna Czarnecka and Magdalena Olek photo exhibition. Photo by M. Rusnak, 2010

Initial cultural adaptation of post-industrial spaces

'Homeless Gallery'

'Homeless Gallery'[3] is an ephemeral artistic organisation which transforms abandoned or not used interiors into temporary galleries of photography [10]. The main idea of its founders was to present in public their own works of art with an insignificant financial expenditure. The artists find empty places and then they try to get a free access to them. The surroundings in which they decide to exhibit their works are not associated with a place of contemplating art. Abandoned tenement houses, devastated railway stations, unused warehouses, docks or terrains of old military bases, similarly to the production halls[4] used by the artists, do not possess the features which would describe a typical shape of the museum edifice. The initiators, who organise those short-term events, invite other photographers. Thanks to the cooperation with them, they are able to prepare an individualised arrangement for a given interior. The way of presenting an exhibition has a spontaneous character and depends on the place as well as on the objects[5] which are in the possession of the artists (Fig. 3). Their exhibitions took place in numerous old factories in the territory of the whole country such as 'Diana' clothes factory in Szczecin (March 2009), a linen spinning mill converted at present to the so called Lofts de Girard in Żyrardów (September 2007), a closed down combed wool spinning mill of 'Merinotex' factory in Toruń (April 2003) or in the factory at Piotrkowska Street in Łódź (May 2003) [10]. One of their exhibitions took place in the interiors of the railway station in Ostrowiec Świętokrzyski (May 2007)[6]. They also presented their photographic shows, which were part of the existing interiors, with the cooperation of other artistic and state institutions[7].

Art Center and Art Factory in Łódź

Łódź Art Center was established in 2006. Its seat is located on the fragment of the terrain of the old Łódź complex of Karol Scheibler at Tymieniecki Street. Art Center is an organisation which accepted the job of revitalisation of a specific fragment of space dedicated to them. Abandoned buildings of the part of the complex were transferred to them on the basis of the concluded agreement with the Łódź City Council. After two years Art Factory was also established there which cooperated with Art Center.

Within the territory which belongs to Art Center and Art Factory there are five buildings (porter's lodge, offices, three old warehouses of raw and ready materials). The warehouse buildings with big cubature allow

[3] 'Homeless Gallery' was founded on 25th May 2002 by two photographers Tomasz Sikora and Andrzej Świetlik. This is the date of organizing the first exhibition which took place in the tenement house at Złota Street in Warsaw. The organisation is still developing. During the last eight years the founders organised 87 temporary exhibitions, including exhibitions abroad in London, New York, Melbourne, Nantes and San Jose.

[4] The above mentioned places have common features. They are degraded buildings, which due to their superannuated function or substandard character are not used any longer.

[5] The artists who work in the 'Homeless Gallery' make constructions from old ladders, boxes, wire mesh fences, branches, wooden pallets, pieces of materials, strings, cables, road bands on which they can place compositions of their photographs. Equally good places for exhibiting their works are uneven surfaces of machines, pipes, hooks, chains, broken window glass, bars, balustrades, and destroyed stairs – simply the whole equipment to which photographs and other artistic elements can be fitted.

[6] The author includes railway stations into the scope of the discussed post-industrial areas.

[7] 'Homeless Gallery' cooperated with, among other, the following institutions: Mieszczański Brewery in Wrocław, Gallery „Szyb Wilson" in Katowice, Alternative Culture Centre Zebra in Tczew, The City Museum in Śrem or City Office in Biała Podlaska.

organising different events there such as theatre spectacles, fashion shows, concerts, film projections, happenings, as well as photography, sculpture and painting exhibitions. Technical condition of the buildings is bad and dissatisfactory regarding preservation aspects (Fig. 4). Façades, wooden and reinforced concrete constructions as well as leaking roofs require refurbishment (Fig. 5). A part of construction drawbacks required an immediate intervention. At present, only some emergency works have been made, which will protect the building until the target refurbishment are performed. Nevertheless, neglected buildings interiors and devastated spaces between them are 'tamed' through exhibited posters, inscriptions, pictures and furniture (Fig. 6). The present arrangements as well as an interesting cultural offer of both of the described organisations make many visitors

Fig. 4. Old power station interior near Art Center during preparations to one of the photo festival exhibitions. Photo by M. Rusnak, 2010

come here during the whole day and particularly in the evening. The present owners try to make the whole area safe, in particular they try to protect it from stealing historical remnants of the equipment, which poses a danger to many buildings of this type that are left without any care[8].

Artistic activity of Art Factory, which was put into formal and legal frames, can be regarded as a sort of activity for creators who want to refer to the context of this type of place. Such a particular attitude to the exhibition is represented by some modern artists who level the work with the exhibition and in this way make the recipient accept the whole exhibition space[9] [3]. It happens not only in the case of Art Center that neglected buildings become an integral element of art created in them. The form of activity undertaken in the territory of the building does not violate the substance of the structure; there are no conflicts of creative or conservatory activities[10]. In the case of the above described historical buildings, it is not possible to act in an artistic way totally independently, however, creating in such spaces, which still are not renovated, is certainly freer than accepted activities in the formalised spaces such as museums and art galleries[11].

A big advantage of those 'half-wild' buildings is their closer contact with everyday life, which is rarely the case with the prestige exhibition buildings (Fig. 7). This closeness constitutes a sort of propagation of 'reducing limits between art and life practice' [3].

Common functioning of these two Łódź organisations so far can be defined as 'a way to survive.' It is an active desire which leads, step by step, to the chosen target. The number of participants of the next artistic events is still growing. The result of the conducted educational and promotional activities can be seen in form of numerous folders which describe both the past as well as the future of this terrain. The most formal proof of the organization activities are the construction designs which were

[8] In the supervised territory, which is managed by Art Center and Art Factory, there are not many elements of the original equipment; however, a valuable remnant is a big number of floors: wooden, parquet, concrete floor as well as external and internal metal plates with anti-slip geometric patterns.

[9] Some artists desire is to equal the status of the exhibition space with the presented exhibit in it.

[10] Here I refer to *street art* as an extremely liberal trend which through its interventions can break the law (Act on Copyright, Act on Monuments Protection). This problem was widely discussed in the article by Stanisław Gzell entitled *Reurbanisation: conditions* which was published in the Interuniversity Scientific Issue, "Urbanista", Warszawa 2010.

[11] As it was in the case of MS2 or the present form of the Leon Wyczółkowski District Museum.

Fig. 5. Façade detail showing the present condition of buildings in Sheibler complex. Photo by M. Rusnak, 2010

Fig. 6. Window bars used as an exhibition element, building façade of ready material warehouse in the territory of Factory of Art. Photo by M. Rusnak, 2010

authorized in the middle of 2009 by the District Monument Restorer in Łódź[12]. The realization of the first part of the construction design referring to the development and changes in the way of usage of three warehouses is supposed to be started in 2011. The completion of the revitalization process of the whole structure is planned for the year 2014. The construction design provides a connection between the two warehouses by means of a glass roof (Fig. 8). A narrow space is to be filled with a high 14-meter hall with an information centre and an elevator for people (Fig. 9). The authors of the design suggested filling the wall losses and reconstructing original window divisions during the replacement of window woodwork. The design can be described as the one that blends in with the trend on minimalist intervention and the interior aestheticism. The suggested construction solutions are the results of adapting to the new function and regulations of

[12] Design materials (construction design and visualizations) were given to me courtesy of the area administrator, Art Factory. Some of them are accessible in the archives of District Monument Bureau in Łódź (ref. No: 212/146, 205/from 53 to 72). The projects' author (dated 05.11.2009 with regard development and change of usage of buildings B and C and hall A) is the company AB-Projekt from Tychy.

Fig. 7. Free way of utilisation of the historical power station in the territory of Art Centre. Photo by M. Rusnak, 2010

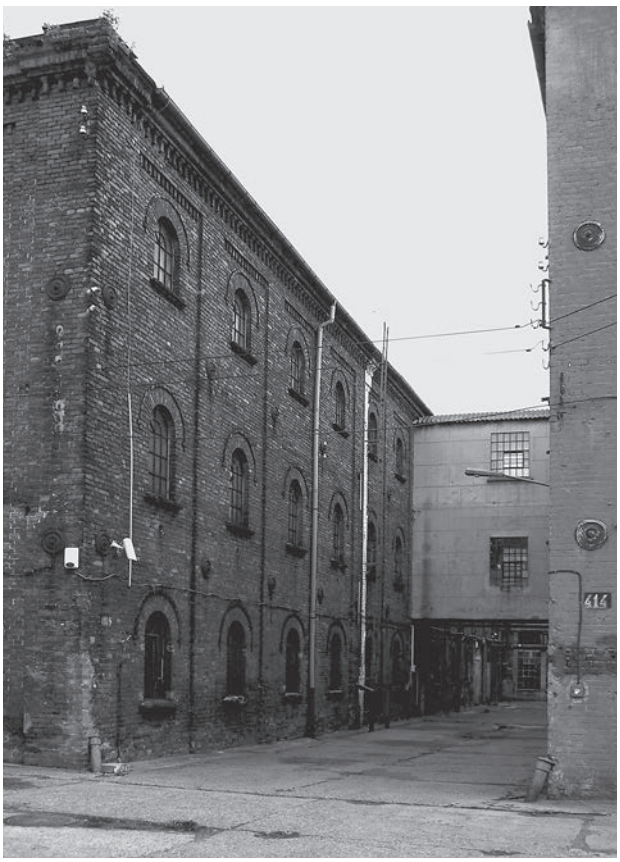

Fig. 8. Current condition of warehouse buildings in Sheibler complex to be revitalized. Photo by M. Rusnak, 2010

Fig. 9. Visualization of the adaptation design for the needs of Art_Inkubator. The investor Factory of Art made the photo available to the author in August 2010

the building law. Rebuilt monumental buildings are supposed to become the seat of Art_Incubator organization. The new entity is to support activities of young artists and a creative sector of Łódź economy [9].

Gallery of Modern Art of the Leon Wyczółkowski District Museum in Bydgoszcz

In a similar way as it was in the case of the factory at Tymieniecki Street in Łódź, a historical steam mill was converted to the seat of Leon Wyczółkowski District Museum in Bydgoszcz. In 1997 the museum became the owner of the building. During the first ten years, due to bad technical condition and lack of funds to continue design and construction activities, only small seasonal exhibitions of modern art were organised. Thanks to this, the process of destruction was stopped and the residents got accustomed to the new planned function (Fig. 10). During the time of initial usage it was possible to create a concept of the building adaptation as well as to leverage sufficient sources of funds to continue the investment. Similarly to the Art_Inkubator designers' suggestion, an additional glass transport staircase was built on the main building.

'Colony of Artists' in the territory of Stocznia Gdańska (Gdańsk Shipyard)

Describing low-budget programs of post-industrial terrains revitalisation, which initiate further revitalisation, we should not forget about artistic activity within the area of Stocznia Gdańska. In 2001 Stocznia Gdańska became the seat of many small fine arts, theatrical and film organisations. The investor – an international company BPTO (Bal-

Fig. 10. New cubature view with a staircase and person elevator added to the old steam mill on Mill Island in Bydgoszcz. Photo by M. Rusnak, 2010

tic Property Trust Optima) which now has over 50 hectares of the post-shipyard terrains – used the artists as a social group being able to improve and propagate a new usage of the place. This group activity created the basis for giving the elaborated design 'Young City'[13] a fashionable status of cultural revitalization. The initial purpose of reviving the old docks was the change of the manner in which this area was perceived by Tri-city residents. 'Colony of Artists' (this phenomenon was that name) was the first design in Poland, which was fully financed by the independent creative circles of Gdańsk. The activity of a big group of artists[14] was so influential that within only five years of activities the shipyard acquired the status of a significant place of art.

At present, most of the institutions which take part in this design must look for other seats. At the place of 'Modeler's Room' seat a new service and office building will be erected. BPTO Company removed the artists from the buildings which were to be demolished or rebuilt and offered some of them temporary supplementary places. The owner of post-shipyard terrains does not guarantee that the artists will have a possibility to continue their previous activities.

It is difficult to criticize strongly the investor because the lease agreement, which was signed by the artists, was to be valid for five years. However, we may get an impression that thanks to the artists' own money and enthusiasm, they were able to create the artistic brand called 'Stocznia Gdańska' [15]. The process of soft terrains adaptation[16], which started in Stocznia Gdańska, is not continued, which may influence the final success of the whole enterprise.

[13] The name of the revitalization design of a part of post-shipyard terrains 'Young City' refers to the name of the old Teutonic location (*Historia Gdańska*, red. Jan Kucharski, Sopot 1997). More information about the design we can find on official websites of Gdańsk City Council as well as on the information website of the water front revitalization design, http://youngcity.pl/.

[14] Among organisations which acted during the first five years of 'Colony of Artists' activity were: Theatre Znak (Sign), Discussion Film Club, Gallery MM, PGRart, Synergia'99, Institute of Art Island, Modeler's Room and individual artists studios.

[15] Lidia Makowska from the City Culture Association accused Baltic Property Trust Optima Company of using the prestige created by Colony of Artists: 'You as a company took over the potential after Synergia. There is a notion of social responsibility in business. After five years you came here to the territory which is already recognized as a brand'. This statement was published on the website http://modelator.blogspot.com in January 2008. In the foreign press we can find another expression for establishing a brand, i.e. 'branding'.

[16] The notion of soft design refers to, among other things, low-budget activities which promote culture, tourism and sport.

Summary

Initial cultural adaptation presents the method of protecting these buildings which are so important for the region development and history and using at the same time their potential. Through the implementation of soft activities, it is possible to slow down the process of destruction – without big sums of money – and prevent these adaptations which are too hasty and are created without thorough planning.

A particular value of this non-commercial and slightly aggressive method of promoting culture – through the initial recycling of architectural structures – is that it takes care of the forgotten places, i.e. neglected post-industrial

heritage in this case. The organised exhibitions and shows are also an opportunity to see the place which after the rebuilding process, in many cases, will become a private structure inaccessible for the recipients of art. We should see numerous benefits, which have already been appreciated in other countries, of using this 'initial revitalisation' model as a prelude[17] for further activities.

Evans and Shawn in their report for DCMS (Department of Culture and Sport)[18] from 2004 listed the features which, according to them, increase chances to achieve success of cultural revitalisation designs [1]. Among the characteristic features of successful adaptations which are suggested by them we can find a reference to the necessity of public participation in creating a regeneration program. According to Evans and Shawn observations, communities and artistic organisations – which in the case of the Gdańsk realisation were excluded from the whole project – constitute a good way to propagate active participation of local communities in the process of development of the remodelled part of the city. The abandoned factory can become a place of identification and development of local community as a result of evolving and appropriately animated process.

Initial adaptation, which is understood by the author as utilisation 'without investments' of the post-industrial space, in our Polish conditions may contribute to revealing values of many still not destroyed factories, industrial warehouses, railway stations, military bases territories, mines and docks. The form of initial annexation of buildings for the needs of exhibitions and other artistic activities can show many investors a way how to use them to a full extent and protect the national heritage of these places. Those designs which are connected with the social popularisation of art may bring more long-term benefits than converting these structures into shopping centres.

[17] It is significant to emphasize the timing of this approach. It would be reprehensible in consideration of public matters to use a historical building as a nostalgic staffage which would help only in marketing or lead to the building's ruin under the false banner of using it for the needs of art.

[18] Department of Culture and Sport – British Ministry of Culture and Sport.

References

[1] Evans G., Shawn P., *The Contribution of Culture to Regeneration in the UK: A Report to the DCMS*, LondonMet, 2004, p. 60.

[2] Kiciński A., *Muzea. Strategie i dylematy rozwoju,* Publishing House of Warsaw University of Technology, Warszawa 2004, p. 76.

[3] Popczyk M., *Estetyczne przestrzenie ekspozycji muzealnych,* Cracow 2008, pp. 48, 207.

[4] Szylak A., Stiasny G., *Instytut Sztuki Wyspa w Gdańsku,* Architektura-Murator, 2005, No. 4, pp. 39–43.

[5] *Gdy bankrutuje fabryka*, Architektura-Murator, 1998, No. 1, pp. 68–70.

[6] *Fabryka Sztuki*, Architektura-Murator, 2005, No. 4, pp. 94–95.

[7] *Muzeum Powstania Warszawskiego,* Architektura-Murator, 2007, No. 1, pp. 57–61.

[8] *Muzeum Powstania Warszawskiego,* Architektura-Murator, 2005, No. 5, pp. 58–65.

[9] Art._Inkubator, Łódź 2009, informative brochure printed courtesy of Art Center and Art Factory.

[10] http://www.galeriabezdomna.art.pl/

[11] http://modelator.blogspot.com

[12] http://www.lodz2016.com/articles.php

Rewitalizacja bez rewolucji. Wstępna adaptacja obiektów poprzemysłowych dla działań artystycznych

Jednym z bardzo popularnych modeli ożywiania terenów poprzemysłowych jest rewitalizacja kulturowa[19]. Na całym świecie sztuka stała się elementem wiodącym bądź wspierającym procesy przekształcania terenów zdegradowanych. Nie wszystkie zamknięte zakłady mogą stać się muzeami sztuki czy prestiżowymi galeriami. Ilość obiektów czekających na nową wizję użytkowania jest duża. Tereny fabryk, pomimo ich znaczącej wartości materialnej i społecznej, w wyniku braku ich użytkowania stają się miejscami omijanymi, szybko wypieranymi z pamięci ogółu. W artykule zaprezentowano działania kulturalne, wprowadzające współczesne życie na tereny dawnych fabryk, o niewielkim stopniu ingerencji w ich materialną strukturę. Są to akcje o charakterze ewoluującego procesu lub jednorazowego happeningu. Głównym celem tych działań jest zwrócenie uwagi na zły stan techniczny budynku, utrzymanie pamięci o społeczno-kulturowym znaczeniu miejsca, odtwarzanie lub wspieranie społeczności lokalnych oraz zbieranie funduszy na renowację. Organizowane wystawy i pokazy są również okazją aby po raz ostatni zobaczyć dane miejsce, które po przebudowie będzie obiektem prywatnym, na przykład loftem albo budynkiem biurowym.

[19] Określenie *cultural revitalisation* lub *cultural adaptation* jest używane w publikacjach angielskojęzycznych i oznacza tyle co rewitalizacja na cele bądź przy pomocy kultury [1]. Termin ten określa rewitalizacje terenów zdegradowanych, w których kultura jest elementem dominującym pośród pozostałych nowych funkcji.

Key words: cultural adaptation, exhibition, post-industrial terrain

Słowa kluczowee: adaptacja kulturowa, ekspozycja, teren poprzemysłowy

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Antitectonics – architecture for information society

According to anthropology we perceive culture as a reality transformed by man – as a result of civilizational achievements – changed physically, and through symbolic representation – modeling opinions, notions and feelings.

The world is completely filled with culture which is presents directly or indirectly in all potential locations. The sensory perceptions and their psychological effects have numerous interpretations. Where is the border between nature and culture?

The technological development which changes perception – the borders of art (architecture) cease to be definitive. The discussion shifts from clear distinctions (is/is not) to relative gradation (is to what extent) or even – to parametric simulations (is in what conditions, what determines that).

William Mitchell's essay titled *Antitectonics: The Poetics of Virtuality*[1] [4] can be considered a manifesto of new culture. The author describes the context of creatice activities by establishing barriers which architecture crosses while absorbing achievements of the informatization era. He demonstrates the contacts between old and new meanings, scopes and forms of human activity. He undermines the sense of continuing the deliberations on the basis of the tectonic architecture advocated by Kenneth Frampton [2][1].

The key terms taken from Semper's (1951) description of a building such as earthwork, interior, framework or detail[3] [6] – which defined the traditional tectonic interpretation become useless in the virtual environment. Mitchell claims that the „traditional" theory stubbornly sticks to schemes which are inadequate for the matter which is described. He notes that *virtual space carries Miesa van de Rohe's* less is more *to a provocatively anorexic extreme*.

The antitectonic debate begins with the presentation of the controversy regarding the scope of space available for creation. The author undermines the conviction of the physical character of architectural structures. The interpretation through understanding of the relationships between the elements which bear and which are borne, gravitational logic of the building and proportions were enough to develop the basis of ancient theories. The postulates of durability and utility are easy to accept when the only way to execute ideas is to create a building of wood or stone. Due to computers the sensations can be perceived in a new, flexible visualization environment whose features require the theory to be remodeled.

The author accuses Frampton of division between a strict physical interpretation and virtuality of explanations. The architectural reality described in the essay IS virtual in a genetic sense. It comprises both forming experiments and workshop procedures as well as fully functional spatial environments.

The technological development of the media alters the sense of artistic creation. The notion of becoming known abruptly becomes relevant covering not only physical substance but information effects of human activities as well. Mitchell stresses that the digital representation is not for architecture a matter of choice by a natural consequence of popular use of CAD. Each project which is prepared with the use of computers is executed in a virtual environment. This fact can be ignored or utilized. Basically – as an inexpensive testing field which, with the application of proper equipment, simulates the conditions of use. More generally – as an individual area of expression.

An architectural work gains in the electronic representation an aspect of 'performance'. Depending on applied means – what is generated is the signals transferred to specific senses or complex simulations, including floating VR visualizations which can evoke sensations similar to natural and automatically generated prototypes. Due to

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[1] W.J. Mitchell, *Antitectonics: The Poetics of Virtuality*, [in:] *The Virtual Dimension: Architecture, Representation, and Crash Culture,* J. Beckmann (ed.), New York 1998, p. 205.

[2] K. Frampton, *Studies in Tectonic Culture,* Cambridge 1995, p. 12.

[3] G. Semper, *The Four Elements of Architecture and Other Writings,* New York 1951, p. 40.

Fig. 1. Kunsthaus Graz, designed by Peter Cook, Colin Fournier. Media façade designed by Realities:United. Photo by author

the functionalities of digital media the record of an architectural idea is more and more like music score. The composition of space, like a composition ofmusic, records the limits of freedom marked by the author. Electronic creation provides for multiplication of representations and generates space for interpretation. As a result of providing access to spatial perception simulation tools even the buildings which have not been existing for years in the real world gain new realizations by extension or parallel.

CAD-CAM technologies transfer the problem of digital creation to the real scale. Mitchell sees the file-to-factory architecture as the culmination of the electronization process. A monitor image, printout, prototype and building – create a hierarchy corresponding, on the one hand, to the complication of equipment, and on the other hand, to the skills of perception of complex environments. The growth of possibilities of creating results from the relationship between two coupled trends: the standards of space description offered by editors are much more efficient than the technologies of production of materials. The fact that it is easy to form, deform, divide and join complex objects on the computer screen stimulates the appetite of authors as well as effort of CAM technology. Furthermore, the procedures available to the numerically controlled machines become the basis for software development. Through mutual interaction – a new myriad of procedural 'archetypes' develops. The language of architectural representation absorbs the structures taken from the world of machines.

Apart from technical and functional consequences, the informatization of architecture causes effects regarding the non-usability sphere. The symbolic representation, which is the basic feature of cultural identity, gains through the computer a totally new context. Mitchell describes by listing the features of a façade and interface. The morphology of an architectural object is traditionally a closed artifact. The variation of physical features and evoked sensations, which is possible as a result of the interaction of such factors as lighting and aging, provides a very narrow predictable range of states. After crossing the threshold of interactivity or at least reactivity we face the solutions bringing a building closer to the functionality which is typical of an information transmitter. The information capacity of a surface/cubature represented digitally depends only on the author's decision. The saturation of space with sensors creates conditions for the development of changeability and makes a building react in real time to the users' actions. They extend the real architecture and provides for dynamic transformation of the exterior/symbols. A building can change its 'façades' performing arbitrary instructions (of the author) or react in the way coded in the sequence of interactions.

The antitectonic conception is a deliberate exaggeration. The virtual debate between Mitchell and Frampton does not need to be assessed as being right or wrong. What is striking, however, is the pertinence of observations regarding changes which occurred in the domain of space development after computers became universally popular.

The information revolution first of all affected the design tools. The invention of CAD resulted in the dichotomy of representation mentioned in the essay. The traditional architectural graphics (plans, cross sections, elevations) is the domain of professionals, whereas the computer models create the basis of universal perception of a work before development. On the one hand, this is because of photorealism and, on the other hand, application of dynamic techniques of presentation.

The building of Kunsthaus in Graz designed by Peter Cook and Colin Fournier and its media façade designed by Realities:United architects is one of the first examples of deliberate use of digital representation of architectural ideas. A virtual model of its surrounding, which was used to verify the external form of the museum, was developed already at the conception stage, creating the basis of the

application which constituted a virtual perception platform to be further developed in the following year. A user connected with the Internet moves around Graz with the use of a marker on the map. Software reacts dynamically displaying an image of the building from a specific point. The broad scope of functionality enables the users not only to 'go around' the museum but also to admire the panoramic view – for instance from the top of Schlossberg. The functionality of the virtual observation window is not limited to the geometric representation. After downloading the video in an appropriate format, the media façade displays animation in the way which is analogous to live exposition in the city. Due to the digital representation – the message of architecture coupled with visual art is perceived by the viewers in a non-material form.

Apart from the creation stage the digital extensions can regard construction and use. The information infrastructure enables the buildings to react to changing conditions. Glasgow Tower designed by Richard Horden which was built in 2001 in Glasgow Science Center realizes this scenario by changing the relations to its surrounding. The form of the structure results from optimization achieved by minimizing the resistance to air. The shape and the location as well as the dimensions of its elements are the result of the compromise between esthetic preferences of the author and the results of computer simulation. The originality of the solution regards the assumption that the exposure to side forces remains constant. A network of sensors measure the wind force and software anticipates the changes of weather conditions. As the digitally controlled engines work continuously this over 130 meters tall structure can rotate and assume the best position towards the wind in real time which assures the best static and dynamic conditions for operation of its elements.

The next step towards digitalization brings architecture to the state in which the exterior of a work resembles the morphology of a live organism. The introduction of sophisticated actuators to the system and the complication of scenarios included in the software enable not only the movement of the equipment elements but also changing the shape and dimensions of buildings.

MuscleBody built by HyperBody under supervision of Kas Oosterhuis is a 'home' reacting to the activities of its users' or the players – as the author prefers to call them[4] [5]. The external skeleton is composed of 26 flexible FESTO actuators stretching the membrane made of Lycra fibers. The sensors fixed inside transmit signals regarding the presence and movements to the computer that controls the pressure in the 'muscle' construction. In effect – the form of shelter changes as the users' activities change. This is accompanied by modulation of transparency of the walls (stretched surface becomes more transparent) and by sound coming from the loudspeakers fixed in the structure.

It is difficult in the light of classical definitions to identify the scenarios of virtual reality with works of architecture. It is, however, worth noting that apart from the form of materialization they do not differ much from traditional works. Both the techniques of modeling and the reception conditions remain unchanged. What is more – the cyberspace creation often is the domain of architects educated to perform in real world.

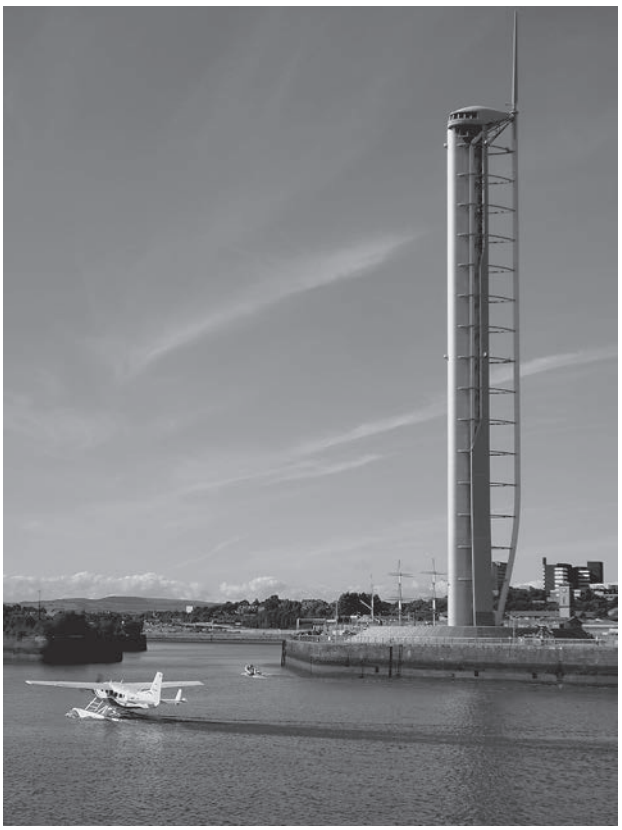

Fig. 2. Glasgow Tower – in Glasgow Science Center, designed by Richard Horden. Photo by J. Woźniak

The analysis of the design of the New York Stock Exchange building and the virtual Guggenheim Museum designed by Asymptote leads to the realization how far the limits of spatial correspondence can be stretched. Separately we perceive the interiors and exteriors, zoning and the proportions of rooms as in the real world. The social functions of the interiors remain unchanged though thanks to the simulated presence we contact the users located thousands of kilometers away. Interestingly, the authors abandon the 'gravitational' requirements of navigation so that the shift between reality and virtual reality is unnoticeable.

The changes in saturation of space with information are significant. The traditional means of coding – form, detail, icon, relief – gain multiple representations. The Stock Exchange building changes its decor depending on the securities market fluctuations. The museum adjusts its interior to selected forms of exhibitions.

Has computerization changed architecture in compliance with antitectonic model? The development of space as traditionally the most durable form of symbolic representation follows the trail marked earlier by other branches of art. The analogies in the cultural context prove useful not only in respect of background description but also expected directions of growth.

[4] K. Oosterhuis, *Swarm Architecture II*, [in:] *Verb Natures*, Barcelona 2006, p. 188.

Fig. 3. ReSwissoffice building, designed by Norman Foster. Photo by author

Lev Manovich [3] lists five criteria defining the new media in the sphere of contemporary artistic activity[5].

1. Numerical representation provides new media objects with a mathematical definition and a possibility of manipulation in algorithmic processes.

2. Modularity enables their analysis by hierarchical disintegration – from basic of pieces information (bits) all the way to complex structures that comply with the principles of logic.

3. Automation, which is the result of application of digital tools, affects the development of new techniques of creation, including a new interpretation of intentionality.

4. Variability distinguishes groups of representations or scenarios included in objects of art that are evoked in the reception process.

5. Transcoding – so far available to a limited extent (e.g. music transcription) regards all new media objects; enables the translation of transfer at the fundamental level and transformation into any form of artistic expression.

Manovich's principles ideally correspond to Mitchell's essay. The use of the term "new media" in space development activities enables the interpretation of architectural works in the context of cultural changes which take place as a result of information revolution. The works which are created in CAD environment uzyskują digital representation. The modular structure of data enables the creation of databases and knowledgebases regarding a building as well as integration of specialist information in a coherent environment (BIM). Automation, variability and transcoding define the contemporary architectural concepts even better than works of visual arts and music which constitute the basis of Manovich's thought. The projects executed by the synthesis of effectiveness are called by Branco Koralevich [2] performative projects[6] – those which best perform assigned assumptions. The automatic processes of simulations regarding geometry, static work and dynamics of flows result in solutions which are the synthesis of author's intentions and parametrization in compliance with specific criteria – such as Swiss RE in London designed by Foster. Due to the mobility of their elements and digital control the buildings are perceived not as single representations but as numerous variations of form, which is especially well illustrated in Kas Oosterhuis's muscle installations. Transcoding symbolism becomes not only easier as the data are digital but first of all more evocative and precise. The BMW pavilion from 2001 designed by Bernhard Franken documents that the process of transfer of the information pattern between such remote areas as dynamics of a vehicle movement and a building form can result in a unique spatial pattern.

Due to the analogy which I see between the Manovich's theory and contemporary architectural designs one can assume the position close to that expressed in Mitchell's antitectonic manifesto. Even if architecture in its core remained the same, because of information technology it is expressed in a completely new language. The language of new media.

[5] L. Manovich, *Język nowych mediów*, Warszawa 2006, p. 91.

[6] B. Koralevic A. Malkavi, *Performative Architecture. Beyond Instrumentality*, New York 2005, p. 8.

References

[1] Frampton K., *Studies in Tectonic Culture,* Cambridge 1995.

[2] Koralevic B. Malkavi A., *Performative Architecture. Beyond Instrumentality,* New York 2005.

[3] Manovich L., *Język nowych mediów*, Warszawa 2006.

[4] Mitchell W.J., *Antitectonics: The Poetics of Virtuality*, [in:] *The Virtual Dimension: Architecture, Representation, and Crash Culture,* J. Beckmann (ed.), New York 1998.

[5] Oosterhuis K., *Swarm Architecture II*, [in:] *Verb Natures*; Barcelona 2006.

[6] Semper G., *The Four Elements of Architecture and Other Writings*, New York 1951.

Antytektonika – architektura społeczeństwa informacyjnego

Esej *Antytektonika: poezja wirtualnosci* Mitchella (1998) tworzy podwaliny nowej teorii. Podważa sens kontynuacji rozważań na gruncie tektoniki architektonicznej promowanej przez Kennetha Framptona (2007). Kluczowe pojęcia opisu budowli zaczerpnięte z wywodu Sempera (1951), takie jak: fundament, wnętrze, struktura, detal, tracą rację bytu w niegrawitacyjnym środowisku. Jak zauważa Mitchell: „*Less is more* Miesa van de Rohe wyostrza się w wirtualnej rzeczywistości do anorektycznego ekstremum". Antytektoniczny wywód operuje zestawami antonimów: materialność – wirtualność, realizacja – zaprogramowanie, rzemiosło – CAD/CAM, lokalność – globalność, fasada – interfejs, tektonika – elektronika.

Coraz silniej głoszony jest obecnie pogląd odrywający nowe zjawiska w architekturze od tradycji dwudziestowiecznej. Autor poddaje refleksji relacje teorii zmiany paradygmatu i wybranych projektów współczesnych budowli. Chciałby dociec, czy między dziewiętnastowieczną tektonika i antytektoniką przyszłości odnaleźć można wątek ciągłości.

Dla lepszego wyjaśnienia zagadnień wpływu technologii informacyjnej na kształtowanie przestrzeni dokonano zestawienia myśli Mitchella z pracami Lwa Manovicha. Kryteria, które służą opisaniu nowych mediów – głównie w obrębie sztuk plastycznych i muzyki – wydają się adekwatne dla interpretacji architektonicznej. Zmiany w technice i języku wyrażania, niezależnie od rodzaju działalności artystycznej, zawierają pierwiastki wspólne. Koncepcja Manovicha definiująca pięć obszarów wyróżniających sztukę tworzoną przy użyciu komputerów wydaje się dobrym narzędziem do interpretacji architektury antytektonicznej.

Key words: antitectonics

Słowa kluczowe: antytektonika

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Holism as a determinant of culture in architecture

Culture and holism; place of culture in the holistic world system

The phenomenon of *culture* formation takes place as a result of sociological reaction of 'double feedback': natural environment impinges on Man, Man – in the process of civilization building – processes and creates the environment, while the environment, in turn, as cultural reality, surrounds and forms Man by improving Man's personality.

Originally, the notion of *cultura* was connected with land cultivation and it referred to transforming the natural state of the environment through human work into a state that was more useful for man. In the ancient times, the meaning of *culture* changed to refer more to man, his mentality and environmental interdependence[1]. In the Middle Ages, *culture* had a more universal character, however, because of the significance of religion (i.e. Christianity) in human life, its particularistic aspect was emphasized. The meaning of *culture* as a motivator of all conscious efforts aimed at developing and assessing the quality of a given object, talking about for instance 'culture of wheat' or 'culture of trades' was in use at the beginning of the 16th century.

Some symptoms of connecting culture with the intellectual sphere of human development referring to ancient philosophies appear in history in the 17th century when Voltaire uses the word *culture* in the context of process of human mind formation and improvement by enlarging the scope of acquired skills with various domains of science, art and knowledge of conventions and manners. In the subsequent periods of history in the 18th and 19th centuries, *culture* is associated with improvement of an individual as 'a whole', with qualifications and skills, including both technology and the intellectual side of life as part of these achievements. A new domain of science appears, 'Anthropology of culture', which slowly aims to separate civilization achievements from culture by humanizing the latter through a range of research on human life environment, in particular with regard to customs, beliefs, art, family and social life, talents and habits, laws and even morality of a given community.

Division of the notions of *civilization* and *culture,* as well as an analysis of cultural phenomena are dealt with contemporarily by many scientific domains; the most significant ones are research in the scope of sociology and cultural anthropology as well as social ethnology.

During the last 100 years of human history, the notions of 'culture' and 'cultural studies' underwent significant evolution or even 'paraphrasing' – because of many important and profound social changes, transformations in the way of valuating phenomena and behaviours, as a result and simultaneous effect of political, economical, social and civilization globalizing universalizing processes. In the contemporary reality there is a visible *cultural dissonance* brought about by a universal trend of unification of principles and phenomena, their ephemerality caused by the creation of 'hybrid cultural structures' – and the need to accept distinctness and uniqueness of cultural community.

The notion of culture presents a dichotomy as regards expressions and meanings:

– culture, with regard to symbols of meanings or behaviours; collection of elements and synthesis of phenomena, signs, skills adapted or created anew by perception and its reference to conscious actions directed at creating new ideological and model values in the social human environment; and

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[1] Cicero (106–43 BC) used the word *cultura* , to define philosophy and emphasized moral and intellectual education of an individual which elevates a human being to a higher level (quoted from: Hartman, *Słownik filozofii*). The following types were distinguished: *Cultura animi* – culture of farming; *cultura mentis* – culture of mind, because: *cultura animi philosophia est* – philosophy is farming, formation of spirit (quoted from: Landowski, Woś, *Słownik cytatów łacińskich*).

– culture as a social phenomenon, but basically referring to an individual or a social group; it is a collection of formulas of the so called 'cultural lifestyle and being human' – resulting from ethnical conditions marked by history that determines the course of political and social changes [7][2].

By a 'statistical' person, *culture* is usually understood as follows: lifestyle of an individual within a social group, determined by history and ethnical conditions and apart from that, synthesis of phenomena, signs, skills adapted or created through perception and its reflection in form of creating new esthetical values in the existing social environment.

[2] There are numerous definitions of the idea, notion, phenomenon and entry of 'culture', depending on the accepted criteria resulting from their authors' range of interests, time of their formulation and purpose of usage. In the present work, the author introduces her own laconic, popularized and somewhat paraphrased interpretation of the notion of 'culture' for the purpose of this essay.

Culture and architecture

Culture is *de facto* a notion/phenomenon which is abstract as such and does not refer to any particular being or thing, yet, it actually effects the concepts of development of phenomena and interpersonal relations. When defining *culture* from the philosophical viewpoint, in the most laconic way, it is best to perceive it as *...a mobile significant element which allows discussing human activity in various manners*[3]. Many factors influence the process of culture formation, of which nowadays the most expressive and significant ones appear to be ethnical, political and social factors [1].

However, human history undergoes evolution and it is determined by system, economic and social transformations and each era brings new values into social culture, its form and content. Fascination with 'the new', discovering new spheres of spiritual development and material civilization goods have always been – as a psychological and sociological phenomenon – logical consequences of man's permanent search and aspirations to improve living conditions, to perfect the form of the surrounding space and to subjugate the forces of nature.

Architecture is understood as the things which are built, shaped by talent and knowledge, things which serve man and possess esthetic features. Lack of these features excludes 'thing / work' from being part of architecture. According to *the Vitruvian canon*, architecture is characterized by: *being solid, useful and beautiful*[4]. We can ask whether this canon also marks the limits of architecture. Variety of definitions of *architecture* as a work which is real and completed, presented by fine and humanistic arts authors allows us to formulate the most adequate and concise definition which says that *Architecture is an organization and art of space formation*[5]. In theory, things from beyond the definition scope do not belong to architecture (for instance, engineering constructions), however, they do complement it as regards ideas, structures, landscape.

Is architecture art? The answer seems to be simple as throughout the centuries, especially during the Renaissance and Baroque periods, architecture was regarded as *the queen of fine arts* and although historically their mutual connotations were perceived variably, we must admit that *art and architecture originate from the same 'cultural root'*. It is logic that fine arts are an indispensible part or even the basis of each type of culture (culture of being, social culture, symbolic culture) and they determine culture.

Therefore, we can draw the conclusion that architecture is a significant part of culture as it is social, universal and it 'touches' almost every being, every figure.

Nowadays, however, the abovementioned rule is understood in a broader sense – the importance of the space which surrounds, complements and so to speak promotes the architectural work is emphasized[6].

Therefore, from the axiological point of view, in order to maintain or upgrade the cultural value of places and space, at the time of permanent uniformity, *it becomes significant to combine the architectural structure with its natural and cultural context as regards ideas, functions and even forms.*

[3] Quoted from: Barker Ch., *Studia kulturowe*, p. 516.

[4] Vitruvius (Marcus Vitruvius Pollio), 1st century BC; Treaty *De architectura*. Vitruvian triad: *firmitas, utilitas and venustas*, i.e. – *being solid, useful/usable and beautiful.*

[5] This is also the main assumption of the idea of habitat (author's footnote).

[6] Quoted from: Krakowski P., *O sztuce nowej i najnowszej*, PWN, Warszawa 1984.

Symbiosis or partnership; Holistic relationship of architecture with art and environment

The notions of value and assessment have always existed in architecture. Man, while transforming Nature for the needs of his own existence, interfered in the surrounding environment in consent and harmony with it – or not, protecting nature and cultural goods – or not, anyway, he always introduced new content, forms and structures into the environment, he introduced a new quality which was not always positive. *These new forms brought in civilization values and by forming places of worship, work and social contacts, man created the cultural value of a place*

Fig. 1. The problem which is discussed in the essay with regard to connections of *culture* and *architecture,* their ideological, mental, historical, social, architectonic, spatial and esthetical connotations is multi-dimensional, broad and inter-disciplinary. It was merely outlined here by presenting for discussion (non-verbal) its significant aspects. The illustration is a type of author's graphic recapitulation, synthesis – referring to symbols of the alphabetical Greek letters: **α–ω** from the Greek alphabet, between which 'a diverse reality' is contained, not only graphic, linguistic, cultural – referring to one culture. **α–ω** this is the symbol of beginning and end, but first of all of stages. Culture also has its beginning, perhaps its end, but it certainly has the stage of philosophical, social and esthetic reflections. And similarly – architecture, too. While Vitruvius defined the canon, Plato – principles of beauty, Corbusier – the topic of economical exploitation, Wright – organicity, Zaha Hadid – extravagance and expression, etc., so we can conclude that in architecture almost everything has been said. Well, but architecture in itself can be nothing more but '…a collection of stones' (quote)…

with an appropriate dimension – local, regional or national.

As *architecture* is created for a community, it is only the architecture accepted by the community that can become assimilated with the natural, or cultural environment, thus forming *a symbiotic work*. This mainly refers to architecture of residence, which should have 'certificate of social acceptance' as a whole.

Uniform, unified and modern technical and technological solutions, which are used in the scope of improvement of the human environment quality (pro-ecological system solutions as regards usage of natural sources of energy or recycling), have a civilization character. By combining technological achievements with architecture as a domain of art, we can achieve two goals for civilization and culture. *This operation humanizes architecture, it is accepted by its recipients, provides framework for unique architecture in places and spaces which are culturally transparent and ideologically and esthetically readable.* More and more frequently, we can observe the employment of spatial solutions in urban planning and architecture which combine totally different and characteristic trends of building the contemporary esthetics: modernistic elements/motifs combined with organic ones; bound by ideas and structures and expressing connection with the context by means of form and content/function.

In the modern world, culture is subject to economization and becomes a product, the source of ubiquitous commerce[7]. This phenomenon generates social and cultural transformations which are based on the necessity to improve the daily life organization, to make forms of consumption and relaxation more attractive, including entertainment, which can particularly be seen in cities and their public, social, sports and relaxation spheres.

Similarly to the unique architecture that 'celebrates' the cultural environment determining the place and space – we can perceive the universalism propelled by the market situation and inclusion of green areas as a dangerous symptom, perhaps an equally dangerous phenomenon is – although apparently socially 'pro-educational' – inclusion of name/entry defining the idea of architecture for commercial products and services.

Let us have a look at the following examples**:** *architecture* – meaning organization of place (symposium, meeting, social event), *architecture* – 'of the subject matter' (concept of arranging a matter), *architecture* – of light (shop with lamps), *architecture* – of space (ordinary, utility space, e.g. backyard, store area), *architecture* – of figure (physiognomic appearance), *architecture* – as a name adapted for cosmetics of a popular company: 'Skin Architect' (facial cream and other products)[8]. Linguists could certainly provide us with some more of such 'pompous' phrases.

According to this essay's author – *apparently, when we familiarize the society with a notion, we deprive it of its ideological superstructure which is reserved for one culturally important domain of science and art and which forms the space and society's sense of esthetics.* Culture has a time dimension, it has its own history, it undergoes development, i.e. it flourishes or it declines depending on political and economical conditions of the society[9].

Architecture as an integral part of culture is a material result of many generations' work, structural transformations of societies, evolution and diffusion of forms 'shaped' by ideas, fashions and civilization innovativeness [8]. Architecture, similarly to culture, refers to organization of places and space, but, since it is not a place itself, it can only create a system[10].

This elaboration is not aimed at conducting an analysis of criteria used when comparing elements and characteristic features of the phenomena of culture and architecture; we only wish to signal the existence of a connection, a symbolic one, between Culture – Architecture and human Environment as regards ideological and psychological spheres as well as behavioural and material ones.

Knowledge is built on facts, like a house is built of stone; however, a collection of facts is not knowledge, like a pile of stones is not a house – Jules Henri Poincare (1854–1912, mathematician, physicist, philosopher).

***Holism** is defined as a philosophical, pragmatic and pro-ecologic idea of symbiosis.* This superior ecumenical idea and mechanism combine all the complexes of the sustainable development system. It acts in the natural ecosystem space and in creating urban premises of cultural space: historical, ethnical, multi-cultural, public, social; mental or verbal.

Architecture as a plane/bridge/element of an agreement between a widely understood environment and man is contained in this holistic cultural ecosystem and it ecumenically cooperates with it in the following scopes:

– locating/residing,

– formation of social space connected with professional and educational activity,

– formation of public and recreation space (sports and relaxation).

These various types of space and places are marked by codes, symbols, utility architecture and narration, which distinguish residential architecture and utility architecture from 'the big one' of theatres, concert halls, office blocks etc. – creating a specific climate of places, zones, public and social space, in which *architecture occurs as the area and image of civilization and cultural transformations.*

The connection of architecture with culture is indisputable, similarly to the connection of architecture with art[11]*. We can observe cultural feedback between these*

[7] Pierre Bourdieu (1930–2002, French sociologist of culture, anthropologist and philosopher) names the modern process of commercialization of culture as 'symbolic goods market' in which we can observe a synergy effect between market, technology and affluence of the society. en.wikipedia.org/wiki/Pierre_Bourdieu

[8] These are only some of the examples that the author could spot.

[9] Quoted from: A. Kłoskowska, *Socjologia kultury*.

[10] Ibidem; referring to characteristic qualities of *culture* as a philosophical and social phenomenon / complex of phenomena.

[11] For more about connections of fine arts with architecture in modern culture, see: Piotr Krakowski in: *O sztuce nowej i najnowszej*, PWN, Warszawa 1984.

three domains: culture – architecture – art. Art, of which architecture is an integral part – because as a whole it is an expression, testimony and motivation of culture.

Nowadays, *culture* is discussed in the context of the two particularly expressive social phenomena: information and mutual interpersonal communication [6]. However, it seems that the theory of creating culture according to individualism and full voluntariness, which is extremely promoted in our times, is controversial from the viewpoint of the social order. 'Individualized voluntariness' gives rise to ephemerality of actions and relativism of assessments. As a consequence, there is no place for the modern universalism of culture which is supposed to form the basis for the modern character of architecture in order to accomplish its idea and mission at the same time and outline a perspective of development.

In relation to the problem which is the topic of the conference, namely, mutual connotations of architecture and culture, we ought to focus our attention on time and space of the modern (end of the first decade of the 21st century) environment of Man's life and outline a sphere of recipient's needs (an individual being or a community) by dividing it into two groups as follows. One is a demand for utility architecture which takes into account basic functions connected with the environment of living and recreation, while the other deals with access to the so called higher social and cultural values, connected with *great* architecture, but also with *small* one of public and social spaces as well as *green landscape architecture.*

All the types of architecture are *de facto* extremely significant for symbiosis of Nature and Culture through Man who, by his creative activity, complements and executes ***holistic system of environmental and cultural ecumene.***

An attempt to 'answer' the second part the question which is formulated in the topic of the conference is not simple and the problem itself is ambiguous. We can only venture to say that the level defining the content of (contemporary) 'culture in architecture' is directly proportional to the intellectual level of the society, financial possibilities, creative predispositions, knowledge, respect for the existing, laboured by generations values – connecting humbleness towards Nature and distancing oneself from periodic fashions, with *transforming the creative designer's ego into a creative – pro-ecologically and esthetically – organization of space.*

We can ask the following question: where is the place and intellectual space for innovativeness – experiment, formal expression of a newly created work of art, or even a formal test awaiting social acceptance? *The choice of place and formula, innovative in content, form and meaning of the architectural work, must result from versatile studies in the domains of urban planning, architecture and environment, employment of timeless canon of order and harmony in space, which is formulated in the Vitruvius principles*[12] *as well as the contemporary principles of sustainable and permanent environment development, contained in the entire idea of 'New Green Deal'*[13] *– with the principal holistic statement*[14]**.**

The traditional view on culture was expressed in the holistic permanent moral and axiological order referring to the cultural and natural environment; according to the contemporary one, this spatial order and harmony ought to be 'enriched' by an economy which gives possibilities of realization of modern architecture as innovative, modern, unconventional, however, with a 'note' of organic stylistics which provides conditions for the formation of environmental empathy.

[12] Vitruvian *triad*: *firmitas, utilitas and venustas*, i.e. – *being solid, useful and beautiful* contains an ideological creed for architecture and it is reflected in the modern principles of sustainable development, particularly with regard to: *dispositio* (appropriate arrangement of elements of a building), *symmetry* (harmonious conformity between elements and the entire work) or *distributio* (appropriate attitude towards economy of the building process)

[13] Initiator of building and employment of the new formula is the UN Secretary-General Ban Ki-Moon; this policy allows stimulating economical growth and concurrently restrains the climate changes.

[14] In the documents on establishing 'Principles of sustainable development' there is no explicit reference to the role of *culture* in the creation of a new architectural structure or its revitalization; lack of a doctrine gives rise to liberty, freedom of interpretation; excess of liberty – gives rise to chaos. Only the principle of *holism* can determine the direction of culture and of cultural activity (author's footnote).

References

[1] Barker Ch., *Studia kulturowe. Teoria i praktyka*, Wydawnictwo Uniwersytetu Jagiellońskiego, seria Cultura, Kraków 2005.

[2] Hartman J. (ed.), *Słownik filozofii*, Wydawnictwo Zielona Sowa, Kraków 2004.

[3] Kłoskowska A., *Socjologia kultury*, PWN, Warszawa 2007.

[4] Krakowski P., *O sztuce nowej i najnowszej*, PWN, Warszawa 1984.

[5] Landowski Z., Woś K., *Słownik cytatów łacińskich; wyrażenia, sentencje, przysłowia*, Wyd. Literackie, Kraków 2002.

[6] Mikułowski-Pomorski J., *Kultura wobec społecznej transformacji*, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków 2005.

[7] Solska M., *Urok i uroda miasta – rozważania dialektyczne,* Wydawnictwo Teka KU i A O/PAN, Kraków 2004/5.

[8] Zamiara K. (ed.), *Kultura. Komunikacja. Podmiotowość; Szkice epistemologiczno-kulturoznawcze*, Wydawnictwo Naukowe UAM, Poznań 2005.

Holizm jako wyznacznik kultury w architekturze

Idea holizmu w kategorii filozoficzno-estetycznej i proekologicznej jest kierunkiem realizacji wszelkich zadań i działań na rzecz KULTURY.

Architektura i kultura, to *dwie damy kroczące w równym rytmie dziejowego korowodu przez szlak życia, góry, doliny, salony i rozstaje* społeczeństw w kolejnych okresach epok dziejów ludzkości.

Architektura jest bowiem rzeczywistym i trwałym obrazem kultury duchowej oraz dorobku cywilizacyjnego i materialnego społeczeństwa i epoki.

Czy jednak we współczesnym multikulturowym świecie architektura nadal zachowuje pozycję ‘mentora’ i świadka dziejów? Czy jest w stanie podtrzymać, bądź wskrzesić unikatowość miejsc i przestrzeni?

Czy współczesna architektura, którą cechuje uniwersalizm formalny, a nowoczesne rozwiązania techniczne i technologiczne stają się jej domeną, nadal utrzymuje status *królowej sztuk*?

Sama nazwa ARCHITEKTURA – symbol kreatywności – uległa pauperyzacji i zawłaszczeniu przez najprzeróżniejsze dziedziny wytwórczości i logistyki.

Czy owa wulgaryzacja nazwy służy właściwemu odbiorowi architektury, jej idei, celebry w przestrzeni kulturowej i jej związku ze środowiskiem życia Człowieka?

Keywords: sustainable development – holism, culture – architecture, universalism and symbiosis

Słowa kluczowe: zrównoważony rozwój – holizm, kultura – architektura, uniwersalizm a symbioza

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Spatial turn.
Transcultural and transdisciplinar spaces in the architecture

Preliminaries.
Spatial turn *as a social science paradigm*

Intellectual discourse within the framework of social sciences at the end of the 20th century and at the beginning of the 21st century was dominated by theoretical analyses of a threefold turn which formulated and at the same time determined the reality of the contemporary societies: 1) cultural turn commenced by M. Foucault, continued adequately to the technological development of the contemporary cultures and civilizations based on the interpretation of history by F. Fukuyama and S.P. Huntington[1]; 2) technological turn with analyses of social changes caused by the new media technologies (M. McLuhan) and information technologies (M. Castells); 3) spatial turn, the forerunner of which is H. Lefebvre with a new concept of space in the social dimension.

The very term of *spatial turn* appeared for the first time in the study by the geographer Edward W. Soja entitled *Postmodern geographies* published in 1989[2]. [3, 18] However, in the social dimension, the forerunner of the new meaning, understanding and interpretation of space is Henri Lefebvre. In his study entitled *La production de l'espace* published in 1974 (Production of space) he presented an interdisciplinary concept of space at the same time introducing anew the notion of space as a motif of the intellectual discourse within the framework of social sciences. The paradigm of the term itself is often referred to in the context of the controversies and disputes on modernism and postmodernism. From the postmodernist viewpoint, Fredric Jameson states that the spatial turn paradigm, or even more a whole series of turns as its variations, enables us to unambiguously define differences existing between modernism and postmodernism and at the same time it functions as one of the main motifs of the postmodernist criticism of modernism[3].

According to Jameson, modernism emphasizes the meaning of time and history whereas postmodernism led to *spatialization of the temporal*. The notion of spatialization of the temporal means a simultaneous trend away from the 19th century obsession of history towards a new era of space (M. Foucault). E.W. Soja in his later works such as *Thirdspace* published in 1996 refers to this meaning of *spatial turn* where he defines it as a type of *master turn*, therefore, we arrive at the main paradigm of science of the end of the 20th century – paradigm of transdiscipli-

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[1] Cf. Foucault M., *Von anderen Räumen*, [in:] Dünne, J. / Günzel, S., *Raumtheorie. Grundlagentexte aus Philosophie und Kulturwissenschaften*, p. 317–329, Frankfurt a. M. 2006; Fukuyama, F., *Koniec historii*, Znak, Kraków 2009; Huntington, S.P., *Zderzenie cywilizacji i nowy kształt ładu światowego*, Muza, Warszawa 2003.

[2] Edward W. Soja, *Postmodern Geographies. The Reassertion of Space in Critical Social Theory*, London/NY 1989. In the recent years two comprehensive studies of the whole issue of the spatial turn in the modern science were published: Döring, Jörg/Thielmann, Tristan (Hrsg.), *Spatial turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*, transcript Verlag, Bielefeld 2008; Warf, Barney/Arias, Santa (eds.), *The Spatial Turn: Interdisciplinary Perspectives*, Routledge Studies in Human Geography, London 2009.

[3] (...) *A certain spatial turn has often seemed to offer one of the more productive ways of distinguishing postmodernism from modernism proper* (...), F. Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism*, p. 154, Durham 1991; (quoted after:) Döring J., Thielmann T. (Hrsg.), *Spatial turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*, p. 8.

nar character as such[4]. In this way, 'space' becomes the main component of the critical social theory [3].

Nowadays, the emphasis is put on the multidimensionality of the meaning of 'spatial turn', which expresses both its transdisciplinar character, i.e. may refer to every discipline of knowledge or science as such as well as its transcultural character, i.e. may occur and be valid independently of place and time in the impingement sphere of a given culture-civilization. In this context, *spatial turn* is strongly connected with the technological development of the second part of the 20th century. It refers to the new information technologies which are interpreted as an omen, expression and at the same time the main tool of the globalization process. Spatial and technological turns mean a new perception of the human reality, either in form of a global village (M. McLuhan) and a web society (M. Castells), or mobility as the main phenomenon of the modern society (J. Urry). The leading motif of spatial turn itself involves the far-reaching changes brought about by the media and communication technologies.

The phenomenon of spatial turn itself is not explicitly defined – we can say that it refers to the disputes which take place within the particular domains by making reference to space. We can observe a sort of prosperity for 'space' as each discipline (field of study) of broadly understood humanities undertakes a different 'spatial turn' by shifting research emphasis, by change of perspective or by an attempt to define a new phenomenon which appears in a given field of research. Thus, we deal with the particular metaphors of spatial turn. This multitude of metaphors allows us to assume a hypothesis about transdisciplinar character of the contemporary science and its particular disciplines. Apart from the notion of *spatial turn*, we can also distinguish the following expressions: 1) *topological turn*, which refers to mathematical terminology and phenomenology within philosophy; 2) *topographical turn*, in theory of literature and culture, an expression based on discovering space as a text with its roots in cartography, i.e. map and map reading as transforming space into a text and also as an expression of human control over space[5]. – A characteristic form of space rehabilitation is assumed by *spatial turn* in historical sciences – this process was initiated by a German author named Karl Schlögel. The starting point here is the question about possibilities of existing the so called great narrations after their proper end caused by the postmodernism postulate of F. Lyotard. Spatial turn signifies a symbolic return of space to the historical discourse in form of locating and spacing historiographical representations and analyses within the impingement sphere of the particular cultural and social space, and consequently, historical space[6].

[4] (...) *Contemporary critical studies have experienced a significant spatial turn. In what may be seen as one of the most important intellectual and political developments in the late twentieth century, scholars have begun to interpret space and the spatiality of human life with the same critical insight and emphasis that has traditionally been given to time and history on the one hand, and to social relations and society on the other* (...), E.W. Soja, *Thirdspace. Journeys to Los Angeles and other Real-and-Imagined Places*, London/NY 1996, (quoted after:) Döring J., Thielmann T. (Hrsg.), *Spatial turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*, p. 9.

[5] Cf. program text of topographical turn, also as a response of European humanities to Anglo-Saxon *cultural studies*: Sigrid Weigel, *Zum topographical turn*, Kultur-Poetik 2002, [in:] Döring J., Thielmann T., *Spatial turn...*, pp. 15–18.

[6] (…) *Erneuerung der geschichtlichen Erzählung selbst* (…) *die Frage nach der Möglichkeit einer großen Erzählung nach dem Ende der Großen Erzählung* (...). History takes place, *deshalb sei jede historiographische Darstellung defizitär, die nicht auch die je historisch-konkrete Ortsverhaftung des zu rekonstruierenden Geschehens mitexpliziere* (...), Döring J., Thielmann T., *Spatial turn...*, pp. 20–22; cf. Karl Schlögel, *Im Raume lesen wir die Zeit. Über Zivilisationsgeschichte und Geopolitik*, München 2003.

Compression of time and space

Compression of time and space (D. Harvey) constitutes a particular background for rediscovering space in the last decade of the 20th century; this term refers to the process of condensing horizons of cognition connected with time and space which at the same time led to an implosion of space. Equally, in McLuhan's global village, in Urry's mobile society as well as in Castells' web society, it is in the space that lines of flows, loops, centres and peripheries are designated. According to the postulated postmodernist theory of media, the process of overcoming time and space, to paraphrase McLuhan, takes place exactly in the space as *medium* and *message* in one. In other words, the postulated deterritorialization of cyberspace is suspended on the coordinates of this space[7] [2, 12, 17, 18].

Therefore, a technologically plausible compression of time and space requires social location and spacing. Deterritorialization refers to the technology, not to man and society. Communication technologies do not liquidate spaces, however, they do change them[8] [3]. This phenomenon is

[7] The phenomenon of compression of time and space is analysed by David Harvey in the study *The Condition of Postmodernity. An Enquiry into the Origins of Cultural Change*, Oxford/Cambridge 1989. The first interpretation of changes occurring in the world of media was presented by H.M. McLuhan, cf. his study: *Wybór tekstów*, Zysk i s-ka, Poznań 2001. As for model of information society with the concept of space as a cultural function, cf. Castells, M., *Społeczeństwo sieci*, PWN, Warszawa 2007. The concept of society based on the phenomenon of mobility is presented in the work of J. Urry, *Socjologia mobilności*, PWN, Warszawa 2009. As for issues of new cyber-culture and technological determinants of the modern society, cf. Zawojski, P., *Cyberkultura. Syntopia sztuki, nauki i technologii*, Poltext, Warszawa 2010.

[8] (…) *ganz so als sei die technisch ermöglichte time-space compression nur vermittels einer Standortversicherung* (...) *sozial zu ertragen. Auch in der Netzwerkgesellschaft bleibt Territorialität als eines der organisierenden Prinzipien sozialer Beziehungen elementar von Bedeutung*.

characteristic of the globalization process in which new varieties of space appear in the context of technological carriers of communication as global, transcultural and transnational ones. Therefore, the postulates of McLuhan to overcome and consequently get rid of spaces in the meantime serve the purpose of locating ourselves, as it is the case with the GPS technology (*Global Positioning System*). At the same time, the development of new communication technologies changed the form of impingement of cultures and civilizations, which not only impinge within their orbits and spaces, but were also located either in space or in orbit. Media technologies (satellite transmission) represent a given culture in orbit, but not the orbit of a given culture[9]. In this sense, there is a growing tendency for materialization in the current discourse on culture and civilization which are more and more dominated by the technological development. As a consequence, along with spatial and technological turns, we can observe the return of materialistic concepts of culture and its materialistic determinants[10] [4].

(...) *Die Orte der Lebenswelt bleiben, aber sie sind nurmehr als medialisierte zu denken* (...) *diese fachübergreifende spatial-turn-Perspektive als notwendige Korrektur einer postmodernen Raumignoranz*, Döring J., Thielmann T., *Spatial turn...*, p. 15.

[9] As an example of technological spacing of cultures and civilizations, cf. Parks, Lisa, *Cultures in Orbit. Sattelites and the Televisual*, Durham, London 2005.

[10] Cf. Eibl, K., *Kultur als Zwischenwelt. Eine evolutionsbiologische Perspektive*, Edition Unseld, Suhrkamp Verlag, Frankfurt a. M. 2009.

Transdisciplinar character of space

We can find a direct example of *spatial turn* at the point of contact of architecture / town-planning and social sciences in form of transdisciplinar sociology of architecture (B. Schäfers) and sociology of space (M. Löw). This change in perspective in social sciences was initiated, *inter alia*, in the works of P. Bourdieu and A. Giddens along with the introduction of dynamic paradigms of change in analyses and interpretations of the social life reality as well as a general process of becoming a society (P. Sztompka)[11][13, 16].

On the other hand, the trandisciplinar approach to this issue dates back to G. Simmel and his space concept in which he emphasized spatial connections and conditions of behaviours and social actions, the expression of which we can find in his sociology of town and space[12] [15]. This concept of spatial conditions of social actions refers to a relational concept of space based on the so called *spacing* whose author is M. Löw. These concepts emphasize a dynamic reality and understanding of space in the social life. They reject the static concept of space as a Euclidian container for the benefit of active production of space as the space of various relations and references, as *spacing*, i.e. creating syntheses in the reality of conflicts and internal tensions of the modern mass society. This formulation emphasizes the ambiguity of space as a social life category which is produced and shaped and at the same time produces and shapes human relations, actions and behaviours in the social dimension[13] [10, 11]. As a consequence, the contemporary concept of society is based on the process of constant fluctuations and configurations[14] [5] on the one hand, however, on the other hand, 'the society' is interpreted as an equally important process of producing space[15] [9].

Therefore, *spatial turn* signifies a new understanding of space not in the sense of a territory, but rather as a social production of space by means of various, sometimes contrasting social processes, actions and aspirations. On the other hand, the expression of a postmodernist turn towards space and a simultaneous turn away from history and time as coordinates of modernism is the multiplication of the so called no-places which are in a state suspension as regards their historical and cultural meanings, which is the main feature of massing the societies, media and consumption. No-places express homogenization and standardization of the global dimension – space becomes as if a massed product[16] [1].

[11] Cf. Schäfers B., *Architektursoziologie. Grundlagen – Epochen – Themen*, Verlag für Sozialwissenschaften, Wiesbaden 2006; Giddens, A., *Stanowienie społeczeństwa*, p. 154–206, Zysk i S-ka, Poznań 2003; Sztompka, P., *Socjologia. Analiza Społeczeństwa*, pp. 437–553, Znak, Kraków 2009.

[12] Simmel G., *Socjologia przestrzeni* (1903), [in:] *Pisma socjologiczne*, pp. 365–385, Oficyna Naukowa, Warszawa 2008.

[13] Cf. Löw M., *Raumsoziologie*, pp. 69–129, Suhrkamp Verlag, Frankfurt am Main 2009; Löw, M., Steets, S., Stoetzer, S., *Einführung in die Stadt- und Raumsoziologie*, pp. 51–92, Budrich/UTB, Opladen & Farmington Hills 2008.

[14] Elias N., *Czym jest socjologia?*, pp. 89–233, Aletheia, Warszawa 2010.

[15] Jałowiecki B., *Społeczne wytwarzanie przestrzeni*, Scholar, Warszawa 2010.

[16] Augé M., *Nie-miejsca. Wprowadzenie do antropologii hipernowoczesności*, PWN, Warszawa 2010.

Spatialization in architecture and town-planning

The contemporary accumulation of technological development has led to a fusion of society and technology on the ground of esthetics, namely new technologies of communication and visualization. At the same time, the meaning of technologies themselves has been extended as regards their role as special rhetoric tools in the discourse

on culture and architecture. As a result, space and technologies have become an esthetic expression of transformation of the modern society in all of its dimensions[17] [8].

By analogy with the change of space perception in social sciences, also in architecture we can distinguish the two concepts of space which condition each other. On the one hand, it results from the understanding of architecture and its functions in the social reality as a social action and fact, i.e. a special process of 'notching' space in which we encode our culture of actions and behaviours[18] [3]. On the other hand, in the architecture proper we can find esthetic interpretations of philosophical concepts of technology and space and their influence on the society structure and its changes. This results from the fact that architectonic / urban space has two faces as it is at the same time produced and producing and from its significance in culture. Thus, one of the main issues is the definition of the role and meaning of technology in the current dispute on architecture and its spatial impingements upon society and culture. The history of architecture, the very motive of building and residing can be understood in the perspective of technology as special rhetoric tools of discourse on culture, space and architecture.

A good example here is the static architectural formula/paradigm by Le Corbusier based on the Plato idealistic concept of technology defined as a process of producing according to a determined formula/paradigm which is supposed to express an aspiration for perfection and enable existence in the historical dimension. It is contrasted with the futurism which places emphasis on the dynamism of the technologies proper and is based on Heraclitus and his variabilism where history is rejected for the benefit of a post-historical permanent process of changes. Architecture as a phenomenon which is dynamic, changing, constantly reviving and renewing corresponds to the paradigm of incessant change and movement in Heraclitus philosophy and at the same time rejects the idea of eternal, invariable lasting adequate to the concept of the world by Plato. These two ontological concepts clash and this can be observed in the contemporary interpretations of the phenomenon of technology and in divergent tendencies within the architecture proper. – This contrast is presented against the background of ideological dispute within politics with architecture as a reflection of the state of the modern society[19] [7]. A similar contrast can be seen in the architectural interpretations of place and space in functionalism (pragmatism and statism) and structuralism (variability and openness of space). Along with the discovery of interculturality and transdisciplinarity in the second part of the 20th century, these contrasts led to the so called spatial turn in social sciences, which from then on have been based on the multidimensional concept of space expressed in the dispute of modernism/postmodernism. This dispute, which focused of interpretations of form and space, at the same time, became the axis of the development of the modern architecture[20] [6]. In this way, architecture appears to be reflected in philosophy and technology as an integral element of culture[21] [8].

[17] Multidimensionality of esthetic and technological society transformation process along with its transdisciplinar and transcultural character were presented in the study: Heil R., Kaminski A., Stippak M., Unger A., Ziegler M. (eds.), *Tensions and Convergences. Technological and Aesthetic Transformations of Society*, transcript Verlag, Bielefeld 2007.

[18] „Architektur als überaus beständige, kulturell verbindliche 'Kerbung' des Raumes, durch die Handlungspotentialitäten codiert werden", [in:] Döring J., Thielmann T., *Spatial turn...*, p. 18.

[19] Cf. Habermas J., *Moderne und postmoderne Architektur*, [in:] Welsch W. (ed.), *Wege aus der Moderne*, Acta humaniora, Weinheim 1988, pp. 110–120.

[20] Ghirardo D., *Architektura po modernizmie*, Via, Wrocław 1999,

[21] Cf. Timmermann P., *Architecture in the Mirror of Technology.* [in:] Heil R., Kaminski A., Stippak M., Unger A., Ziegler M. (eds.), *Tensions and Convergences...*, pp. 47–57.

Notching *space – Shin Takamatsu's architecture*

These internal connections of modern architecture, philosophy, social transformations and new technologies within the framework of multidimensional tensions between modernism and postmodernism found their expression in the projects executed by a Japanese architect Shin Takamatsu[22]. His architectural designs understand architecture as an integral element of culture and at the same time they go beyond the general scheme of controversies between modernism and postmodernism. Takamatsu has his own unique way of interpreting space in the context of tradition and history of the Japanese culture. It manifests itself as a radical process of 'notching' this historical and cultural space in form of 'architectonic machines'[23] as its integral element and a challenge at the same time, for example, in the project *Ark* (Kyoto 1983). Takamatsu's creative work is inspired by metaphors of light and shade which occur in the architecture of East and West with reference to one of the oldest Shinto temples Izumo[24]. His architecture represents an interpretation of this tradition as a radical entry into the

[22] *Shin Takamatsu, ein Architekt aus Kyoto*, mit Beiträgen von F. Guattari, P. Virilio, S. Takamatsu, Merve Verlag, Berlin 1995.

[23] Cf. Guattari F., *Die Architektur-Maschinen von Shin Takamatsu*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, Merve, Berlin 1995, pp. 56–83.

[24] As is emphasized by Takamatsu: (…) *In Bezug auf Licht kann ich wohl sagen, daß ich unter dem Einfluß von Izumo stehe. Das izumoische Licht ist eine leuchtende Finsternis, wie ich es gerne nennen möchte. Das heißt, die Finsternis ist hier kein Gegensatz zum Licht, sondern sie ist eine leuchtende Finsternis. Die Finsternis von Izumo bestimmt und definiert das Licht. Jede Existenz tritt in Erscheinung, nicht weil sie im Licht steht, sondern weil sie einen inneren Schein in sich trägt. Dieser Gedanke über Izumo spielt für mich eine wichtige Rolle, wenn ich mich mit Architektur befasse. Meine Vorstellung ist es immer gewesen, alles, wie Orte, Material, Gestalt und Architektur zu kristalisieren, als etwas, das vom eigenen Licht durchtränkt ist* (...), [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, p. 20.

space of this place, i.e. in this case the city space of Kyoto – generally modern space of the Japanese culture [14].

The starting point in the analysis of Takamatsu's creative work is the definition of architecture as a tool and at the same time method of expression of the moment in which the architect's initiation occurs in a creative act by virtue of an internal need for expression or an act of shaping the form. In Takamatsu's case this is achieved thanks to the metaphors of light and shade and the permanent process of repeating movement as designing-drawing the form and its search which in architecture means creating and at the same time researching by analogy with capturing space and architecture as produced and producing. In this way, a direct analogy is drawn between designing-drawing and writing as a metaphor of the power of light contained in the tip of the pen / rapidograph (i.e. technical pen) (*Leuchtkraft, die aus der Spitze des schriftstellerischen Stiftes hervorgeht*, ibidem, p. 13).

However, the very act of creation involves an inseparable bond between the subject and the work itself, almost a biological relation, which is emphasized by Takamatsu (*Ich kann sogar sagen, daß meine Architektur mein Körper selbst ist*, ibidem, p. 18). By analogy with this biological relation with the work, Takamatsu presents architecture on the model of mechanism, aggregate which introduces light into our shade, into man's interior where light and shade, similarly to Izumo temple, do not constitute opposites but mutually complement each other[25]. This inspiration with Izumo temple in Kyoto also expresses differences in understanding the metaphor of light between the cultures of East and West. In the western world, the metaphor of light dates back to the Plato interpretation of light as a kind of revelation or completion of a cognition act. On the other hand, the eastern culture, among other things, the Japanese culture is characterized by dimmer light which comes out of shade and it is not explicit because it is burdened with subtle, sophisticated taboo of reticence. This light serves the purpose of expressing and simultaneously refuting taboo. In the context of architecture, this means an aspiration for shaping this internal light hidden in shade – extracting light from the form, material and finally from the existing urban space. According to Takamatsu, the act of creation perceived in this way is something sacral and the architect himself/herself becomes a priest and alchemist[26].

In the case of relation between place and space, this means that place is always defined anew by architecture in the process of producing space. Such redefining of places is an act of spacing (*spacing*, M. Löw). Simultaneously, in the context of place and space on the one hand, and on the other in relation to the triad of history, tradition and culture – we can observe duplicity of architecture. The architect may remain faithful to the so called *genius loci* to which he subordinates an act of creation and architecture in the perspective of historical long lasting (F. Braudel) or he can reject history and horizontality for the benefit of moment, transfer and flow (M. Castells, J. Urry) by introducing a vertical bend in form of moment-place, in which architecture becomes a challenge for the existing place and space. One of the examples of such domination of place in the process of simultaneous producing and bending space is the design by Takamatsu *Kirin Plaza Osaka*. In order to express this dependency between architecture and space, Takamatsu uses the metaphor of ether (*Ether Planning*)[27]. This concept was supposed to enable the definition of fleetingness, change, temporariness in space, which at the same time remains specified. In this sense, the metaphorical character of architecture connects its development starting from the aesthetics of space and glass at the beginning of the 20th century contained in the studies of Mies van der Rohe and the metaphors of light and shade at the end of the 20th century in Takamatsu's projects. Concurrently, Takamatsu's designs express new technologies at the turn of millenniums, for example, *Yokohama Urban Ring* as an attempt to express electronic space.

As emphasized by P. Virilio, Takamatsu treats space as the subject of criticism and also as a peculiar subversive act of abolishing rules. However, it does not occur in the sense of postmodernist deconstruction but it rather means the question of what and when to build. It resulted from the specific transformation of the Japanese society after World War II. Takamatsu's structures explicitly enter space; it is a particular process of notching space as an expression and objectivity of the whole issue of spatial turn exactly by *Zuspitzung* (P. Virilio) – sharpening, overstatement in form, confrontation with the existing principles of the static and widely accepted scheme. This confrontation resulted from the unique situation in the history of Japanese culture and society, which was suspended between the past and tradition as well as progress and future, from the permanent state of tension between ideas and condensing of metropolis space[28].

[25] (…) *der das Licht in die Finsternis unseres Inneren dringen läßt. Licht und Dunkel stehen zueinander nicht in Opposition* (...), [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, p. 18.

[26] *Ich glaube auch, daß sich ein Architekt als eine Art Priester der Images darstellt. Er versucht nicht die Kräfte visuell zu rationalisieren. Formen sind schon da. In dem Moment, wenn eine Form hervorgeht, übertrifft sie sich selbst, geladen mit unerhörten Kräften, als eine Existenz. Die Architektur ist eine paradoxe Maschine, wie ich es mir vorstellte, die dieses ursprüngliche Begehren von Formen hervorruft und klärt. Ich habe geglaubt, daß Architektur als ein Filter, als eine Kristallisationsapparatur, denkbar ist*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, p. 22.

[27] *Äther ist für mich eine Metapher für einen Raum: Ein veränderlicher, ätherischer Raum durch die ungleichmäßige Dichte der Luft, in dem jedes Teilchen sich frei bewegt und die Entstehung der neuen Raumstruktur beeinflußt. Ein Raum, in dem die Inkohärenz der Kohärenz und die Kohärenz der Inkohärenz ein flexibles, dichtes, dynamisches Feld darstellen.* (...) *Ich kam zu der Überzeugung, daß die Räume, die demnächst in Betracht kommen sollen, gekennzeichnet sind durch diese unbestimmte Bestimmtheit*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, p. 37.

[28] In this context P. Virilio emphasizes: *Das heutige Nippon, das zwischen Vergangenheit und Zukunft, zwischen Gedächtnis und Erfindung vereinsamt ist, kommt auf den Augenblick zurück, auf die kurze Zeitspanne einer photographischen Momentaufnahme.* (...) *Shin Takamatsu Werk entspringt aus Spannungen, die hier, in Tokio, in Kyoto und anderswo wirksam sind, aus Spannungen, die der Dichte des Verkehrs und der Überdichte der städtischen Bevölkerung geschuldet sind: Es erscheint wie das Bild einer unvermeidlichen Zusammenballung von rückwärtsgewandten und vorausblickenden Ideen, als Sinnbehälter, als Panzerschrank von architekturalen Werten, die dabei sind, zu verschwinden*, P. Virilio, *Zuspitzung am Beispiel von Shin Takamatsu*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, pp. 50–51.

Takamatsu refers to the concept of open, dynamic space of structuralism by Kenzo Tange as a reaction to the functionalism which was dominant in international architecture. At the same time, the modern Japanese architecture (trend of the so called metabolism) intends to adapt buildings to the requirements of contemporary man. F. Guattari defines this trend as processualism, i.e. not surrendering to the formulas and schemes accepted in the schools and trends of architecture so far[29] [14]. First of all, it is a form of provoking and challenging the existing space which also results from the tradition of form. In the context of space, Guattari distinguishes two contrasting concepts: 1) Le Corbusier with his postulate to maintain the integrated relation between form and space, 2) Mies van der Rohe with his postulate of separating the work, i.e. a structure and its form from the environment. The dilemma between those two concepts means the choice between maintaining and rejecting the context in relation to the surroundings. According to Guattari, Takamatsu's architecture is the third option – an aesthetic structure in a way perfect in its form is at the same time open to the spatial context[30]. Some of the expressions of this third option are, among other things, the aforementioned no-places (M. Augé) which become individualized in an act of creation according to Takamatsu's idea. These three options determine the place of architecture in the modern culture and space [14].

[29] *Wenn man jede systematische Etikettierung dieser Architekten ablehnt, kann man bei ihnen Prozesse evolutiven Werdens ausmachen, die ganz natürlich darauf abzielen, ihre Werke aus den funktionalen Rahmenbedingungen, aus den Erfordernissen des Kontextes, ja sogar aus jedem kulturellen Bezug humanistischer Art heraustreten zu lassen*, F. Guattari, *Die Architektur-Maschinen von Shin Takamatsu*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, pp. 57–58.

[30] *Vielleicht genügt aber auch der Hinweis, daß wir jeden Tag solche Objekte aufsuchen, die intrinsisch strukturiert sind und zugleich mit der äußeren Umwelt arbeiten: Diese Objekte sind die unterschiedlichen und vielfältigen Maschinen, durch die unsere moderne Existenz von allen Seiten her versorgt wird. Ein Merkmal dieser Objekte ist, daß sie sich im Lauf der Zeit entwickeln und sich gegenseitig in einer Phylogenese ersetzen, die an die der Lebewesen erinnert*, F. Guattari, *Die Architektur-Maschinen von Shin Takamatsu*, [in:] *Shin Takamatsu, ein Architekt aus Kyoto*, pp. 62–63.

References

[1] Augé M., *Nie-miejsca. Wprowadzenie do antropologii hipernowoczesności*, PWN, Warszawa 2010.

[2] Castells M., *Społeczeństwo sieci*, PWN, Warszawa 2007.

[3] Döring J., Thielmann T. (Hrsg.), *Spatial turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften*, transcript Verlag, Bielefeld 2008.

[4] Eibl K., *Kultur als Zwischenwelt. Eine evolutionsbiologische Perspektive*, Edition Unseld, Suhrkamp Verlag, Frankfurt a. M. 2009.

[5] Elias N., *Czym jest socjologia?*, Aletheia, Warszawa 2010, pp. 89–233.

[6] Ghirardo D., *Architektura po modernizmie*, Via, Wrocław 1999.

[7] Habermas J., *Moderne und postmoderne Architektur*, [in:] Welsch W. (eds.), *Wege aus der Moderne*, Acta humaniora, Weinheim 1988, pp. 110–120.

[8] Heil R., Kaminski A., Stippak M., Unger A., Ziegler M. (eds.), *Tensions and Convergences. Technological and Aesthetic Transformations of Society*, transcript Verlag, Bielefeld 2007.

[9] Jałowiecki B., *Społeczne wytwarzanie przestrzeni*, Scholar, Warszawa 2010.

[10] Löw M., *Raumsoziologie*, Suhrkamp Verlag, Frankfurt am Main 2009, p. 69–129.

[11] Löw M., Steets S., Stoetzer S., *Einführung in die Stadt- und Raumsoziologie*, Budrich/UTB, Opladen & Farmington Hills 2008, pp. 51–92.

[12] McLuhan H.M., *Wybór tekstów*, Zysk i S-ka, Poznań 2001.

[13] Schäfers B., *Architektursoziologie. Grundlagen – Epochen – Themen*, Verlag für Sozialwissenschaften, Wiesbaden 2006.

[14] *Shin Takamatsu, ein Architekt aus Kyoto*, mit Beiträgen von F. Guattari, P. Virilio, S. Takamatsu, Merve Verlag, Berlin 1995.

[15] Simmel G., *Socjologia przestrzeni* (1903), [in:] *Pisma socjologiczne*, Oficyna Naukowa, Warszawa 2008, pp. 365–385.

[16] Sztompka P., *Socjologia. Analiza Społeczeństwa*, Znak, Kraków 2009, pp. 437–553.

[17] Urry J., *Socjologia mobilności*, PWN, Warszawa 2009.

[18] Warf B., Arias S. (eds.), *The Spatial Turn: Interdisciplinary Perspectives*, Routledge Studies in Human Geography, London 2009.

[19] Zawojski P., *Cyberkultura. Syntopia sztuki, nauki i technologii*, Poltext, Warszawa 2010.

Spatial turn. *Przestrzenie międzykulturowe i transdyscyplinarne w architekturze*

Współczesna akumulacja rozwoju technologii doprowadziła do fuzji społeczeństwa i technologii na fundamencie estetyki, dokładnie nowych technologii wizualizacji. Jednocześnie poszerzyło się znaczenie samych technologii jako swoistych retorycznych narzędzi dyskursu toczonego wokół kultury oraz architektury. Jako przykład może tutaj posłużyć statyczny wzór/paradygmat architektoniczny Le Corbusiera oparty na platońskiej idealistycznej koncepcji technologii (wytwarzania). Jego przeciwieństwem jest futuryzm z podkreśleniem dynamizmu samych technologii, a oparty na heraklitejskim wariabilizmie. Podobne przeciwieństwo odnajdujemy w architektonicznych interpretacjach miejsca i przestrzeni funkcjonalizmu (pragmatyzm i statyzm) oraz strukturalizmu (zmienność i otwarcie przestrzeni). Wraz z odkryciem międzykulturowości i transdyscyplinarności w drugiej połowie 20. wieku przeciwieństwa te doprowadziły do tzw. zwrotu przestrzennego w naukach społecznych, opartych od tego momentu na wielowymiarowej koncepcji przestrzeni i wyrażonej w sporze modernizm/postmodernizm. Spór ten stał się jednocześnie osią rozwoju współczesnej architektury, czego wyrazem są projekty Shin Takamatsu. W ten sposób architektura ukazuje się w zwierciadle filozofii i technologii jako integralny element kultury.

Key words: spatial turn, space in architecture

Słowa kluczowe: spatial turn, przestrzeń w architekturze

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Individualism and background architecture. Education dilemmas in the days of breakthrough

Faculty of Architecture at Warsaw University was founded in 1915 as one of the four units of the newly established university. The Organisation Committee's task was to outline the rules of functioning, including the principles of University educational program. The Committee members were architects and engineers who graduated from different European schools, universities of technology and academies and had various scientific and esthetical experiences.

Nowadays, we aim at organising a new university which is supposed to centre and shape our efforts; we aim at connecting creative activity at the deepest sources – architectural, painting and sculpture art; our goal is to revive old traditions, to maintain and develop the artistic tradition on the Polish land in order to compete with the Western Europe art with dignity like in the previous centuries.

The purpose of the program, which we present here, is to educate architects at the highest level and range – wide artistic culture and serious professional knowledge constitute guiding principles in form of a general study schedule as well as particular subjects[1].

Faculty of Architecture schedule was formed on the basis of the assumption that the architect's profession is characterised by the need to associate and use the knowledge which comprises many different disciplines understood as fields of study. A lot of attention was paid to the connections existing between architecture and painting, sculpture and pattern-designing. In the group of scientific subjects which included, among other things, mathematics, mechanics, building trade, constructions, installations and cost estimates, technical basics of designing were also taught. The schedule was complemented by practical information as regards architect's professional duties. Plenty of time was also devoted to the issues of history of art and history of architecture as well as teaching urban planning in the historical and contemporary context[2] [19].

The first plan of studies comprised 4 140 hours of didactic classes carried out within four years. Over 35% (1 500 hours) constituted design classes. Historical subjects comprised nearly 20% of time (810 hours), while scientific subjects like building and construction – over 25% (1 080 hours). Almost 15% (600 hours) constituted drawing, graphics and sculpture classes[3].

For comparison purposes, in the study schedule for the academic year 2008/2009 (for master's and engineer's degree inclusively) realised for six years (4 + 2 years respectively), the number of hours is 3 905. Design subjects comprise nearly 39% of time (1 520 hours), historical – circa 11% (450 hours), scientific building and construction – almost 17% (665 hours), drawing – less than 5% (180 hours).

The schedule outlined in 1915 was finally shaped till the academic year 1920/1921 without any bigger changes[4] [15]. Within this time, all planned didactic units started to function:

– Departments: Urban Designing, Monumental Designing, Village Designing, Ancient Architecture, History of Architecture, History of Art, Polish Architecture, Town Building, Building Industry, Freehand Drawing;

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[1] A fragment of the first schedule preamble of Warsaw University of Technology, Faculty of Architecture, Warszawa 1915.

[2] '*Wydział Architektury na Politechnice w Warszawie. Program*, Warszawa 1915.

[3] The analyses of study schedules at Faculty of Architecture of Warsaw University of Technology made on the basis of the information contained in the university documents were worked out by the author and used in the doctoral thesis: 'The Method of Recording and Accessing Historical Knowledge on the Example of Faculty of Architecture of Warsaw University of Technology', Warsaw 2010, pp. 255–270.

[4] '*Program Politechniki Warszawskiej na rok naukowy 1920/21*, Warszawa 1920, pp. 85–86.

– Institutes: Polish Architecture, History of Ancient Architecture, Renaissance Architecture.

Program sources of Faculty of Architecture of Warsaw University of Technology can be found in Polish and foreign schools educating future professors of architecture – these schools functioned in Europe in the 19th century and at the beginning of the 20th century.

The beginnings of architectural education in Poland go back to the 17th century. At that time the first Polish Department of Geodesy at Cracow Academy was opened[5] [15], which – according to the foundation act – was supposed to teach, among other things, military construction. In 1632 at the same Academy, Department of Geometry and Fortification was opened, the schedule of which included the studies on Vitruvius 'Architecture'[6] [20]. In the 18th century, some elements of architectural education can be found in Engineering and Military schools schedules. However, graduating from those schools did not mean the right to practise the profession.

More or less until the middle of the 19th century, the majority of architects in Europe studied in the master systems and did not study at universities. A fundamental way to gain experience and fluency in the profession was practice. At the end of the 18th century and at the beginning of the 19th century, non-compulsory professional examinations were introduced in many countries, which were mainly taken by persons who applied for clerk posts.

In the same period, first universities with technological sections were opened. In 1794 École Polytechnique was endowed – a Parisian elite technical school. The method of education in this type of schools was initially based on a free choice from the courses comprising issues from different branches of technology. Around the middle of the 19th century, faculties with specific profiles and examinations during the course of studies were introduced in the organisational structure of the university as well as the obligation to present a master thesis[7] [2].

An important event for the development of architectural education in Poland was foundation of Crown Engineers Corps School in Warsaw in 1789. At the same time, Lithuanian Engineers Corps School was open in Vilnius. Architectural education was introduced in both schools.

In 1826 the Preparation School to the Institute of Technology[8] [1] was opened in Warsaw with the Department of Civil Engineering which, among other things, educated students in the scope of architecture and geodesy[9] [12]. The school, which was supposed to be transformed into a university of technology, was closed after the outbreak of the November Uprising. As a result of reprisals which took place after the uprising, Warsaw University and Faculty of Sciences and Fine Arts were closed in 1831. In 1844 School of Fine Arts continued teaching students in the range of artistic education[10] [7]. After the school had been suspended (1863) and then closed (1866), education in the range of architecture on the level secondary school took place in Warsaw.

In 1898 Warsaw Tsar Nicholas Institute of Technology was created[11] [9]. Among three faculties of the newly opened university Faculty of Engineering and Construction started its activity, at which architecture constituted one of two specializations achieved on the level of a diploma. All the classes were run in the Russian language. After the University of Technology had been closed in 1905, in the years 1907–1910 The Society of Scientific Courses developed its activity in Warsaw, which organized, among other things, construction courses at the major of architecture.

In 1915, after tsar's authorities had withdrawn from Poland and the Germans had entered Poland, The Society of Higher Scientific Courses and The Association of Technicians made attempts to open Polish University and University of Technology in Warsaw[12] [8]. Initially, the major of architecture was planned to be opened as part of Faculty of Engineering and Construction, however, due to the efforts made by Warsaw Architects Club a separate 'Architectural Faculty' was finally opened.

In the Organisation Commission there were the following persons: Mikołaj Tołwiński (the chairman), Rudolf Świerczyński (the secretary), Józef Dziekoński, Czesław Domaniewski, Jan Heurich, Karol Jankowski, Juliusz Kłos, Kazimierze Skórewicz, Tadeusz Tołwiński, and Jarosław Wojciechowski. The architects Zygmunt Kamiński and Apoloniusz Nieniewski as well as the engineers connected with other Faculties of University of Technology such as Henryk Czopowski, Wacław Paszkowski and Ignacy Radziszewski also contributed to the preparation of schedules[13] [14, 19].

We can assume that a diversity of experiences gathered by the members of the Commission significantly influenced the interdisciplinary and open character of the Faculty. Starting from education which they got in schools with technical profiles (Faculties of Architecture at Universities of Technology in Vienna, Karlsruhe and Darmstadt; Faculties of Construction of Higher Technical School in Dresden and University of Technology in Riga; Faculty of Engineering and Construction of Tsar Nicholas II Warsaw Institute of Technology; Institute of Civil Engineers in Petersburg; II Corps Cadets in Petersburg) as well as with artistic profiles (Tsar's Academy of Fine Arts

[5] Suchodolski B., *Historia nauki polskiej*, Wrocław 1974, Vol. 6, pp. 658–660.

[6] Zarębska T., *Początki polskiego piśmiennictwa urbanistycznego*, Warszawa 1975, p. 404.

[7] Anderson R.D., *European Universities from the Enlightenment to 1914*, Oxford 2004.

[8] *150 lat Politechniki Warszawskiej: kalendarium*, Warszawa 1976, pp. 2–3.

[9] *Ogolny programmat kursów wykładać się mających w Szkole Przygotowawczej do Instytutu Politechnicznego w roku szkolnym 1830/183*1, Warszawa 1831.

[10] Jakimowicz I., Ryszkiewicz A., *Szkoła Sztuk Pięknych w Warszawie 1844–1866,* [in:] Rocznik Warszawski 1963, Vol. IV.

[11] Kolbiński K., *Politechnika Warszawska 1915–1965*, Warszawa 1965, p. 22.

[12] Kazimierski J., *Nauka i szkolnictwo wyższe w Warszawie,* Warszawa 1987, pp. 401–409; *150 lat wyższego szkolnictwa technicznego w Warszawie 1826–1976*, Warszawa 1980.

[13] *Wydział Architektury…,* op. cit.

in Petersburg; School of Fine Arts in Warsaw; School of Fine Arts in Cracow; Higher School of Painting, Sculpture and Construction in Moscow) through first design attempts to the development of one's own characteristic style.

The formula of education, which was accepted at the moment of creation of the School and developed during the first years of its activity, defined a specific profile of Warsaw Faculty determined by consistent coexistence of technical, artistic and historical disciplines. The plan of the program enabled the student to choose to some extent an individual way of education often based on cooperation with a chosen professor.

A boom in philosophical thought and new tendencies in art preceded by a rapid development of industry constituted the background for architectural activity at the beginning of the 20th century. The more and more common usage of new construction materials as well as the arising need for functional architecture resulted in changes in understanding the essence of building creative activity and the role of the architect.

A desire to leave the 19th-century historicism appeared in architecture. The last decade of the 19th century brought the origin of a new expressive style – secession. Modernity in architecture was represented at that time by realisations of Chicago School in the United States and designs by Perret and Garnier in Europe.

In 1907 in Berlin, Deutscher Werkbund was created – the association organised by a group of artists and industrialists, which aimed at creating conditions for the development of industrial production of high quality based on valuable craftsmanship[14] [11]. The architectural creative activity was characterised by purity of functional solutions and simplicity of the form. The first exhibition, which presented realisations corresponding to the accepted assumptions, was opened in Cologne in 1914.

In general, the character of European architecture around the year 1915 was featured by fondness for historicism, in particular, in the scope of average creative activity. Representatives of the younger and progressive generation of designers tried to leave traditional thinking about art by heading towards rationalism.

Enlivening of artistic and intellectual activity, which was restrained by the events of World War I, came back after 1918 and was intensified by the development of industry and technological progress generated by military needs. Rational thinking about architecture, whose sources were already embedded in the creative activity of the 19th century, was developed in the atmosphere conducive to logical understanding and effective working. Dynamic development of industry and building industry was accompanied by initiatives from the borderline of art and technology.

In 1919 in Weimar, Staatliche Bauhaus was opened – the school whose profile was determined by the respect for craftsmanship, the awareness of unity of architecture, sculpture and painting as well as the conviction that the best source of creative imagination is perfection of the technique[15] [5, 6].

In 1917 T. van Doesburg established De Stijl group which played a significant role in the development of the modern architectural thought[16] [13]. In this group there were painters, sculptors and architects who created according to neo-plasticism principles (geometric abstraction). This group introduced functional and constructivist tendencies into architecture. It also contributed to the development of the rational thought, the example of which constitute Kiefhoek residential complexes in Amsterdam (J. J. P. Oud) or cheap districts in Hilversum (W. M. Dudok) [17] [18]. The year 1914 brought five principles of modern architecture formulated by Le Corbusier: detached supports, free plan, walls independent on the construction, facades with wide (streaked) windows, and flat roofs with gardens. The innovative concept of understanding architecture introduced new methods of building the form which made the architectural composition independent of the construction[18] [10].

In 1926 'Praesens' group was established in Poland. It was created by, among other, artists connected with Faculty of Architecture of Warsaw University of Technology: Helena and Szymon Syrkus, Bohdan Lachert and Józef Szanajca. The program of the group referred to functionalism and constructivism and assumed synthetic unity of all fine arts. Members of the group realized many designs in which specific colours and forms were subject to functional purposes. They actively took part in the works of the International Congress of Modern Architecture[19] [3, 4].

In this atmosphere, architectural creative activity developed in Warsaw, which comprised both completions of the existing city buildings and designs of new housing development. By using new areas, among other things, on the right side of the Vistula River or in Żoliborz it was possible to build urban complexes, which are nowadays commonly perceived as unique. While walking down the streets of this district we have the impression that this architecture – although often quite different as regards style, form and scale – perfectly blends in with the existing structure and gives the space an unexpectedly uniform character.

Building a new bridge on the extension of Aleje Jerozolimskie in the years 1905–1913[20] contributed to the opening of the new investment areas on the right side of the Vistula.

[14] Maciuika J.V., *Before the Bauhaus: architecture, politics, and the German state 1890–1920*, Vol. 2, Cambridge 2005.

[15] Gropius W., *Scope of total architecture*, Ann Arbour 1962; Walter Gropius *The new architecture and the Bauhaus*, Boston 1965.

[16] Padovan R., *Towards universality: Le Corbusier, Mies and De Stijl*, New York 2002.

[17] White M., *De Stijl and Dutch modernism*, Manchester 2003.

[18] Le Corbusier, *Toward an Architecture*, Los Angeles 2007.

[19] Baranowicz Z., *Polska awangarda artystyczna 1918–1939*, Warszawa 1979.

[20] The bridge was opened to public in January 1914. In August 1915 it was blown up by Russians like other Warsaw crossings. It was burnt after several months since its emergency repair. Reconstruction started in 1921 and lasted till 1927; in the meantime one road was opened (1925).

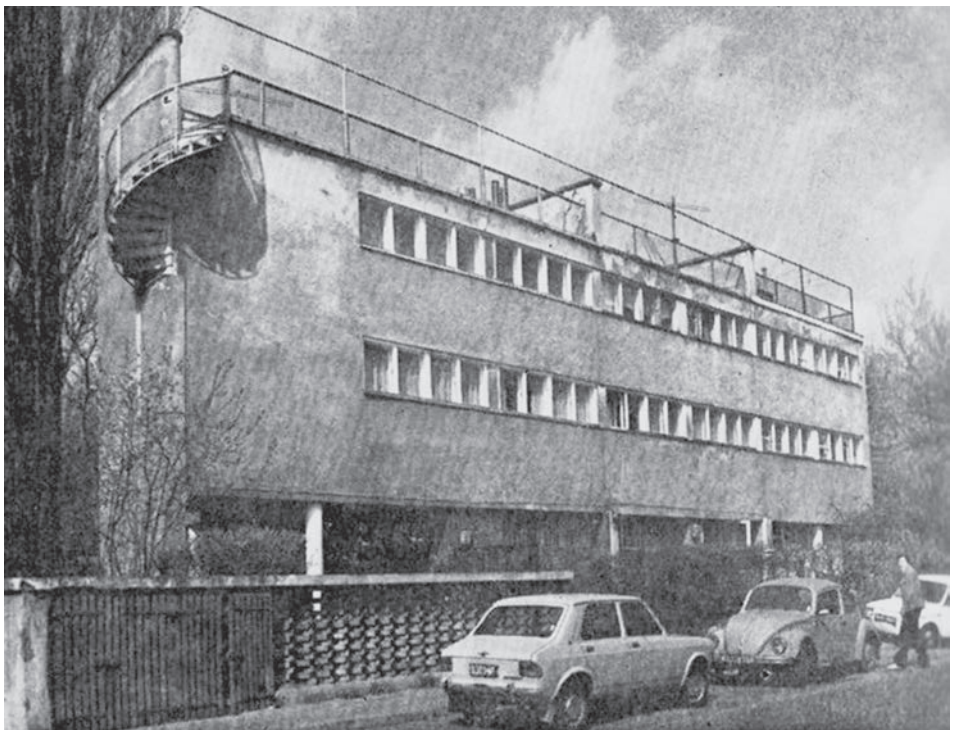

Fig. 1. Bohdan Lachert, Józef Szanajca, The Building at Katowicka Street in Warsaw

The first development plans of Saska Kępa appeared already in about 1900. After the building works of the bridge started, architects came back to the concept of district plotting and in 1911 the municipal council published the sketch of the regulatory scheme in which the realization of villa housing development was planned and the location of Skaryszewski Park was indicated. According to earlier assumptions, the arrangement of streets was shaped in the radiant system with the central square situated at the exit of the bridge. These plans were carried out almost 20 years later. Numerous reasons and conditions influenced the spatial arrangement and character of Saska Kępa. A particular climate of the place, which is today more appreciated than ever before, was shaped, among other things, by architecture reflecting wide creative possibilities of architects working in this area.

Walking along Saska Kępa, we can see not only examples of historicizing buildings but also buildings designed in the spirit of functionalism up to elegant, classicising modernism[21].

The first significant investment in this area was the so called Kolonia Łaskiego which was located in the region of the following streets: Katowicka, Obrońców and Dąbrowiecka. The development complex was built in the historicizing stylistics although with the usage of a modern gravel-concrete technology. Many structures, which were built in the 1920s and 1930s, referred to traditional forms and details. This also refers to the building at Obrońców Street 33, the project of which is attributed to Józef Vogtman – a graduate from Faculty of Architecture of Warsaw University of Technology in 1933[22] [17]. This structure was built quite late, i.e. in about 1936 and its realization at that time shows the architects' everlasting devotion to historical inspirations.

At the end of the 1920s, the first buildings representing architectural avant-garde were built on Saska Kępa. Among them, there is a building at Katowicka Street 9/11/11a, which was built as a three-family terraced house (it included the house and the study of Bohdan Lachert at number 9, the house of Z. Lechowska (No. 11) and the house of M. Ostrowska (No. 11a)). The project strictly referred to five principles of modern architecture of Le Corbusier. The architects Bohdan Lachert and Józef Szanajca were the authors. Both of them graduated from Faculty of Architecture at Warsaw University of Technology and they defended their diploma in 1926 and 1927 respectively. Bohdan Lachert worked as a didactic instructor; he was a deputy of the professor in the Department of Industrial and Economic Designing (1945–48); he obtained the title of associate professor in 1948.

At the same time, i.e. in the years 1928–1929, the architects realised – unfortunately not existing[23] any longer – the Villa of Antoni and Olimpia Szyller located at Wał Miedzeszyński 756. It was an outstanding example of extreme functionalism with the form consisting of rectangular elements of diverse heights.

In the 1930s the development of Saska Kępa was systematically extended by buildings which belonged to the modern architecture trend.

A good example can be the Villa of Andrzej Zaleski designed by Bohdan Pniewski in 1930. It is characterised

[21] Classification introduced by K. Koszewski in the study: *Koncepcja architektoniczno-historycznej bazy wiedzy na przykładzie Saskiej Kępy w Warszawie*.

[22] *Warszawska Szkoła Architektury 1915–1965*, Warszawa 1967, p. 295.

[23] Destroyed gradually since 1945 and pulled down in 2002.

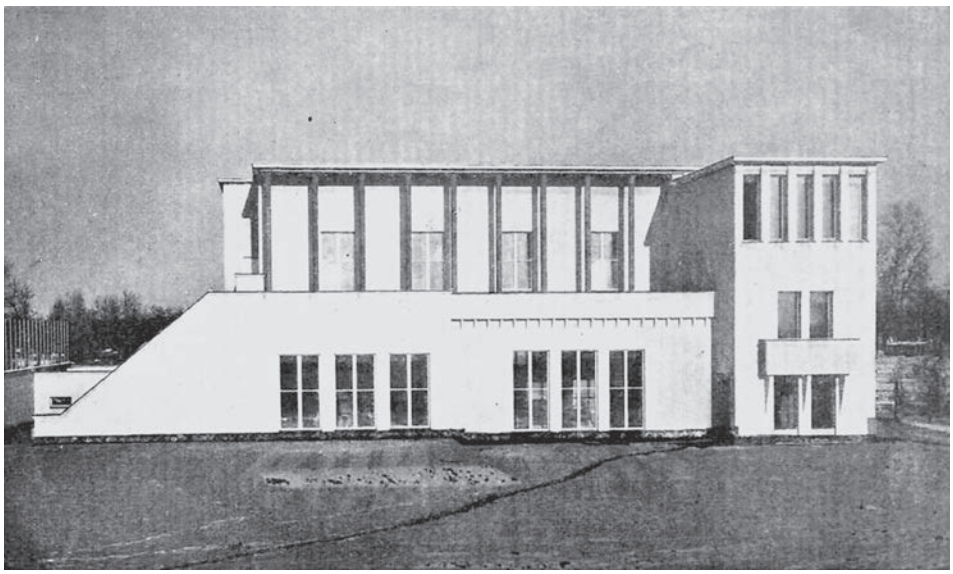

Fig. 2. Bohdan Pniewski, The House at Miedzeszyński Wał in Warsaw. Source: Architecture and Construction, No. 8/1932, p. 237

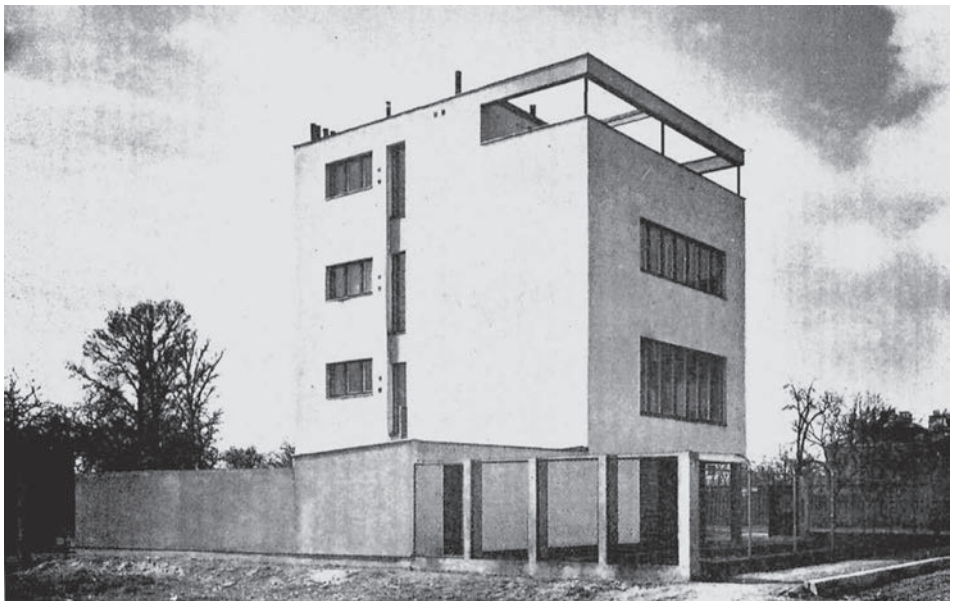

Fig. 3. Jadwiga Dobrzyńska, Zygmunt Łoboda, The House at Estońska Street in Warsaw. Source: Architecture and Construction, No. 4/1934, p. 114

by the structure consisting of simple forms of different heights and facades deprived of details and shaped by means of large planes of smooth walls. It is located in a way which makes it possible to observe the composition from the most convenient places and directions. According to the author's description: *'Forms of the building were designed in such a way that there were no short cuts from Miedzeszyński Wał'*[24] [21]. Bohdan Pniewski graduated from Faculty of Architecture at Warsaw University of Technology in 1922 and later he was connected with this Faculty due to his didactic activity. After the war he received the title of associate professor (1945) and then professor (1946). In different periods of his work at the Faculty, he managed the following departments: Department of Designing and Architectural Composition, Institute of Theory and Architectural Criticism and Department of Public Utility Edifices Designing[25] [17].

The house of Jadwiga Dobrzyńska and Zygmunt Łoboda located at Estońska Street 6, which was designed and realised in the years 1932–1933, is considered to be an outstanding example of rational architecture. The form of the building defined by the uncomplicated rectangular mass referred to Le Corbusier creative activity following his principles: a free plan, terrace on the roof, free façade, streaked windows and a building on pillars. Jadwiga Dobrzyńska graduated from Faculty of Architecture in 1922, while Zygmunt Łoboda in 1927[26] [17].

The villa at Obrońców Street 10, which was designed by the architects Piotr Kwiek and Lucjan Korngold in the years about 1934–1936, constitutes an example of luxuri-

[24] Architektura i Budownictwo, No. 8/1932, p. 240.

[25] *Warszawska Szkoła Architektury*..., op. cit., pp. 248–249.

[26] Ibidem, pp. 274, 284.

ous functionalism. It was the building with diverse facades arranged according to the principles of geometric abstraction. Lucjan Korngold graduated from Faculty of Architecture in 1921 and Piotr Kwiek in 1927[27]. These several examples of prominent architectural works designed by the graduates of Faculty of Architecture in the area of Saska Kępa can constitute the proof that strongly individualised architecture can successfully intermingle with neutral urban context and in this way enrich the space with characteristic elements and jointly create genius loci [17].

It is worth emphasising the fact that the above mentioned architects studied at Faculty of Architecture at Warsaw University of Technology shortly after the University was set up. Many students started their education before the year 1920. However, it seems impossible to determine a simple rule which would show the relation between the date of submitting the diploma and the nature of further creative activity. It also seems interesting that a probable author of the presented most conservative works is the last graduate of the School (Józef Vogtman, diploma in 1933).

Nowadays, if we look around Warsaw in search for a contemporary equivalent of the housing estate of Saska Kępa quality, it is difficult to find examples of organised plotting on this scale at all. Perhaps, modern norms of the investment market are not favourable for a reasonable planning policy.

Against this background, the Town Wilanów seems to be a particular example whose realisation has lasted for several years on the so called territories of Pola Wilanowskie in the south of Warsaw. The housing estate is designed on the basis of the local plans worked out by the authors selected through urban competitions, which is something really unique. Of course, the range and character of the design significantly differs from the above mentioned pre-war realisations. It refers to the scale and to the intensity of the development as well as to the planned functional structure which – apart from multi-family residential buildings – includes trade, service and office zones. The central element of the arrangement plan is Świątynia Opatrzności Bożej (National Temple of Divine Providence) – currently under construction.

It seems that in the perspective of several years, we will have an opportunity to see whether the ambitious plans of a private investor turn out to be effective. Will we be able to sum up a walk around the Town Wilanów as satisfying not only because of the quality of the public spaces but also due to the character of the local architecture?

[27] Ibidem, pp. 281–282.

References

[1] *150 lat wyższego szkolnictwa technicznego w Warszawie. 1826–1976*, materiały z sesji naukowej 13–14 grudnia 1979.
[2] Anderson D.R., *European Universities from the Enlightenment to 1914*, Oxford 2004.
[3] Baranowicz Z., *Polska awangarda artystyczna 1918–1939*, Warszawa 1979.
[4] Chrościcki J., Rottermund A., *Atlas architektury Warszawy*, Warszawa 1977.
[5] Gropius W., *Scope of total architecture*, Ann Arbour 1962.
[6] Gropius W., *The new architecture and the Bauhaus*, Boston 1965.
[7] Jakimowicz I., Ryszkiewicz A., *Szkoła Sztuk Pięknych w Warszawie 1844–1866*, [in:]: Rocznik Warszawski 1963, t. IV.
[8] Kazimierski J., *Nauka i szkolnictwo wyższe w Warszawie*, Warszawa 1987.
[9] Kolbiński K., *Politechnika Warszawska 1915–1965*, Warszawa 1965.
[10] Le Corbusier, *Toward an Architecture*, Los Angeles 2007.
[11] Maciuika J.V., *Before the Bauhaus: architecture, politics, and the German state 1890–1920*, Vol. 2, Cambridge 2005.
[12] *Ogolny programmat kursów wykładać się mających w Szkole Przygotowawczej do Instytutu Politechnicznego w roku szkolnym 1830/1831*, Warszawa 1831.
[13] Padovan R., *Towards universality: Le Corbusier, Mies and De Stijl*, Nowy Jork 2002.
[14] Piłatowicz J., *Profesorowie Politechniki Warszawskiej w dwudziestoleciu międzywojennym*, Warszawa 1999.
[15] *Program Politechniki Warszawskiej na rok naukowy 1920/21*, Warszawa 1920.
[16] Suchodolski B., *Historia nauki polskiej*, Wrocław 1974.
[17] *Warszawska Szkoła Architektury 1915–1965*, Warszawa 1967.
[18] White M., *De Stijl and Dutch modernism*, Manchester 2003.
[19] *Wydział Architektury na Politechnice w Warszawie. Program*, Warszawa 1915.
[20] Zarębska T., P*oczątki polskiego piśmiennictwa urbanistycznego*, Warszawa 1975.
[21] Architektura i Budownictwo, 1926–1935.

Indywidualizm i architektura tła. Dylematy edukacji w dobie przełomu

Współczesna kultura zbudowała przekonanie o konieczności ponadnormatywnej ekspresji.

Wyścig ikon generuje krótkotrwałe zainteresowanie i różnorodne skutki w czasie. Teledyskowa lista przebojów znika w cotygodniowej reinkarnacji. Miasto krzyczących fasad trwa.

Kiedy w roku 1915 członkowie Komisji Organizacyjnej tworzyli podstawy programowe Wydziału Architektury Politechniki Warszawskiej kontekst działań architektów odzwierciedlał ponad stuletnią destrukcję państwowości.

Różnorodność upodobań i rodowodów upoważniała do przewidywania niespójnych, kompilacyjnych efektów. Spotkali się m.in.: Józef Pius Dziekoński, Rudolf Świerczyński, Karol Jankowski wywodzący się z różnych europejskich szkół, politechnik i akademii sztuk pięknych.

Mimo to warszawska spuścizna dwudziestolecia tworzy spójny obraz o ponadprzeciętnej jakości. Szkoła wykształciła „architektów klasy średniej", którzy tworzyli znakomitą architekturę tła: gmachy publiczne, budynki socjalne, mieszkalne. O czym przekonuje spacer po warszawskiej Saskiej Kępie, czy Żoliborzu.

Jakiej chcemy dziś architektury? Czy przez absorpcję ikonicznych modeli zdołamy uporządkować krajobraz miast zniszczony przez półwieczne niedoinwestowanie i totalitaryzm? A może znów, bardziej niż wirtuozów potrzeba nam mistrzów drugiego planu?

Key words: background architecture, individualism, education

Słowa kluczowe: architektura tła, indywidualizm, edukacja

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At the senses' edge. Multisensual architecture

Vision

Designing buildings at the beginning of the 21st century became a field in which the development of technology and design support software resulted in a clearly visible trend to move the barriers which until recently were considered ultimate architectural limits. This is in line with the expectations of both investors and end users who are accustomed to the swift exchange of information and to the performance in virtual reality. Contemporary society which is oriented to consumption driven by the media and accustomed to quickly satisfy their needs, naturally impose similar requirements on architecture. At the same time this is only the first level of expectations. Advanced users of modern architecture, apart from a high level of complexity and functionality, want to use it to experience the contact with art in its broad sense and recently more and more often also with nature.

Designers do not hesitate to introduce some elements of surprise. They try to encourage the end user to join the process of creating architecture, arranging interactive solutions. Many authors seek to enable the visitor to experience the contact with architecture as deeply as possible. They try to achieve that by creating a unique atmosphere, characteristic of not only one specific building but each visit, the season of the year or the time of the day or simply individual mood of the user. In order to maximize the experience architectural objects should affect several senses simultaneously. The advance of that phenomenon can be seen in the Blur Building designed by Diller/Scofidio (Expo 2002) which is permanently shrouded in a cloud of fog or in wood smelling Peter Zumthor Swiss Pavilion (Expo 2000). The degree of complexity of the solutions can obviously greatly vary in respect of applied effects and technology from quite simple to very complicated ones. It is worth noting that for instance providing interiors with LCD monitors displaying any landscape, which only a few years ago was considered advanced technology, nowadays is considered the basic level of complexity. The phenomenon of multisensual architecture increasingly relates to cultural sites (museums, exhibitions, theaters or concert halls), recreation spaces (SPA facilities), commercial areas (retail and services) as well as private homes.

Body and movement

Designed by Asymptote in 2003, Carlos Miele Flagship Store in New York was inspired by the beauty of human body. The space in fluid forms was created on the basis of observation and analysis of movements of professional dancers. The silver gleaming dancer's dress and the scarf flowing around her figure became a permanent symbol of a woman's rich and lively nature. The arches outlined by the edges of flowing fabrics mark the irregular curves of the structure, limiting specific sections of the interior, whereas the expressive movements of the naked dancer symbolized the purity of form and natural elegance of body. The elements of interior decoration were designed on the basis of averaged graphs of the man's movements. The combination of fragments generated in this way resulted in a retail space as well as exhibition and theater sections. Despite the palpability the dancers' movements frozen in architectural forms, the spectators and customers visiting the store, moving around unusual structures, assume the role of actors. The clothes from the latest collection, just like the elements of the theatrical set

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Fig. 1. Interior of Tribeca Issey Miyake Store in New York (2001), design by Frank O. Gehry. Photo by Barbara Widera

design, are suspended on thin strings fixed to the ceiling. Dresses, levitating in a mystical glow generated by light rings in the floor, are perceived as unusual exhibits, stimulating curiosity and becoming objects of desire.

Tornado

Tribeca Issey Miyake Store (2001) is another New York clothes boutique designed by Frank O. Gehry for Issey Miyak whose interior design was inspired by a tornado whipping through space. The space of the store was divided into smaller sections, however, the intention of the author was to maintain a sense of a large, single-space interior. In order to do that a glass shaft was installed at the lower floor to provide eye contact between two levels of the store[1] [1]. Especially spectacular effects were achieved on the ground floor which has access directly from the street and which is the upper, more representative part of the boutique. This is where Gehry decided to affect simultaneously several senses of the visitors of the parlor. He used steel bands, suspending them in space like metal curtains undulated by strong wind and frozen in that state (Fig. 1). Just like in nature, each element is unique in this amazing landscape. In the opinion of the author these differences and diversity determines their beauty[2] [2]. As a result the character of the interior became more contemporary and surprising, but not technological. It corresponds well to both the style of clothes designed by Issey Miyake and to the dangerous, heavy and cold yet still fascinating nature during a hurricane. In order to more closely experience the effect created by Gehry one should hold two furthermost steel sheets fixed to the pillar in the middle and gently shake them a few times. As a result of spreading vibrations the store interior is filled with a distant and gradually growing sound of thunder. The impression is strong enough to cause a change in the spectator's perception of space through eyesight, touch and hearing.

[1] Hubertus Adam, *New York Architecture and Design*, teNeues Düsseldorf 2003, p. 155.

[2] Compare also: Frank O. Gehry, [in:] *Gehry Talks,* Mildred Fridman (ed.), Thames and Hudson, London 2003, p. 210.

Water and air

Next group of objects includes the ones which use architectural means and scenery to engage all possible senses. A good example of that is Atomic Spa Suisse at the Exedra Hotel in Milan, designed by Italian architect Simone Micheli in 2009. The spectacular effects created in that facility provide the visitors with relief and deep relaxation, which is in line with the idea of wellness. The combination of colors and LEDs creates a mystic atmosphere and discretely marks the boundaries between specific spaces. The soft, fluid shapes of white furniture and

Fig. 2. Atomic Spa Suisse in Milan, Italy (2009), design by Simone Micheli. Photo by Jürgen Eheim

biomorphic, tree-like supporting structures match the soft music flowing from loudspeakers which are invisible to the users. Mind and body are stimulated in such a way as to facilitate full relaxation. As this is a Spa facility, water is present there in different forms and seems virtually ubiquitous. The theatrical attempt at creating architecture within architecture is supposed to take the recipient to a three-dimensional, multisensual space – totally palpable and perceived with the use of senses yet still unreal due to its unusual character[3] [4]. Its exceptional quality is achieved by mirror macroscopic half-spheres made of plastic, coated in shining chrome (Fig. 2). Fixed above water, on the walls and under the ceiling, they resemble air bubbles. The visitors of the Spa can feel they are under water, where they can see, hear and feel their breath which, in the opinion of psychologists, greatly aids complete relaxation. Additionally, the silver bubbles can, in the opinion of the author of the project, evoke associations with bubbling champagne, resulting in a sense of euphoria and joyous relaxation[4] [4].

Fig. 3. Interior of the main building of the new addition of the Nelson-Atkins Museum of Art, Kansas City (1999–2007), design by Steven Holl Architects, copyright by Andy Ryan

[3] Simone Micheli, *Atomic SPA Swiss*, Press Release 2009, http://www.simonemicheli.com, 03.05.2010.

[4] Ibidem.

Journey

The designers of museums and exhibition spaces make use of a lot of methods engaging different senses of the viewers. In some cases the most sophisticated solutions are applied in a quite simple form. This principle was applied in the new addition of the Nelson-Atkins Museum of Art (NAMA) in Kansas City (1999–2007) designed by Steven Holl and Chris Mc Voya. According to the author: *As visitors move through the new addition, they will experience a flow between light, art, architecture and landscape, with views of from one level to another, from inside to outside. The threaded movement between the light-gathering lenses of the new addition weaves*

the new building with the landscape in a fluid dynamism based on a sensitive relationship to its context created by the architect[5] [3].

Both the process of creation and the ultimate character of architecture perceived by its users are dedicated to a specific journey undertaken by the visitors of the museum. Each time their experiences can be totally different as open circulation enables the multiplication of paths going through various exhibitions. The system is based on chaos theory. Similarly to other museums designed by him such as Cranbrook Institute of Science in Bloomfield Hills (1992–1999), Steven Holl uses the strong potential of the Lorenz attractor[6] [6] (Fig. 3).

[5] Steven Holl, [in:] Francesco Garofalo, *Steven Holl*, Universe Publishing, New York 2003, p. 196.

[6] Detailed description of the conception of the expansion of NAMA, [in:] Widera B., *Bloch Building – Muzeum nowej generacji. Rozbudowa Nelson-Atkins Museum of Arts, Kansas City, Steven Holl, Chris McVoy 1999–2007*, Archivolta, 1/2008, p. 8.

Limits of architecture

Modern systems, including construction solutions as well as multimedia technologies, offer designers an exceptionally broad selection of possibilities, enabling them to execute virtually every vision. Consequently, imagination is the ultimate limit of architecture. Regardless of sources of inspiration, architects evidently strive as much as possible to engage the user in the man–architecture relations. The trend promoting the multi-level perception of architecture and including various types of perception in that process helps the development of multisensual architecture, and ultimately, so called virtual architecture breaks the barrier of senses [5, 7].

References

[1] Adam H., *New York Architecture and Design*, teNeues Düsseldorf 2003.
[2] Fridman M., *Gehry Talks,* Thames and Hudson, London 2003.
[3] Garofalo F., *Steven Holl*, Universe Publishing, New York 2003.
[4] Micheli S., *Atomic SPA Swiss*, Press Release 2009, http://www.simonemicheli.com, 03.05.2010.
[5] Threat C., *Sensory Architecture_Beyond Appearances. The relationship between Senses and Space*. http://upetd.up.ac.za/thesis/available/etd-07162010–002128/unrestricted/00front.pdf, 19.08.2010.
[6] Widera B., *Bloch Building – Muzeum nowej generacji. Rozbudowa Nelson-Atkins Museum of Arts, Kansas City, Steven Holl, Chris McVoy 1999–2007*, Archivolta, 1/2008, pp. 8–13.
[7] Winkler T., Reimann D., Herczeg M., Höpel I., *Creating digital augmented multisensual learning spaces – Transdisciplinary school education between aesthetic creating and building concepts in computer science*. http://mc.informatik.uni-hamburg.de/konferenzbaende/mc2003/konferenzband/muc2003–30-winkler.pdf, 19.08.2010.

Na granicy zmysłów. Architektura multisensualna

W dobie błyskawicznego rozwoju technologii granice możliwości architektonicznych stają się coraz bardziej umowne. Odbiorcy, przyzwyczajeni do szybkiej wymiany informacji oraz funkcjonowania w wirtualnej rzeczywistości, oczekują od obiektów architektury wysokiego poziomu funkcjonalności i złożoności, pozwalającego zaspokoić ich potrzeby. Projektanci nie wahają się również wprowadzać elementy zaskoczenia. Starają się włączyć końcowego użytkownika w proces kreowania architektury, tworząc rozwiązania interaktywne. Wielu twórców dąży do umożliwienia odbiorcy jak najpełniejszego przeżywania kontaktu z architekturą. W tym celu obiekty architektoniczne mają oddziaływać na kilka zmysłów jednocześnie. Zjawisko architektury multisensualnej dotyczy w coraz większym zakresie obiektów kultury (muzea, powierzchnie wystawowe, teatry czy sale koncertowe), przestrzeni rekreacyjnych (obiekty SPA), komercyjnych (strefy handlowo-usługowe), a także prywatnych domów.

Key words: multisensual architecture, senses

Słowa kluczowe: architektura multisensualna, zmysł

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Sustainable space development

Sustainable development

Sustainable development, sustainable design, and sustainable space design – involve improvement of quality of life of present and future generations in harmonious coexistence of man with nature [5]. Traditionally, the environmental protection emphasizes the environmental aspect connected with natural resources, however, its correct, holistic meaning comprises a balance of all interdependent sectors of anthroposphere and biosphere. According to sustainable development human environment and natural environment are considered complementary – not competitive. Ultimately, this is about the development of humanity that will assure the maintenance of the conditions of the environment which will enable man to live now and in the future.

The main idea of sustainable development is to integrate the environmental, economic and social order [8]. The principle of dependence of the quality of the natural environment on economic and social situation has been present in literature regarding sustainable development since the 1990s. Achieving a permanent equilibrium in environment is dependent on equilibrium in its individual sectors. The environmental protection is not possible without spatial order which in turn depends on economic as well as social and cultural order.

The global crisis which since 2008 has blown over most world economies has revealed the weakness of the mechanisms of market self-regulation. The conviction that the development of civilization will also automatically adapt to the deteriorating conditions of environment and depletion of resources is an excuse for inactivity which can lead to catastrophe [11]. Humanity needs a deliberate and reasonable prevention of self-destructive trends [13]. The necessary reforms which will encompass all aspects of human development need to be based on changes in mentality, lifestyle, hierarchy of values and adequate level of social and cultural development. Apart from all necessary changes it is important for the top-down actions to have a clearly defined goal – strengthening the natural processes of the environmental protection and development as well as resolving problems and threats – locally along with the growing activity and decision-making authority of local communities. All programs and undertakings developed at international [4 and 5] and governmental levels should aim at constituting local communities as natural and main change centers – this is, among others, what the principle of sustainable development is based on [2].

Sustainable policy

The strength of international programs and political arrangements is necessary for changes. However, top-down management is dangerous for social development – it replaces the natural solidarity between people and consequently strengthens demanding egoistic attitudes [10]. In order to balance the processes of change it will be necessary to develop a common subsidiarity policy instead of top-down management dominance at local level.

The global environmental, economic as well as social and cultural threats require supra-local agreements, strategies and policies [7]. However, all these activities should with their strength support the natural mechanisms of local activities in building social patterns, spatial policy, and culture. The limits of influence of central manage-

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ment practices should be clearly defined to protect what is the most valuable, natural and necessary to balance the processes of development of human environment – capabilities of local communities to self-organization and joint care for the common good. The strategies and policy as well as official procedures which result from them should support the decisions regarding space development and make them more valuable as well as more community-oriented – to increase the participation of local communities and decrease the influence of central management. Public man [12] needs natural environment to develop, and local community is that environment.

Sustainable social development

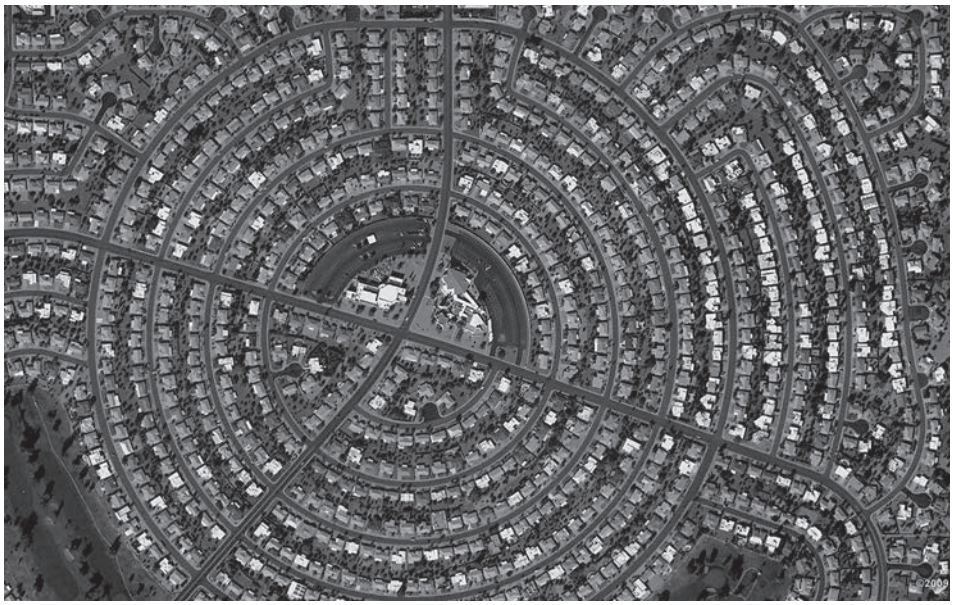

Fig. 1. Sun City constructed since the 1960s by Del Webb – Sun City, Arizona, USA. Source: Google Earth

Fig. 2. Breaking off spatial culture topics. The monotony of mass production – San Buenaventura, Mexico. Source: www.imagenesaereasdemexico.com

The level of cultural development is closely connected with social development. The level of social capital is an indicator of social development which is very low in Poland [6].

Community is the bonding agent for such qualities as sensitivity, desire to achieve harmony or to admire beauty, a need to grow roots and community which take permanent shape in local culture. A community condition has a direct influence on economic and spatial development as well as on the level and quality of culture. As a result of disintegration of social bonds, extinction of behavioral patterns and absence of values in public life, the activities taken in order to create common principles fall on barren ground because the most fundamental frame of reference, namely community, is missing.

Spatial culture: patterns of spatial behaviors, continuity of tradition of residence, set of rules applied in a residential space – are all inextricably connected with community [14]. Culture without reference to community becomes a manner and dead formalism (Fig. 1). Without support in local community, architecture becomes a monolog detached from local culture. It does not bond people through common understanding of culture. It does not enter into dialog or exchange of sensitivity; it does not evoke common emotions which can build, develop or revive local culture.

Architecture treated as a mass product which is governed only by the rules of the commercial market results in a social disintegration because it is addressed to an anonymous group of customers; it does not draw on any existing patterns of spatial culture, it does not provide an opportunity for inclusion into the community of place (Fig. 2).

Architecture should reply to the basic need of social development and create places which will be filled with interpersonal bonds. When assessing values, the social aspect of an enterprise must be taken into account. The

calculation of costs should include the extent of impact of planned investments on the existing social structure and introduction of new inhabitants into the place. The way this is conducted determines whether the existing community will be enriched or conflicted and destroyed.

Sustainable, permanent and social order is possible only if the stability of the natural grass-roots processes of consolidation of social groups is secured. Social ecosystem will really work out when the top-down assistance from outside is no longer needed.

Sustainable culture

Culture is reflected in the way in which human space is organized. The appearance of human settlements allows for determining the spatial behaviors of their inhabitants, social structure, hierarchy of values or level of culture. Sustainable space development is inextricably connected with the protection and development of the spatial culture of the community residing there[1]. The condition of our landscape demonstrates how huge threats we face. Spatial chaos, environmental degradation and waste of resources indicate a low level or even disappearance of culture.

The more and more unequal economic development, deeper and deeper process of social disintegration and growing cultural conflicts translate specifically and directly into the environmental degradation and cause concerns about the future. Changes are necessary, and it is possible that in order to make them and for their results to be permanent it is necessary to redefine the interpersonal relations and establish the cultural patterns which express the identity of local communities. When defining what is common in culture, it is not possible to exclude local community. However, in many cases it is still necessary to enable and prepare it for that participation. In order for the process to be successful it must take into account the activity of the community from the very beginning. Only then will it be possible to be sure that the effects to be achieved will be accepted by the community as their own and they will be permanent.

The principle of subsidiarity is the best vehicle to transfer the sustainable approach to culture which is an expression, and at the same time one of the most important pillars, of the identity of local communities. Culture cannot be regulated by top-down decrees, however, it can and it should be protected against the dominance of foreign, external patterns or solutions which can disintegrate and destroy local culture.

The centralized model is one of the reasons of the crisis which affects culture. It is evident in space development. No clear boundaries, no special places, loss of local identity, destruction of structures by express transit roads, supra-local shopping and office centers – these are just a few of many examples of negative consequences of centralized indifference to local communities. In the system of centrally assigned procedures and decisions, community is no longer a subject, a decision maker, a host of the place. The top-down imposition of patterns is based on the basic principle of equality to established rules. Unfortunately, these patterns are often developed for large areas, without recognizing or paying any attention to the differences between neighboring communities existing there and without knowledge of their local culture of residence, without their participation in decision making processes, without respect for social and cultural continuity of the place. This leads the whole urban areas to depravation of their original cultural diversity. All this contributes to social disintegration, loss of identity and generates cultural crisis.

The popular artistic happenings negate previous patterns and become discussion for discussion's sake; they do not add much, or they add little, to common cultural assets, and often they weaken or even harm culture. The rejection of the existing culture is a dangerous manner which, in the name of search for new values, questions the existing values, offering no valuable alternative instead. Search only for search sake often does not add any real values, and instead it reaffirms contempt or aversion to the traditional cultural patterns. Architecture more and more often divides, inflames, stuns, shocks, breaks, ridicules and loses... its connection with culture which is experienced communally. Contesting and going to extremes does not contribute to improving or developing the culture of residence – on the contrary – it deepens the spatial chaos, diminishes the prospect of culture shared with others, disturbs the common cultural heritage, degrades architecture to a commodity whose sale depends not on its actual usefulness for the inhabitants but on the brand built according to market rules.

Such developments cease to be a means of conveying shared culture. Instead of becoming an object of common care and an appeal to build and develop, culture is transformed into formal deformations to draw attention of the anonymous viewer for a moment. Single and individualistic treatment of culture, no respect for the existing communities and local cultural patterns result in breaking the continuity, loss of local identity as well as destruction of natural legacy and potential of local communities, exposing them to threats of global universalization and shallowness of culture-like mass products.

In the times of growing influence of globalization when culture is especially threatened – the aspect of protection and development of cultural heritage, continuity of tradition of residence as well as patterns of spatial behaviors – becomes especially significant in our care for the quality of life of present and future generations. The extensive literature documenting the regional cultural values of architecture is not applied in architectural policy, development strategies or spatial planning and in design practice. This is not a result of the lack of specific research or insufficient knowledge. This is rather the effect of the complex process of uniformization of needs,

[1] The Polish Policy Architectural assumes that: *Understanding the work of an architect as an obligation to cultural heritage, contemporary human needs and the future of next generations, the participants of the Congress of Polish Architecture in Poznań encourage all those who understand the mission of an architect in public life in a similar way to cooperate in order to develop architecture and create spatial order which determine the quality of life of all citizens* [3].

tastes and opinions subjected to marketing treatment by sales experts [9]. The basic problem is agreeing which cultural values should be protected and how to develop them.

Agreement at community level is the key to solving the basic problems of the environment and sustainable development.

Sustainable architecture

Architecture is a language which expresses human spatial culture [1]. Architecture – which individually can demonstrate positive qualities – holistically, socially and culturally can generate a dissonance. This is the difference between human capital and social capital. Both are needed but only when they are balanced is optimal development assured. The difference between culture and a culture-like product is the same as between theater and digital television – the point is community experience – which, if it exists, greatly contributes to building a common culture or, if it does not exist, it may develop some internal sensitivity, however, it is more a form of entertainment controlled by viewing ratings and political situation. A designed building, even if it is a single-family house, is a political act in the sense in which it is perceived from outside by users of common space.

We need architecture which develops a permanent order not only in respect of space but also in respect of social and cultural development. This can be achieved only if the design process involves community participation [15]. The spatial development is achieving long-term objectives which are impossible to achieve without relying on permanent local communities.

References

[1] Buczek G., Chwalibóg A., Chwalibóg K., Gawlicki M., Grochulski J., Kaliszewski A., Kiciński A., Lenart J., Śmiechowski D., Wolski P., *Polska polityka architektoniczna – polityka jakości krajobrazu, przestrzeni publicznej i architektury,* Poznań 2008, www.sarp.org.pl/pliki/ppa-www.pdf*, 06.2009*.

[2] *Community participation in local health and sustainable development*. Working document on approaches and techniques. WHO Regional Office for Europe, Copenhagen 1999.

[3] *Deklaracja Poznańska 2008,* www.kongresarchitektury.pl/?m=51&d=2&ak=14, 10.2010.

[4] *European Handbook for Participation,* PARTECIPANDO – Thematic Network of the URBACT Programme, www.urbact.eu/fileadmin/subsites/participando/pdf/European_Handbook_for Participation.pdf, 10.2007.

[5] *Europejski proces Localnej Agendy 21. Materiały szkoleniowe ICLEI.* „Lokalne strategie zrównoważonego rozwoju", post-conference materials. Warszawa 2000.

[6] Gumkowska M., Szołajska J., Herbst J., Buttler D., Mozga-Górecka M., Batko-Tołuć K., Kuraszko I., Iłowiecka-Tańska I., *Indeks Społeczeństwa Obywatelskiego w Polsce 2007*, Raport Stowarzyszenia Klon/Jawor, Warsaw 2008, pp. 68–69 www.portal.engo.pl/.../INDEKS_SPOLECZENSTWA_OBYWATELSKIEGO_2007_LAST2.pdf, 04.2009.

[7] Markowski T., *Problematyka wdrażania polityki przestrzennej państwa*. Paper presented at the conference "Spatial Development Plan for Poland and the Visions and Perspectives of Spatial Development in Europe" organized jointly by the Commission for Spatial Development of Poland PAN and the Ministry of Regional Development on September 25–26, 2008 in Jachranka near Serock, p. 2, http://www.mrr.gov.pl/Rozwoj%20przestrzenny/Strony/Konferencjaw-JachranceKPZK.aspx, 30.06.2009.

[8] Piątek Z., *Przyrodnicze i społeczno-historyczne warunki zrównoważenia ładu ludzkiego świata*, „Problemy Ekorozwoju", 2007, Vol. 2, No. 2, pp. 5–18.

[9] *Raport Tygodniowy,* Nielsen Audience Measurement, http://www.agbnielsen.pl/2010-10-03,1510.html, 10.2010.

[10] Ridley M., *O pochodzeniu cnoty*, Rebis, Poznań 2000.

[11] Sadowski Z., *Przedmowa do wydania polskiego*, [in:] Meadows D.H., Meadows D.L., Randers J., *Przekraczanie granic*, Warszawa 1995.

[12] Senet R. *The Uses of Disorder: Personal Identity and City Life*, Alfred A. Knopf, New York 1970.

[13] Tyburski W., *O niektórych aksjologicznych przesłankach zrównoważonego rozwoju*, [in:] Pawłowski A., *Filozoficzne, społeczne i ekonomiczne uwarunkowania zrównoważonego rozwoju*, Lublin University of Technology, Lublin 2004.

[14] Wiszniowski J., *Krajobraz jako dobro wspólne*, paper presented at the international conference „Landscapes of Europe", Wrocław 2009.

[15] Wiszniowski J., *Wpływ partycypacji społecznej na proces projektowania architektonicznego*, doctoral dissertation, Faculty of Architecture, Wrocław University of Technology, Wrocław 2003, p. 118.

Zrównoważone kształtowanie przestrzeni

Proces kształtowania przestrzeni odbywa się w wielowymiarowej sferze dynamicznych współzależności. Kształtowanie środowiska odwzorowuje wspólne dla lokalnej społeczności wzorce kulturowe, zachowania przestrzenne, struktury społeczne, styl życia i kondycję ekonomiczną. Architektura jest tych wartości zapisem w przestrzeni.

Trudność polega na tym, że wraz z coraz szybszym postępem cywilizacyjnym pogłębia się kryzys kulturowy i społeczny, co odbija się w otaczającym nas krajobrazie. Decyzje projektowe – nawet te w mikroskali, podejmowane pod wpływem doraźnych, partykularnych, jednostkowych interesów – skutkują negatywnymi konsekwencjami na długie lata. Czy dezintegracja okaże się pozytywna? Czy na gruzach dotychczasowych porządków kulturowych, społecznych i gospodarczych powstaną nowe porządki?

Zrównoważone projektowanie zakłada poprawę jakości zarówno życia obecnego, jak i przyszłych pokoleń – a to niemożliwe jest bez wypracowania wzajemnego porozumienia opartego na wspólnie akceptowanych wzorcach uznanych w danej społeczności. Dlatego tak ważne jest pozyskanie akceptacji, zaangażowania i współodpowiedzialności za kształtowanie przestrzeni zamieszkania przez lokalne społeczności. Znalezienie wspólnego języka staje się zatem palącą koniecznością dla wszystkich użytkowników tej przestrzeni.

Key words: community participation, spatial order, common good

Słowa kluczowe: partycypacja społeczna, ład przestrzenny, dobro wspólne

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Małgorzata Włodarczyk*

Culture or tact in architecture?

Poland lies on the outskirts of the West and on the outskirts of the East – at the meeting point of many cultures. This location was the foundation of the phenomenon of many Polish cities combining in architecture the traditions of (...) *nations, denominations and cultures*[1].

One could consider the question: *Culture*[2] *or Tact*[3] *in Architecture?* to be groundless. However, the meaning of these two terms – *culture* and *tact* – should be distinguished. Architecture comprises both of them. *Culture* – as a broadly explained semantic expression – is embedded in the history of philosophy and aesthetics. *Tact* is rather *parvenu* in this comparison but it provides a less restrained, less historical and philosophical, approach to *culture*. Culture is our common good connected with historical heritage and architecture, as one of the most permanent arts, is its special expression.

In 2009, on the initiative of the Minister of Culture and National Heritage Mr. Bogdan Zdrojewski, the Congress of Polish Culture was held in Cracow. A document which presents in its more detailed part an approach to immovable historic monuments but understood in their broader sense as cultural heritage was developed for the meeting[4]. Numerous questions were also asked; for instance: *"Is there no alternative to Polish 'today' than: epigonic historicistic thinking of heritage or another 'hint of modernism* (...)[5]. In the final notes, it was stressed e.g. that so far the experiences after 1989 have demonstrated an urgent need to change approach and treat the cultural legacy not as a burden but as an opportunity as well as a need to look at culture as an element of economy not as an unproductive thing[6], especially in the context where the current legal system does not include all elements allowing for adapting objects of architecture to changing conditions. There is no "social debate" on the role of historic monuments and the latest cultural assets in valuation of that heritage[7]. This is the origin of the need to approach architecture also from the position of "tact" and not only from the position of "culture".

Architecture is closely connected with the art of knowledge. For knowledge to be possible what is needed, as Roman Ingarden proved, is discovery of cognitive values[8]. In this case it could be architecture, both historical and modern, in culture. We learn architecture through its

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[1] Kysiak M., *Miasto kultur, religii narodów – wielki bazar architektury,* conference materials from the Congress of Polish Architects: „Architektura miasta w dialogu kultur, narodów, religii", Białystok, May 20–22, 2005, passim. The deliberations regard Poland but they include issues regarding activities between cultures. Both the "meetings" and "knowledge" which provides a broader context for communication and differentiation: what subjectively is culture and what is tact [6].

[2] *Culture* has here two meanings. On the one hand, it is spiritual and material legacy and on the other hand, it is an expression of high development or skill, education, knowledge.

[3] *Tact* (Lat. taktus=touch) should be understood here especially as maintenance of moderation and principles of decency in architecture of "yesterday, today and future, some gentleness.

[4] Publication edited by Jacek Purchla, *Raport o systemie ochrony dziedzictwa kulturowego w Polsce po roku 1989*, National Culture Center, Warszawa, 2009 [7].

[5] Op. cit., p. 10.

[6] It is evident that architecture is important e.g. in tourism, which in the theory of culture is called cultural tourism. The term "cultural-tourism" which appeared in the theory of culture is not connected only with historic sites but also with modern ones as well with those which are connected with "addition and subtraction", which is closely connected with culture or tact/culture and tact. Cognition can be in this case multicultural.

[7] This also regards modern designs (20th and 21st centuries) which "consume" the existing environment: both cultural and natural.

[8] Ingarden R., *Studia z teorii poznania*, PWN, Warsaw 1995, passim. He also writes this about values: (...) *a value is never something that exists for itself, but it is always the value of something. Regardless of their kind* [usefulness, moral, artworks – abbreviated by MW]. (...) *There is no value which whatsoever which exists which would exist without that something of which it is a value*, [in:] *Przeżycie – dzieło – wartość*, Kraków 1966, pp. 92–93; [after:] W. Juszczak, *Fragmenty,* Zamek Królewski w Warszawie 1995, p. 65 [4].

Fig. 1. Cinema "Kijów" in Cracow, 2004

impact and message – communication of ideas, functional or sentimental and historical message. This knowledge allows for placing a given object or architectural and urban complex in culture of a given community[9]. The character of this knowledge is "open": it is in fact not limited by any definition. Consequently, depending on context we can perceive architectural activities as connected with "culture" or we will consider them "tact". A lot of theories[10] have been developed for the events which cannot be defined as knowledge and only as listing[11]. They regard e.g. styles and rules of analysis and perception of events and buildings as well as in the scope of continuity in architecture and continuity connected with culture or tact. This enables us to look at architecture in a broader historical context also at present in the times of pop-culture[12]. In this context it becomes evident that it is possible nowadays to look for differentiation of meanings. Mass culture, however, should require *tact* from what is historical and *culture* in creating for the future, depending on adequacy in capturing quality of a given architectural structure and with subjective assessment of modification possibilities. Of course, as the precursor of pop-culture Andy Warhol put it, "everybody will be world-famous for fifteen minutes" but it is the activities taken now that, despite their subjectivity, should be cognitive and not only informative or presentative. They should also serve cultural communication, especially in respect of such permanent artwork as architecture.

Due to its concrete character and relative permanence, architecture is a firm "physical foundation" of other arts such as painting, sculpture, mosaic and as such it ranks high in cultural heritage. This harmonization is evident in both historic buildings and complexes and in some modern buildings – but it is also less and less frequent mainly for economical reasons. This is where culture and tact in continuity is missing: addition or subtraction in a new space development as well as creative space. Due to its special time spread architecture is vulnerable to change and transformation but new activities do not always demonstrate creative properties[13]. This results from the changing weight of semiotic and ontological values, which translates into experience and perception of activities perceived as *cultural* in the case of meaning resulting from education or *tactful* in the case of experience.

In perception of activities connected with architecture, what is important is architectural education which is an indicator of culture of a given society. In Scandinavian

[9] It should not be forgotten that culture and tact will be understood and differentiated in a different way by recipients from one social culture and those from other cultures because what will be needed then is understanding between cultures – cultural communication based on aesthetics.

[10] A. D'Alleva claims, however, that the borderline between theory and methodology is fluid. Com.: Anne D'Alleva, *Metody i teorie historii sztuki,* Universitas, Kraków 2005, passim [1].

[11] Listing also regards judgments and aesthetic convictions which exist in a given culture, in this case in Western culture. When deliberating the need to list and place, U. Eco notes that (...) *it is difficult to say how a given image can present things and still suggest some 'and so on* (...). *Infinity in aesthetics is* a subjective *feeling of something that surpasses us* (...) *it is a feeling that comes from a finite and perfect wholeness of admired thing* (...). *This presentation modality will be called a list, index or a catalog."*, [in:] *Szaleństwo katalogowania,* Rebis, Poznań 2009, pp. 9–17, passim [3].

[12] In the opinion of W. Burszta pop-culture of the 21st century is the domain of simultaneity. Com.: Wojciech J. Burszta, *Świat jako więzienie kultury*, PIW, Warszawa 2008, passim [2].

[13] W. Tatarkiewicz indicates a contemporary definition of creation where the notion of novelty is general as *Every creation implies novelty but not every novelty implies creativity. Furthermore, he claims that* (...) *creating a new work can have different* results – *theoretical and practical.* W. Tatarkiewicz, *Dzieje sześciu pojęć*, PWN, Warszawa 2005, pp. 309–310 [8].

Fig. 2. Cinema "Kijów" in Cracow, 2010

countries, e.g. in Finland[14], great emphasis is placed on this kind of social education, just like on cultural education in general. As Jacek Woźniakowski put it: there are countries where children are exposed to culture which is a "living value of tradition and necessary progress"[15]. And since architecture is the common root of all arts, its significance is synthesizing, both for the recipients and authors of architectural works in which and with which other arts harmonize, constituting a culture-forming element. However, in order to understand and experience architecture the "eye and mind" should be developed as well as the whole "apparatus" receiving graphic stimuli to which people with their psycho-physicality are exposed[16]. This is exactly the purpose which architectural education serves because the very term *culture*, without architectural education, easily escapes purely theoretical definition, and more intuitive, closer to *tact*, definitions seem more applicable. *Culture* subjects itself to certain rules, whereas *tact* uses some implied freedom of activities, complementing or excluding each other in art and architecture. However, they are both connected with creating and with Vitruvian "propriety"[17].

The term "sustainable development"[18], which is currently quite popular, is used in reference to more and more aspects of our life. What does it really mean? It is my experience that so called sustainable development has always been present in culture as an element of continuity and heritage and "sustainable design" is the answer to the necessary adaptation of design in architecture to the conditions resulting from more and more complex activities connected with the environmental protection in its broad

[14] M. Włodarczyk, *Architektura Finlandii a edukacja architektoniczna społeczeństwa,* Doctoral dissertation, Faculty of Architecture, Cracow University of Technology 2009. In chapter II – 8.4, p. 46 on the role of education he states that special attention needs to be paid to the fact that the significance of the influence of architecture on the general cultural and social sensitivity is universal [in Finland – note by MW], which results in both architectural culture in designing and tact for the context of the place and time. The author writes that *Finland decided that education through art, including architecture, is important element of policy of the state and by extension educational system. In the sixties,* [1960s – note by MW] *an educational campaign began* (...). *It was decided to educate conscious consumers*. He also quotes Dariusz Śmiechowski [in:] *Budowanie systemu edukacji architektonicznej w Polsce*: *Respect for our own environment testifies to the level of our national culture. The development of the sensitivity to the quality of surroundings at young age (understood as both built and natural environment) determines future behaviors connected with the use of space in our country. Investing in education and knowledge, including architectural education of children and youth* (...) *belongs to the most effective policy* [11].

[15] J. Woźniakowski, *Czy kultura jest do zbawienia koniecznie potrzebna?*, SIW Znak, Kraków 1988, p.176. The text regards also other aspects connected with culture which demonstrate that the European culture is "alive" and its properties include pluralism as well as a large scale of issued connected with different time and different places. The author notes that masterpieces are not created every day but they set the direction of efforts and possibilities, and only by creating culture they can be preserved. He stresses that (...) *in a sense man is the greatest masterpiece of culture*. In that context it is especially important to pay attention to the significance of education in architecture as developing man's experiences and thus himself [12].

[16] Ibidem, p. 197.

[17] In his treatise *The Ten Books on Architecture,* Vitruvius lists the component elements of architecture which include for instance beauty (eurythmy) – the proper arrangement of members and propriety (decor) – perfection in appearance composed of individual members which are considered good. Currently that approach could be denote new meanings and contemporary connotations with good continuity or sustainable development in architecture design [10].

[18] *Sustainability* (e.g. renewability, durability, balance). Often used without translation in the field literature, including architecture. Apart from infrastructural and technical activities in the scope of designing buildings, this term can also regard aesthetic and cultural aspects. This means that in architectural activities there may appear a need to look at prospective behavior of future recipients in respect of the connection between cultural and natural environments.

Fig. 3. House at Szczepańska Street 5, Cracow – before remodeling; former Restaurant "Pod Trzema Rybkami"

sense, including urban and natural landscape. The context of the place and time as indicators of culture in architecture is here a "supplementary" element. At present, in a sense, the word *culture* is replaced with the term *sustainable development*. A similar thing can be observed also in activities connected with architectural heritage where for a long time now *conservation* more and more often has been replaced with a broader term *revitalization*.

Let us focus on some examples. Is covering a building with advertising banners cultural? It is not. The person who was commissioned to design a building did not design a holder for banners. The plague of advertising banners destroys not only historic buildings but modern ones too: without any culture and without any tact. Unfortunately, this also regards objects of so called high culture such as museums, theaters or cinemas (Figs. 1–2). People who take such decisions evidently violate copyright unless the author has given a permission but I have never noticed in my career that efforts at obtaining such permits are made. The building and conservation authorities say they have no legal capacity to do anything about that. It is not exactly true because "anything that is not prohibited by law is legal", so these institutions are allowed to inform potential law breakers about applicable

Fig. 4. House at Szczepańska Street 5, Cracow – after remodeling; at present "Hotel Stary"

regulations and consequences of their violation. Similar problems regard thermal modernization of buildings. Where is then culture in architecture? It is rather rare (Figs. 3–4). So called "right continuity" principle is vanishing[19]. It is not supported by "sustainable development". However, *tact* could be useful in this situation but this seems to be rare as well.

The deliberations presented above provoke reflection on the problem in general. However, maybe the question asked at the beginning was asked in the wrong way. Maybe not *culture or tact* but *culture and tact*. This could be a logical conclusion. Without harmonization of those apparently synonymous terms and sensitivity in approach to what is culture and what is tact in architecture, there will never be any culture or any tact. The same way a cultured man should be tactful and a tactful man should be cultured (although it is not always so). One can be cultured in general that is "educated" but at the same time with no tact at all. And the other way around – one can be extremely tactful that is "considerate" and know nothing about culture and in this sense not be cultured. I think that it is similar with architecture in which we are dealing with both culture and tact and we keep searching for the answer to the question: "culture or tact". Everybody will look for the answer in their own way. One thing, however, seems to be certain – right continuity and reflection over the past, presence and future encompass both meanings of seemingly the same notion. Paraphrasing a philosophical thought: we satisfy the soul not when we know much about culture, but when we understand and feel[20]. In culture, like in nature, development takes place gradually and slowly and (...) *intellect enjoys, in a sense, sensual pleasures although coming not directly from senses, intellect enjoys aesthetic pleasures*[21]. Ultimately then it is *culture and tact* in architecture, and not *culture or tact*.

[19] J. Żórawski, *O budowie formy architektonicznej,* Arkady 1973, passim [13]. In his book J. Żórawski notes the psychological aspect of experiencing architecture. He stresses the juxtaposition of subjective and objective experience in the theory of architecture and adds that development evolves towards subjectivity. So the more in architecture, "good continuity", which is an element of culture in designing and activities regarding architecture, is important to experience it. He continues similar deliberations and writes that *It will be a mistake if we do not find the input form in the derivative form but we will see other formal values*. (...) *architecture operates only through adding or subtracting parts*. (...) *architecture is exclusively about constant and permanent continuity of existing systems*. (...) *Most probably we will achieve that by experiences and not by reasonable inquiries*, [in:] *Wybór pism estetycznych*, Universitas, Kraków 2008, pp. 148–152 [14].

[20] Ignatius of Loyola: *What fills and satisfies the soul consists, not in knowing much, but in our understanding the realities profoundly and in savoring them interiorly*, [in:] W.E. Lynch SJ, *The integrating mind*, Sheed and Ward 1962, p. 82; [after:] J. Woźniakowski, op. cit., p. 292.

[21] I. Kant, *Antropologia w ujęciu pragmatycznym,* Warsaw 2005, pp.175–176.

References

[1] Burszta W.J., *Świat jako więzienie kultury. Pomyślenia*, PIW, Warszawa 2008.

[2] D'Alleva A., *Metody i teorie historii sztuki,* Universitas, Kraków 2005.

[3] Eco U., *Szaleństwo katalogowania,* Rebis, Poznań, 2009.

[4] Ingarden R., *Studia z teorii poznania*, PWN, Warszawa, 1995.

[5] Juszczak W., *Fragmenty,* Zamek Królewski w Warszawie, 1995.

[6] Kysiak M., *Miasto kultur, religii narodów – wielki bazar architektury,* conference materials from the Congress of Polish Architects: „Architektura miasta w dialogu kultur, narodów, religii", Białystok, May 20–22, 2005.

[7] Purchla J. (ed.), *Raport o systemie ochrony dziedzictwa kulturowego w Polsce po roku 1989*, National Culture Center, Warszawa, 2009.

[8] Tatarkiewicz W., *Dzieje sześciu pojęć*, PWN, Warszawa, 2005, pp. 309–310.

[9] Wilkoszewska K. (ed.), *Czas przestrzeni.* Anna Wolińska, *Doświadczenie nieskończoności – rozległość czy skupienie?*, Universitas, Kraków 2008.

[10] Vitruvius, *O architekturze ksiąg dziesięć*, Prószyński i S-ka, Warszawa 1999.

[11] Włodarczyk M., *Architektura Finlandii a edukacja architektoniczna społeczeństwa,* Doctoral dissertation, Faculty of Architecture, Cracow University of Technology, 2009.

[12] Woźniakowski J., *Czy kultura jest do zbawienia koniecznie potrzebna?*, SIW Znak, Kraków 1988.

[13] Żórawski J., *O budowie formy architektonicznej,* Arkady, 1973.

[14] Żórawski J.*, Wybór pism estetycznych*, Universitas, Kraków 2008.

Kultura czy takt w architekturze

Wydawać by się mogło, że postawione pytanie: kultura czy takt w architekturze jest bezzasadne. Niemniej jednak należy rozróżnić wyrazy: kultura i takt. Jedno i drugie w architekturze występuje. Kultura jako szerzej pojmowane semantycznie wyrażenie jest umocowane w historii filozofii. Takt jest bardziej „parweniuszem", ale jednocześnie pozwala na swobodniejsze podejście do wyrazu „kultura". Poruszając się wśród przykładów: Czy kulturalnym jest obwieszanie budynków reklamami? Nie jest. Ktoś kto projektował na czyjeś zlecenie, nie projektował „wieszaka dla reklam". Osoby decydujące o takim działaniu naruszają prawo autorskie. Chyba, że autor wyraził zgodę, ale z moje dotychczasowej praktyki nie wynika, aby takie starania o zgodę były czynione. Władze architektoniczne i konserwatorskie zasłaniają się niemożnością działania. Nie jest prawdziwe, bo w świetle obowiązującego prawa to, co nie jest zabronione, jest dozwolone. I nic nie stoi na przeszkodzie informowaniu potencjalnych entuzjastów naruszania tego prawa o wynikających z tego konsekwencjach. Podobnie jest z występującą obecnie powszechnie tzw. termoizolacją. Gdzie jest zatem kultura w architekturze? Jest niestety wyjątkiem. Zanikła tzw. dobra kontynuacja. Nie wspomaga jej też obecnie modny „zrównoważony rozwój". Mógł by być tu pomocny „takt", ale jego też najczęściej nie ma. W końcowej refleksji: jednak kultura i takt.

Key words: culture, tact, architecture

Słowa kluczowe: kultura, takt, architektura

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The culture of architectural design – the ideological basis of modern architecture

It is common belief nowadays that the development of contemporary architecture was smooth and it originated naturally from the continuity of the development of civilization of societies. That is why industrialization of building which intensified especially after the Second World War and its architectural consequences are erroneously believed to be obvious. However, this would not have been possible without such favorable circumstances as deviations from diligence, designing talent and workmanship in favor of *semi*-courage and grandeur.

The creative capabilities of the pioneers of international modernism reached their pinnacle at the moment when new materials and engineering solutions enabled the development of totally new architecture. The destructions in the south of France, degradation of industrial regions in Germany after the First World War and especially dramatically growing residential needs of the people required building to become a mass industry. It was a problem which nobody could effectively solve at that time.

Modernists grew up when the decor of a typical burgher's house included heavy decorated furniture, plush upholstery and ubiquitous knick-knacks. It can be said that that kind of aesthetics achieved its highest level of development. However, its another form, instead of being an antidote against it, became the extreme opposite of that exaggeration. The authors of modern architecture claimed that it should be universal in respect of aesthetics and functionality because the only right way of building indeed can exist. They excluded all exceptions: *Oslo, Moscow, Berlin, Paris, Algiers, Port Said, Rio de Janeiro or Buenos Aires; it doesn't matter, the solution is always the same as it satisfies the same needs* (Le Corbusier) [1].

The most famous ideological dispute in modern architecture took place still during the development of Britz residential estate near Berlin (1925–1927). Howard's city-garden was divided into two parts "traditional" and "modern". This, however, did not mean at all that the advocates of international modernism came out of the conflict victorious. On the contrary, an assumption bordering on certainty can be made that only huge destruction suffered during the Second World War paved the road for a new, not necessarily better, perception of developed space and different methods of design. What was noticed in ugly architectural experiments by L. Hilberseimer, Ch.-E. Jeanneret (Le Corbusier), A. Loss, M. van der Rohe and others was primarily utilitarian necessity and not beauty and that is why they were universally ostracized even before they died.

The difference between residential needs and conditions before and a little after the Second World War regarded the damaged and lost resources. They were, however, so severe and extensive that they resulted in a dramatic change in social awareness and application of even radical solutions. That in turn resulted in a transformation of architectural thought, basing it on universalism and aesthetic purism as well as special material – concrete. It became possible then to carry out undertakings which earlier had been considered totally impossible. They were often carried out by untrained persons and amateurs[1].

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[1] From among the representatives of international modernism listed here only L. Hilberseimer was profoundly educated in the scope of architecture; he completed five-year-long studies at University of Technology in Karlsruhe, whereas Le Corbusier at first studied engraving and chiseling at the art school in La Chaux-de-Fonds (1900–1904). He took his first architecture study trip when he was twenty (Austria-Hungary, Italy). M. van der Rohe took his training in a construction and decoration company (1899–1904) and at the age of eighteen he started his internship in an architecture office. At the age of twenty, A. Loos began three-year-long studies in architecture at Dresden Technical University (1890–1893).

This was the origin of ideas which enabled the natural process of evolution in architecture and urban planning which lasted for centuries to stop.

The aesthetics of concrete extremely quickly became a showcase of the soulless movement in architecture called modernism[2]. It seems that it was supposed to terrify and confuse. Le Corbusier was one of those who especially adamantly glorified his destructive ideas as courage and unrestricted imagination: *Le Corbusier was to architecture what Pol Pot was to social reforms. He felt fulfilled in destruction* [1]. The comments of the representatives of international modern movement were ominous for the post-war development of cities in Europe and around the world. That is why it was difficult to be proud of it.

The aesthetic coherence of works of architecture was based primarily on the apotheosis of functionalism, and the design process as well as its culture was developed into an intellectual revolutionism. There was no escape from the dictates of the representatives of modern architecture: *Enthusiasm is the only way, the source of energy in human machine* (Le Corbusier). It can be said that this is when the first symptoms appeared of distortion of a fluid state in architecture – total philosophy, workshop minimalism, aesthetics of multi-motifs connected even with turpism. However, the canon of "out of the box" architecture which remains in total opposition to the values of civilization, humanity and natural environment, proved extremely catchy. This was happening despite many negative experiences connected with the mono-cultural designs of multi-family developments from the 1930s. Paradoxically, such slogans as *ornament and crime* (A. Loos), *less means more* and *God is in the details* (M. van der Rohe) instead of provoking protest were glorified as expression of creative genius of their authors.

Contrary to the declarations of the advocates of modern architecture, it was dehumanized. Human elements practically disappeared from drawings to prevent impeccably pure, almost platonic built environment. Everything had to be assigned a specific function to suppress any spontaneous interpersonal relations. Chandigarh in India (Le Corbusier) and Brasilia in Brazil (L. Costa, O. Niemeyer) testify to the grim visions and insufferable arrogance.

In communist countries, the contempt for humanity dramatically exceeded words. This was evident in treating history as tyranny which should be rejected, as if nobody knew or created anything valuable earlier. The flat concrete surfaces, bare and abstract shapes perfectly suited the system difficulties. High-rise blocks dominated the structure of urban space in the cities very quickly, aspiring to become everlasting progress, whereas not so long earlier – during the interwar period – such architects as H. Kilus, P. Schmitthenner and H. Rimpl could design innovatively and harmoniously the same time. They did not, however, try to obsessively impose their own will on the society but they did try to contribute to the civilization legacy of previous generations.

The totally unintentional and therefore the most sincere "homage" that has been paid to date to modernists and their continuators has been paid by mural artists. Uneducated and pauperized dwellers of big-city slums intuitively noticed what a lot of architecture designers tried not to see: namely that they often acted against ordinary people. It was most accurately described by the French philosopher J.-F. Revel: *it is a sign of the abiding strength of the totalitarian temptation that Le Corbusier* [and the like] *is still revered in architectural schools and elsewhere* [1].

The problem with creative activities of the architect is that they often represent ambiguous aesthetic value and moral aspect. Many historical figures can be undoubtedly considered the most prominent figures in specific historical periods. However, the thing is about their influence on the course of events and not merits. A similar attitude can be noticed among architects today too. As if the essence was not solving inherited problems but considering, with few exceptions, the past an error. That is why many modern projects and designs show that architecture can be both enchanting, sophisticated and soulless. This is best demonstrated by the ideas promoted by the advocates of the *New Bauhaus* school in Chicago, practical experiences connected with Marseille *L'Unité D'Habitation* as well as arcological visions of human habitat (Soleri).

However, it was only in post-modern societies that it was possible to improve the culture of design based on perfection, talent and reliable knowledge. It seems to have great significance in the situation of constant attempt at shortening the time needed to execute investments, primarily in respect of applying optimal design solutions, constant pressure of economic factors and low awareness of investors.

Today it is the developers who are more and more often the actual city architects. Consequently, buildings must be constructed quickly and inexpensively. Combining those two features can be dangerous [4].

Such a defective interaction can cause a decrease in motivation of a designer of architecture. This is not far from banality and repetitiveness of solutions designed for anonymous and "standard" users even if the solutions reflect the architect's anthropocentric and holistic point of view. That can cause serious consequences which can be demonstrated by numerous examples of architecture with completely dehumanized graphic message, which at the same time is in compliance with the latest stylistic trends – minimalism or more catchy conceptual formalism[3].

However, a lot indicates that the present development of architecture again began to smoothly result from the natural cycles of the development of societies. Fortunately, again it began to assume elements from other realms and more importantly it became exceptionally diverse. It

[2] The term "modern" in fact proved euphemistic as at least one of the main advocates of vernacular architecture in Germany before the First World War – P. Schmitthenner in Staaken Residential Estate (1914–1917) limited the number of apartment types to as few as five and intended to obtain the same living conditions for everybody.

[3] Formal conceptualism as an antithesis of minimalism was based on graphic constellations and multiplication of ornaments. These two styles in architecture were advocated by Swiss designers J. Herzog and P. de Meuron who were considered world class at the end of the 20th century.

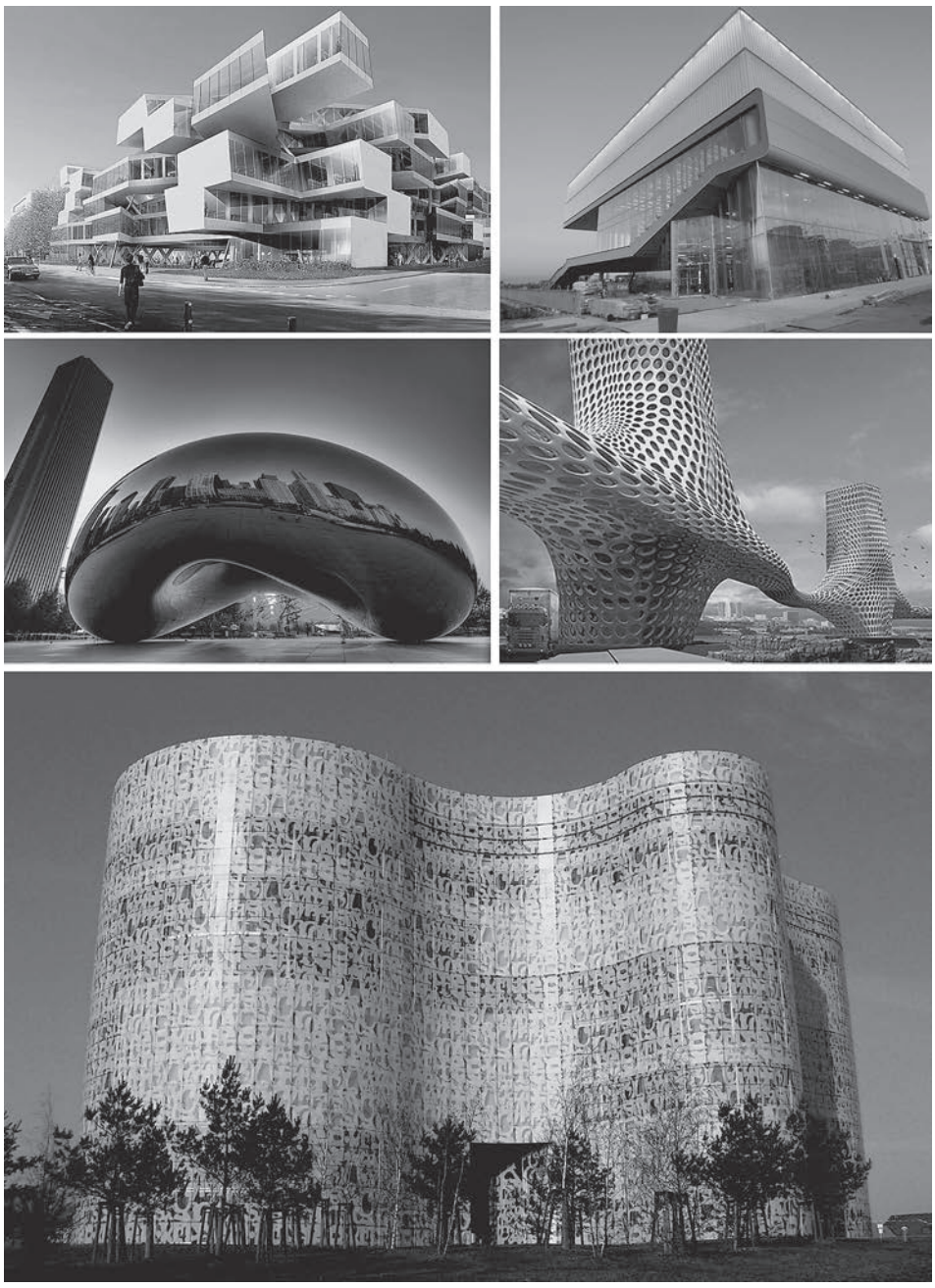

Fig. 1. Actelion Business Center in Allschwill (J. Herzog, P. de Meuron, Switzerland) – top left; source: www.elpais.com (02/02/2010). Renfo Institute of Contemporary Art in Boston (Diller+Scofidio Architect, 2006) – top right; source: www.archidialog.com. Cloud Gate in Chicago (A. Kapoor) – left; source: www.flickr.com. Residential buildings "The three graces" in Dubai (NOX) – right; source: www.designboom.com. University Library in Cottbus – bottom. Source: www.pl wikipedia org

began more evidently to succumb to fashion, naturally more easily during economic prosperity than during crises. At the same time creative activities of architects, unlike in the 19th century (J. Ruskin), demonstrate that it can be both pure art (*I think that artistic expression is the juice which drives our collective soul*– F.O. Gehry) [2, p. 60], 'engineering' (*each new design is a series of construction problems that need to be solved* – P. Andreu) [2, p. 60], as well as virtual (*building was designed as a dynamic system with constant computer interaction between users, environment and the building* – L. Spuybroek) [2, p. 134]. This means that it does not have to serve exclusively utility purposes. Furthermore, since constructivism works of art have been created at the point where engineering meets art, and their scale as well as technology is not worse than the scale and technology of architecture structures, for instance famous Cloud Gate in Chicago (A. Kapoor).

Nowadays a great majority of architects present their own style, apply different materials and draw inspiration from other regional factors. Buildings are erected from concrete (T. Ando) or even paper (S. Ban) in figurative (B. Coates), futuristic (Z. Hadid), minimalistic (W. Arets) or sculptural style (F. Gehry). Apart from solving tasks given by the clients, architects try to impart to their works their own identity. The generation of neo-modernists only complements other international designers (T. Ando, T. Ito).

On the basis of that diversity the following conclusion can be naturally drawn: one cannot talk today about an international style; there is no one way to look at presence. (…) *A lot of buildings testify to a great acceleration of changes which take place in architecture. Today's architecture is driven by computers or the will to improve ideas that go back to modernism...* [2, pp. 7–8].

Designing architecture has always been an individual process of creation where the rational assumptions and skills of the architect should play the key role. These exact qualities determine the significance of the design culture among so many manifestations of activities of the architect.

Architecture should be given back to people. It is connected with a specific place but it also leaves its imprint in the psyche. We like buildings that are noble, sensual, inspiring: those which we keep in our memory (…)*, as well as cheap architecture, custom made and precise* [4].

References

[1] Dalrymple T., *The Architect as Totalitarian. Le Corbusier's baleful influence,* City Journal Autumn, 2009, Vol. 4., www.city-journal.org.
[2] Jodidio P., *Architektura dzisiaj*, Taschen/TMC Art Gmbh, Köln 2003.
[3] Reiter C., *Minimal style*, Taschen Gmbh, Köln 2006.
[4] Zabalbeascoa A., *Entrevista: Planeta Urban – Entrevista Jacques Herzog. No nos interesan las burbujas. Queremos seguir dudando*, El Pais, www.elpais.com (02/02/2010).

O kulturze projektowania architektonicznego. Podstawy ideowe współczesnej architektury

Zagadnienie kultury projektowania w architekturze współczesnej w dużej mierze odnosi się do nośnych niegdyś prądów modernizmu. Na początku XX stulecia doszło do gwałtownego przyspieszenia rozwoju ekonomicznego wielu państw europejskich. Pociągnęło to za sobą zmiany na polu kulturowym, a w dalszej kolejności w warsztacie architektów. Aby móc odpowiedzieć na nurtujące nas dziś pytania o kierunki rozwoju architektury współczesnej należy poddać analizie przesłanki, które legły u podstaw powstania i ugruntowania się międzynarodowego stylu modernistycznego.

Key words: culture, modern architecture

Słowa kluczowe: kultura, współczesna architektura

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Garden architecture in contemporary Japanese culture

In contemporary Japanese culture, gardens are a form of art which combines nature and human creation. The Japanese garden presents nature formed with the human hand. This way it is both an element of nature and architecture as well as art.

Contemporary art and architecture are dominated by functionalism and simplicity where excessive decoration and ornamentation are avoided. Similar trends appear in gardens globally. A lot of old rules are questioned and in many cases nature is rejected. Japanese designers also experiment by creating inventive compositions but the basic difference is that they still draw from their native tradition of garden design.

The oldest tradition assumes that the garden represents nature which for centuries has been considered holy in Japan. Such understanding of nature is connected with indigenous *Shinto* religion which provides that each natural phenomenon is interpreted as a manifestation of deities. Japanese *kami* deities dwell in places which display natural beauty such as mountains, trees, waterfalls, rocks. They were the places of contact for man where people could worship deities and pray to them for grace. These natural sacred surroundings, enclosure and pebbles became the origin of the garden.

In the 18th century, *Zen* Buddhism was brought to Japan from China and it exerted great impact on numerous aspects of Japanese culture such tea drinking ceremony, garden design, calligraphy, *suibokuga* painting, ceramics or theater. This unique culture developed under the influence of Zen and it deeply penetrated into the aesthetic perception of the Japanese who love simplicity, naturalness and subtlety. The Japanese now also live in connection with traditional culture which is highly significant to life and spirituality of these people.

Zen monks created contemplative *ishidateso* [1, p. 11] gardens which literary means "a priests who raises stones". These gardens were the answer to the simplicity and austerity which are the attributes of a Zen monk life. The austere atmosphere created by stone compositions seems proper for ascetic places where Zen is practiced. Through their simplicity and limited elements which could distract the viewers, the gardens provoked meditation and contemplation. They demonstrated a scarcity of means of expression and at the same time philosophical profundity. This simplicity was coupled with color moderation and the use of natural colors and materials. With the use of rocks and gravel as well as few slow-growth evergreen shrubs, Zen monks created dry landscape gardens, *karesansui*. By reducing nature to its most basic level, removing from it everything that could be removed and restoring it to its most fundamental dimension, they displayed its essence. These almost unchanging gardens seem to be frozen in time. Zen monks rejected passing phenomena and worthless appearances. Thus the gardens which they created present universe in its most condensed form. Rocks which do not change are such an imperishable element – at least in the scale of human life. Rocks in Japanese gardens play a very important role which is unheard of in the West. The Japanese believe that stones, like plants and animals, have spiritual life. Single rocks can be the main element of the Japanese garden and especially colors, texture and shape of each of them provide the whole landscape with specific qualities.

The influence of Zen is visible not only in the selection of materials but also in the composition of *karesansui* gardens. It is very important to compose free space with space occupied by rocks and shrubs. In traditional Japanese painting, an unoccupied space, which in the Western culture has negative connotations and is considered emptiness, constitutes the basic part of the composition and its artistic significance is great. It is an artist's task not to say everything and some room is left for the viewer's imagination to interpret the rest. The most important message should be suggested, delicately signaled and in no case should it be communicated directly. Emptiness expresses perfection, the absolute, true substance of all things and it is the essence of the teachings of Zen. Similarly, in *kare-*

* Wyższa Szkoła Zarządzaniem Środowiska w Tucholi.

Fig. 1. In this *karesansui* garden, the stones are replaced with clipped azaleas and camellia shrubs. There are three groups with three, five, and seven plants. The *shakkei* technique of a borrowed distant view is of Mt. Hiei

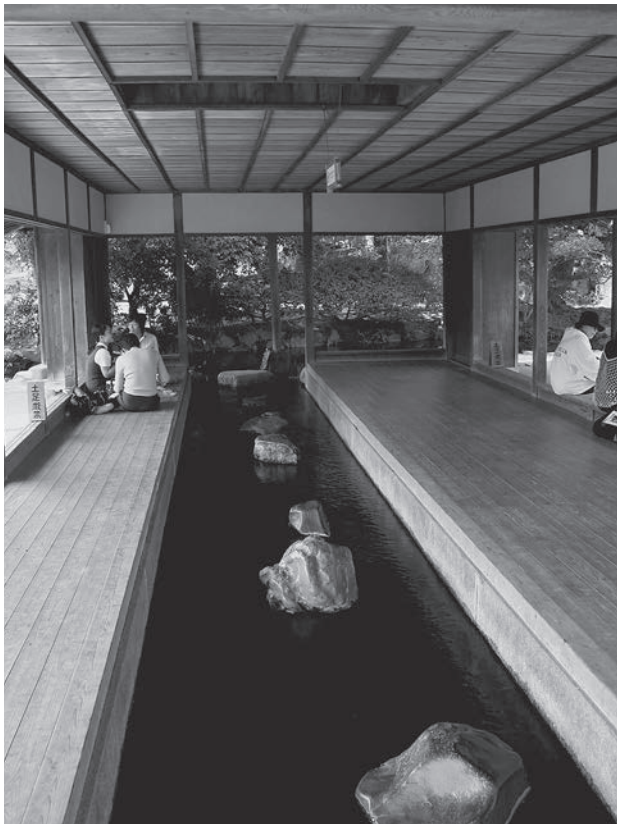

Fig. 2. In the traditional *karesansui* garden, water is represented in a symbolic way by gravel. In this garden, stones standing in the shallow water integrate the garden with the building

sansui gardens there are large spaces of light gravel and trees and rocks contrast with that light space which surrounds them. These gardens were not meant to be used for strolls; they were meant only to be looked at from the building as a landscape (Fig. 1).

Harmony achieved by asymmetry is another characteristic feature of the Japanese garden, originating from observation of nature. The Japanese aesthetics deliberately and consistently rejects symmetry, building harmony of the whole on asymmetric location of the rocks in the garden. Rocks and trees can be used individually but usually they are arranged asymmetrically in groups of 3, 5 or 7. The principles of breaking symmetry in order to achieve harmony with nature were applied not only in the arrangement of rocks but they also govern the relations between the groups and their relations to the pathway or the building. The natural harmony, as seen in nature, is also achieved by arranging different, often opposite, elements of form and color in the garden. Contrasting arrangement of shrubs, ferns, clumps of grass and moss brings out the beauty of the rocks and constitute an element combining the rocks with the surroundings.

The contemporary gardens, created under the influence of Zen, are also designed to express simplicity and nature in its purest form without plants or water. Like sculptures, *karesansui* gardens can be seen as abstract and three-dimensional monochromatic landscapes. With different modifications, what always applies is the principle of great moderation and simplicity in selecting elements and well as in their arrangement, resulting in very sophisticated garden designs. The rocks which are used very often in the contemporary Japanese gardens have new shapes and they are specially cut; sometimes they are replaced with irregular "blocks" made of glass imitating rocks; sometimes, combined with water, they create space integrating the interior of the house with its surroundings (Fig. 2).

Other well developed garden design techniques include beauty spots and compositions influencing the perception of the garden by the viewer. Such effects can be achieved by directing the viewers' eyes, revealing parts and not the whole view or by revealing the same view from different places. The partial blocking of the viewing field provides some room for imagination and enables the control of the view. The fragmentary and episodic nature

Fig. 3. The tree trunk and branches in the foreground catch a glimpse of the distant view. Space in the garden thus appears to be bigger than it really is. When garden borders are not visible, focusing on a part enables the viewer to imagine the whole

as well as the lack of unity in art is connected with deliberate rejection of symmetry as well as a predilection for naturalness. These qualities are expressed in gardens by focusing on a single element as well as in their simplicity and limiting the number of the elements of the garden to the necessary ones. This has its origin in Zen philosophy which is deeply rooted in Japan, based primarily on intuitive acquisition of knowledge and perception of the world as well as avoiding logic and minimizing the role of intellect in artistic creation. According to this philosophy universe is not constructed logically, and a fragment is as important as the whole, which is in line with a Buddhist saying "ichi soku issai soku ichi" meaning "the one is none other than the many, and the many is none other than the one" [4]. In a traditional Japanese home, the sliding *shōji* doors or straw *sudare* screens or blinds which are used as curtains carve out some outside space – garden or scenery – and compose a graphic view resembling a painting seen from inside of the house. The view of the garden is blocked with the use of groups of plants and bamboo fences. Under no circumstances should the garden space be directly revealed. Adequate vegetation can make the garden look bigger than it really is, which is especially convenient in small gardens. Planting trees by a pond with swooping branches which provide glimpses of the view behind them or a plum tree branch in the foreground behind which there is a whole landscape and the space is just suggested and make is look bigger. Similarly, the details are only delicately signaled instead and the viewers can let their imagination run free and image more (Fig. 3).

Tea ceremony is another element that shaped the Japanese patterns. The aesthetics developed on the basis of tea ceremony exerted great influence on garden art, architecture and interior decoration of tea pavilions, the art of flower arrangement, applied utensils, costumes and the behavior of the participants. Since there is a close connection between the symbolism of tea and Zen philosophy, the metaphor of emptiness plays an important role in tea ceremony. According to the esoteric Zen mysticism emptiness is the essence of things and that is why in tea ceremony what is not there it is more important than what is in it. The same criteria apply to the pavilion where what is important is empty space is limited by the roof and the walls and not the roof and the walls themselves.

The brewing and drinking tea has become a religious ritual still in China, however, in Japan it extended its dimension to include the totally secular domain in order to ultimately develop the aesthetic patterns which still are visible today in many aesthetic and spatial solutions as well as in applied materials. Tea ceremony fully developed in the 16th century when Sen no Rikyū was the tea master; he is considered precursor of formal rules of tea drinking and strict regulations for each activity, including the kind of tea bowls used and flower arrangement as well as the tea house interior decoration. The rules of tea ceremony developed by him have been applied with slight changes until today. The characteristic features of that style included primarily the following: moderation, rejection of splendor and ostentation as well as elimination of everything that can district attention and cause unrest of the spirit. Rikyū wanted to create surroundings that would demonstrate the frailty and the fleeting character of the surrounding world. He wanted to wake the world of soul by applying simplicity. The elements of his philosophy, especially those regarding the development of the "framework" for a broader context of the surroundings, still can be seen in the contemporary development of urban space.

The style of tea pavilions was reflected also in the architectural mainstream. Architecture is the expression of the typical Japanese way of perception of space as being continuous, flexible, horizontal and combining the elements of the world of nature and man. For the Japanese space, which is in the West perceived as emptiness limited only by walls and roof, is considered real beauty of the room and a valuable element of composition. The real

Fig. 4. In the traditional Japanese room there may be a *tokonoma* alcove with a flower arrangement and/or hanging scroll painting. In this room, the scroll is imaginatively replaced with an actual view, a cropped fragment of the garden

beauty can be shown in artistic work by simplicity and delicate suggestion of color, form or texture. The characteristic features of traditional homes include almost empty interior, simplicity, harmoniousness and beauty of few details. The mind and ingeniousness of the viewer should complement the image which is visible only for a short moment. The external emptiness is internally rich. Emptiness – which is erroneously identified with nothingness – is a treasure chest full of infinite possibilities. This idea is the "essence" of the Japanese home and garden. The most important thing is the space designed with basis elements – it is the "pure" function. Contemporary buildings and gardens are designed in Japan according to the above assumptions and their value is demonstrated not in their rich ornaments but in the sophisticated details made of traditional materials or in compliance with the traditional spatial form (Fig. 4).

The traditional Japanese home is integrated with its garden which, regardless of its size, is important, integral part of the home. In the Japanese home with simple structure, almost all walls, both external and internal, are sliding and they can be temporarily disassembled, which makes the home look totally integrated with nature. After sliding the walls to the sides the whole view of the garden appears; one of the garden's sides adjoins the building and the other ones are is enclosed by a wall constituting the frame of the design. As a result the home's interior and the garden, which is outside, are spatially connected with each other to provide integral whole. Looking outside from such a home's interior, the wooden poles of the light timber structure are the frame, which with the trees, stone lanterns, mossy rocks and the mountains glimmering in the distance, create a great picture that looks as if it was painted by an unparalleled artist.

The contemporary architectural solutions of this type that involve combining space used by the residents with garden are typical primarily of residential buildings or generally accessible public spaces. The problem is high-density housing and no private space. Nowadays, when the living spaces are very limited, apart from *shōji* doors which help to integrate the home with its garden, vegetation is introduced inside the home. The sense of presence of nature inside the home is achieved e.g. by a growing tree which changes during its growth. In the spring buds appear; in the summer leave provide a lot of shade and when the fall comes they turn red. The tree was planted in such a place so that it could be seen from the places which are used most often at home in a small rectangular area enclosed by the walls. Sliding the walls open provides the view and light and it makes the division between interior and exterior indistinct and provides a sense of freedom and open space.

One of the most effective techniques is *shakkei* – a technique of "borrowed scenery" where a fragment of a distant landscape is incorporated into the garden composition. Frequently, the garden design makes use of the natural surroundings e.g. a forest or hills which provide a sense of additional space and prospects. These solutions are also applied in contemporary designs such as Matsuo Taisha in Kyoto. The central element of the composition in the garden – large hill with clipped azaleas – reproduces the shape of Mt. Matsuo, behind the temple. At the same time the shape of the hill resembles a tortoise which in Japan is the symbol of a long life. Rock arrangements, located all over the garden, strongly contrast with nicely clipped *karikomi* shrubs on the hill. The repetition of the shape of the mountain and the use of *karikomi* as a backdrop for a meandering stream makes this garden unique and special (Fig. 5).

The contemporary Japanese designers create a new kind of scenery. In an inventive way, they design space by combining, in accordance with their taste, elements selected from nature. They face new issues connected with contemporary life and specific conditions of urban life. Even if in their designs they use new materials in a totally new way, they still draw inspiration most often from the

Fig. 5. The shape of Mt. Matsuo behind the shrine is „borrowed" into the garden by a reproduced hill with clipped karikomi shrubs. The banks of the meandering stream are covered with flat, bluish rocks and its shallow bottom is covered with small pebbles

rich Japanese repertoire of traditional techniques. As a result the gardens are still close to their roots.

Experimenting with new materials and a new way of their arrangement provides new perspectives in the design of Japanese gardens. One of them is the use of cut stones – a radical departure from the old tradition of application of stones which can only be found in nature; sharp edges and chisel marks on the stones reveal a different kind of beauty. Another, is the application in the garden of gravel of a different color and a plane raked to produce innovative patterns. The contemporary designers also found an application for glass, iron, stainless steel, tiles and even carbon fiber, stimulating imagination of the viewers so that they could create their own image of the garden.

Inhabitants of the city who suffer from stress connected with work and lack of space can easily lose their identity and strong connection with nature. In its ideal form, the contemporary Japanese garden should be a spiritual place designed in line with the sophisticated aesthetics which evokes and celebrates nature as space that includes nature helps to relieve stress and soothe the mind. In order to achieve this, various techniques are applied, including rock Zen gardens or focus on one element (e.g. a tree) and less restricted forms of arrangement of plants – still they all draw from thousands of years of tradition. This kind of expression, involving a combination of traditional and contemporary solutions, sets new directions in the design of Japanese gardens.

References

[1] Freman M., Rico Nosé M., Masuno S., *The Modern Japanese Garden,* Toppan Printing Company Limited, 2002.

[2] Kubiak Ho-Chi B., *Estetyka i sztuka japońska. Wybrane zagadnienia,* Universitas, Kraków 2009.

[3] Suzuki D., *Zen i kultura japońska*, Wydawnictwo Uniwersytetu Jagiellońskiego, 2009.

[4] Wołodźko M., *Ogrody w Kioto – studium historyczne*, rozprawa doktorska, materiały własne, niepublikowane, Wydział Architektury Politechniki Warszawskiej, 2009.

Architektura ogrodów w kulturze współczesnej Japonii

W kulturze współczesnej Japonii nie można pominąć ogrodów jako formy sztuki, w której natura i dzieło ludzkich rąk łączą się ze sobą. Artystyczna wartość „japońskich ogrodów" jest powszechnie uznawana na całym świecie i miała znaczący wpływ na rozwój współczesnych ogrodów na Zachodzie.

Sztuka tworzenia i idee japońskich ogrodów przekazywane są z pokolenia na pokolenie, chociaż przez pewien czas uważane były za mało nowoczesne i starano się je zastąpić wzorcami zachodniej kultury masowej. Pomimo to nadal kultywuje się tradycyjne umiejętności tworzenia ogrodów i traktowanie krajobrazu jako wnętrza użytkowego. Wielu czołowych projektantów coraz częściej eksperymentuje z zastosowanymi materiałami, formą i stylem projektowanych przez siebie ogrodów. Zmianie ulega wygląd współczesnej przestrzeni miejskiej. Pojawiają się rozwiązania wykorzystujące tradycyjne elementy kultury i sztuki, wkomponowane w nowoczesne, niekiedy wręcz futurystyczne rozwiązania architektoniczne.

Key words: Japan, garden architecture

Słowa kluczowe: Japonia, architektura ogrodów

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'High' architecture

A given object belongs to culture if it has existed longer than any function which it fulfilled at the moment of its creation

Z. Bauman [2, p. 249]

Architecture in culture has existed for ages and it is needless to propagate it in a special way because it has always been perceived as prominent among other arts. It has often been described in literature as well. Interesting literary texts can easily be confronted with descriptions of various buildings, sometimes also paintings, sculptures, monuments and this provides a unique possibility of perception of architecture as a field of art which is distant from constructional or functional issues. On the one hand the poetic opinion inspires us to enrich our knowledge as regards architecture, while on the other hand it can make us search for wise and good literature.

Literary descriptions of architectural structures are created by non-architects and are addressed to non-specialists. They describe impressions of a spectator as well as feelings and experiences caused by the direct contact with an architectural structure which is outstanding and significant. There are also architectural structures which are quite common and only their different perception through a unique personality allows us to see 'their hidden beauty'.

Out of the ancient *seven wonders of architecture*, only the Pyramid of Cheops survived until the present times. The rest was lost throughout the ages. We are informed about their size, beauty and existence mainly by literature, which in some fragments is now confirmed by archeology. Therefore, we put our trust in the ancient descriptions which extol their unique beauty. Callimachus of Cyrene is considered to be the greatest poet of the so called Alexandrian period and the author of the first history of literature – a productive writer indeed. In 220 BC he made one of the lists of *seven wonders of the world*, probably the oldest one. For the ancient Greeks, this was a peculiar guide which constituted an affirmation of the architecture that was significant and remarkable and which is particularly valuable for us today as most of it is now lost.

Zbigniew Herbert sensed the beauty emanating from architecture in a very profound way. In a peculiar manner he perceived Italy with the colours of the particular towns *…Assisi is pink, as long as this banal word can express the tone of reddish sandstone; Rome is fixed in your memory as terracotta against the green background* [3, pp. 66–67]. He analysed in detail the constructions of Gothic cathedrals, dealt with their architects by dispelling the myth that their builders were anonymous. He analysed historical materials about *…workers-bricklayers, stone-masons and architects and not about what happened in their souls when they were building the cathedral but what materials, tools and methods they used and also how much they earned* [3, p. 125]. He was especially interested in the cathedral in Orvieto, the town which is gold and brown with a façade in the painterly and sculptural convention. *The cathedral is standing (as long as this motionless verb is adequate to describe something that tears the space apart and makes you dizzy) on a large square and the surrounding several storey buildings fade away after a moment and you no longer see them. The first impression does not differ from the last one and there is a prevailing feeling that it is impossible to get accustomed to this architecture.* (…) *You can wander around the town for a long time but you never lose this feeling that the cathedral is behind you and its overwhelming presence supersedes all the other impressions* [3, pp. 63–67]. A literary work and an architectural image are similar visualizations. They both create a fictitious reality for the spectator and this reality in both of the spheres is contaminated with subjective impressions. The Z. Herbert's description is an affirmation of architecture in ideal conditions, the architecture which

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is abstracted from climatic weather changes, similarly to a perfect photograph whose author must have spent many hours waiting for proper light. However, for each type of architecture its perception or subjective feelings are of key importance. Therefore, one's own reflection on architecture which is *experienced* and seen is extremely significant. At this point, a certain comment seems necessary. The notion of *experienced* architecture is of utmost importance here. It is not enough merely to read about a building, its creator, see the plans, designs, perhaps a photograph in order to start writing about it. An image created in this way is a hoax. It may give an impression of truth, but it is only *half-truth*. Each object must be experienced. You must feel its atmosphere, climate, smell, see the people who are there, recognise the surroundings, its elements and structure. Architecture is more than a costume or a shell in which some interiors are closed. It is an integral entirety of the urban context which is one of the most significant reasons why it was created as well as the composition of masses, its form, function, light, inherent idea and first of all subjective perception of the work of art. Only after we have had a taste of such architecture, can we attempt to write about it, try to be objective or rely upon our own feelings and emotions. Zbigniew Herbert's poetic language is very adequate here, while the emotions depicted in the poem Architecture constitute the synthesis of truly individual perception.

Above a light arch –
eyebrow of stone

on the wall's
undisturbed front

in windows joyful and open
where faces instead of geraniums

where rectangles very compact
next to a dreaming perspective

where woken by an ornament
stream on a quiet field of planes

where movement with stillness, line with scream
uncertainty trembling, straight brightness

you are there
architecture
art made of fantasy and stone

you are there, beauty residing
above a light arch
like sighing

on the wall
pale with height

and in the window
tearful with a window pane

an exile of obvious shapes
I promulgate your motionless dance [4]

In the contemporary world, there are many opinions that due to the globalisation processes, towns are transformed from places which protect their inhabitants into the areas *…which are characterised by rules of terror and ubiquitous fear* [1, p. 115]. Remaining in the sphere of reflections upon dangers connected with the analysis of the modern urban tendencies, Zygmunt Bauman wrote: *The place called La Defense, a great square on the right bank of the River Seine which was designed and executed as a permanent monument to François Mitterrand's presidency – in which the greatness and dignity of the office was carefully separated from the personal weaknesses and faults of the person who held it – it contains all the features* (…) *of the category of public but inhospitable town space.* (…) *a visitor is struck by the fact how repulsive this place is: all the things around here gain the visitor's respect at the same time discouraging everybody from staying. The fantastically shaped buildings surrounding the big and empty square seem to be erected in order to be admired and not in order to be used. Completely glassed mirror like façade sheets seem to be windowless and not to have entrance doors which gives the impression that they turn their backs on the square on which they are standing. They are imperious and indifferent – imperious because indifferent – and both of these features complement and reinforce each other* [1, pp. 149–150]. It comes as no surprise that the perfect asceticism of the place and lack of the attributes of traditionally understood space made Z. Bauman comment as follows: *…it exists only to be traversed quickly and left behind* [1, p. 158].

Throughout the decades, assessment criteria of architecture do change and the permanent works which were once perceived as kitsch can grow infinitely valuable. Globally admired, they will last until their last days or until another reevaluation. Such changes, defined by Zygmunt Bauman as 'liquid modernity' [1, p. 158], are nothing unusual although when confronted with a radical change in valuation they can surprise.

In 1973 Jan Zakrzewski a postwar journalist, writer and translator wrote: *…many have a grudge against Catalans* (…) *for not destroying, at a moment of anarchist excitement, the structure created by Gaudi under the name 'Sagrada Familia'. It is hard to encounter something equally hideous. This is an example of employing secession for building a cormorant's nest, next hybridizing the whole thing with a coral reef, a dirty sponge after washing a car and pouring the whole thing with a mixture of clay and water. The Gaudi's structure is gigantic, its ghastly figure makes your hair stand on end, faith evaporates from even the most faithful ones. It just stands there and, surprisingly, the Catalans still do not lose their sense of humour…* [6, p. 242].

Already then J. Zakrzewski stated that crowds visit and after forty years it is even difficult to draw near towards the Gaudi's work. The church faces the destruction by 'trampling'. The church architecture has existed in culture for a long time and it is needless to promulgate it in a special way, similarly to hundreds of other places around the world. We can ask the following question: is it real admiration for a work of art, place, its creator that make people admire it? Perhaps it is just a part of a designated tourist track and the splendour of good holidays, and maybe they really think that *…Gaudi is a priest of architecture who*

Fig. 1. La Défense.
Photo by M.J. Żychowska

respects the laws given by God and turns our attention to His great work – nature. Turning streams, bird's nests, anthills, stalactites, mountains and plants into towers, vaults, domes, columns and pilasters. Gaudi would say that originality is nothing but a return to sources and that beauty is a light of truth [5, p. 187].

The definition of 'culture' itself was shaped in the second part of the 19th century as *...a shortened term describing the process of managing human thinking and behaviour* [2, p. 239] and according to the definition, it referred to learning and accumulating information. On the whole, we can say that this phenomenon is dependent upon external determinants within the framework of division into those who are managed and those who manage. The former ones, those who are managed are creators of art the immanent feature of which is freedom. It is *...the most developed part of culture – fights reconnaissance battles in order to discover the roads to follow and lay out new routes for* (…) *human culture*… [2, p. 243]. On the other hand, those who manage are the people who form standards and administer cultural processes. They create a normative order which evolves in time and in accordance with needs for searching or experimenting. However, all avant-garde actions always caused social fears and were treated with reserve.

Between these two antagonistic parts, we do not see symbiotic cooperation because their interests seem to be different as well. Nevertheless, culture, independently of its shape is a phenomenon which dominates our existence. Architecture as one of the most permanent elements of art is an object belonging to culture because it has existed longer than any other objet d'art.

References

[1] Bauman Z., *Płynna nowoczesność*, Kraków 2006.
[2] Bauman Z., *Szanse estetyki w zglobalizowanym świecie*, Kraków 2007.
[3] Herbert Z., *Barbarzyńca w ogrodzie*, Wrocław 1997.
[4] Herbert Z., *Struna światła*, 1956, http://www.poema.art.pl/site/itm_70513_/architektura.html
[5] Martin E., Carranza A., *Tajemnica Gaudiego*, Warszawa 2009.
[6] Zakrzewski J., *Iberyjskie wędrówki*, Warszawa 1973.

Architektura „wysoka"

Architektura w kulturze istniała od zawsze i jej specjalne propagowanie jest zbędne, bo zajmowała poczesne miejsce wśród innych sztuk. Często też była opisywana w literaturze. Ciekawie teksty można z łatwością zestawiać z opisami różnych budowli, czasami także obrazów, rzeźb, pomników, co tworzy unikatową możliwość percepcji architektury jako dziedziny sztuki odległej od zagadnień konstrukcyjnych czy funkcjonalnych. Z jednej strony poetycka opinia inspiruje do pogłębiania wiedzy z zakresu architektury, ale też skłaniać może do poszukiwań literatury mądrej i dobrej.

Key words: "high" architecture

Słowa kluczowe: architektura „wysoka"

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Civil engineering and building technic

Oksana Kinash*

Peculiarities of ventilating of the Lviv Opera Hall

Introduction

Lviv State Academic Opera and Ballet Theatre of Solomiya Krushelnitska is a peculiar building being of special importance for the architecture and culture of the city of Lviv. The building was designed by Zygmund Gorgolewski, an outstanding architect of his time, in 1897 [2], and was erected in 1900. The bulk of the Opera auditorium is 4374 m^2, the auditorium has room for 1000 spectators. The stage part of the theatre also has significant dimensions, being equipped with modern technologies with moving platforms.

The project of ventilation and heating systems of the theatre building was done by engineer Władysław Niemersz from Austrian designing firm "Johanes Haag" in 1897 in Vienna [6]. One of the projects of modernizing ventilation, central heating and temperature electrical regulation systems was developed in 1903 by Lviv engineering company "Michalski and Hupert" specializing in health recreation equipment [7]. Another project of reconstructing ventilation and central heating systems as well as their partial automatic control was developed in 1977 [8].

Analysis of design plan and specification of the ventilation system

The initial project provides for systems of direct flowing mechanical plenum-exhaust ventilation of the auditorium and the stage, recirculation mechanical plenum-exhaust ventilation of these main premises and the system of their thermostimulating (natural) ventilation.

For example, the system of mechanical direct flowing (without recirculation) plenum ventilation operates in the following way (Fig. 1). Due to rarefaction created by ventilator W1, the external air from the on-land cylindrical air collector, distanced from the building, flows through the underground duct, then through filter F_1 with duct F closed, goes through distributed horizontal underground (under-floor) ducts and flows into four (six) vertical ducts that are shown in the plan of the basement (Fig. 2, 3). Two of the ducts are embedded near the edges of the interior wall that limits the auditorium from the side of its entrance apertures and two others, in the same cross section, are attached to the partitions of two symmetrically located corridors.

Then the incoming air flows out from these vertical ducts and goes through distributed horizontal over-floor ducts to the ceiling air distributors of the auditorium as well as to the foyer and the entrances (valve C being open). When valve C is closed, the input air of the central mechanical ventilation system is distributed only in the

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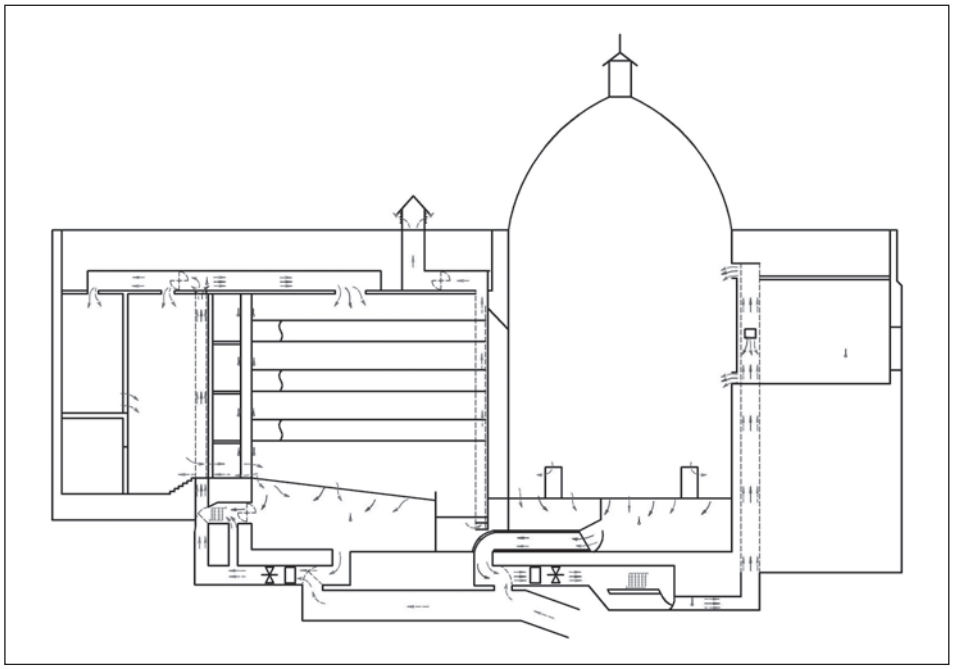

Fig. 1. Theatre ventilation system – longitudinal section

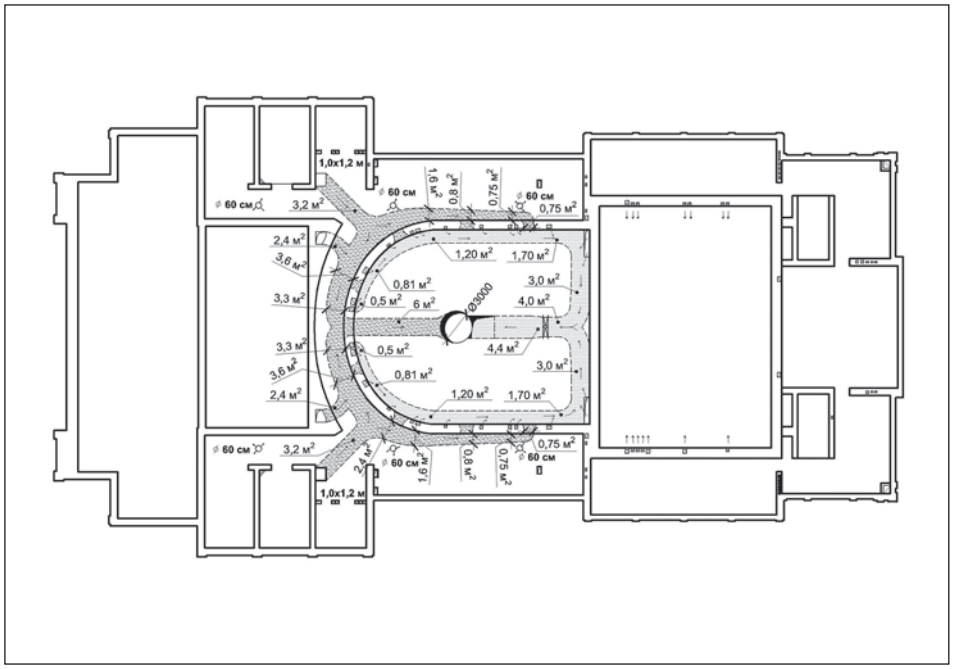

Fig. 2. Heating and ventilation system of the theatre – plan of the loft [6]

auditorium and flows through it upward–downward, as primarily the streams of incoming air are cool.

According to this scheme, the air flowing out of the auditorium should flow through ventilating grids, equally spaced in the floor of the stalls, into the under-floor rarefaction chamber, the rarefaction being also created in the under-floor balcony rarefaction chambers by a corresponding ventilator or ventilators. Then, the out-flowing air should be blown by the same ventilator (ventilators) into horizontal and then vertical ducts, the tips of which protrude from the roof, and should be dispersed in the atmosphere. Such a scheme cannot be seen in the drawings.

The proposed scheme of the auditorium hybrid ventilation (mechanical plenum with "upward–downward" air distribution and exhaust natural of the stalls under-floor space) cannot function effectively as no regulated air rarefaction is provided in the stalls under-floor space (such rarefaction can be created only by the ventilator of mechanical exhaust ventilation system; the ventilator, together with the expense regulator and noise suppressor, can be placed in a container on the roof of the building). Due to this rarefaction and additional (or zero) excessive pressure in the auditorium, the air will flow through floor grids into the under-floor space. The air flow through balconies floor grids is not foreseen at all.

The scheme of up–down air flowing can be effective only in case of cool air distribution and exhaust of the interior air out of the auditorium through the stalls floor

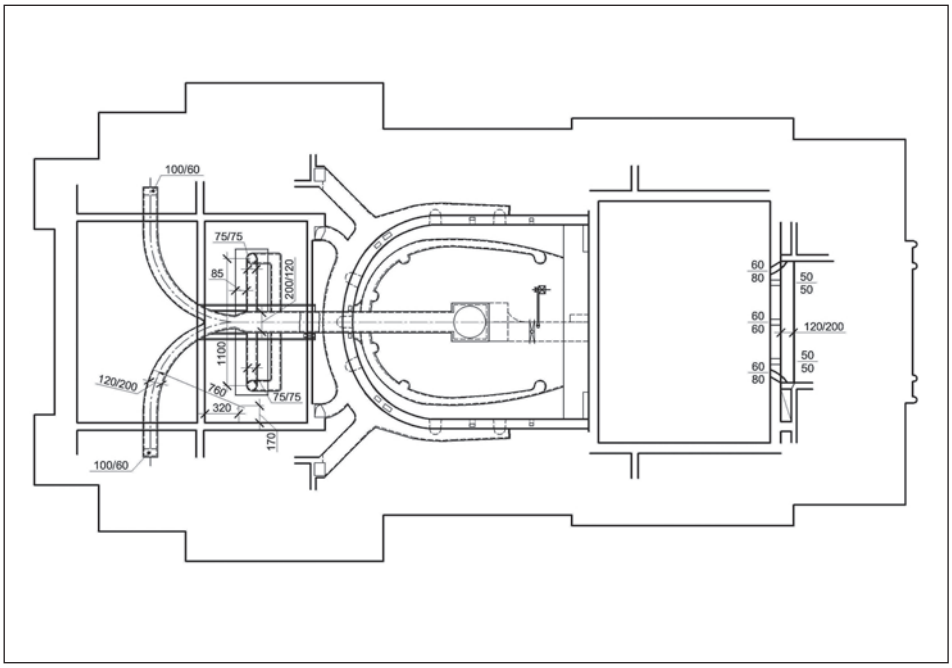

Fig. 3. The scheme of reconstructing airing, central heating and electrical temperature regulation systems. The loft – the plan at the mark of +15,0 m

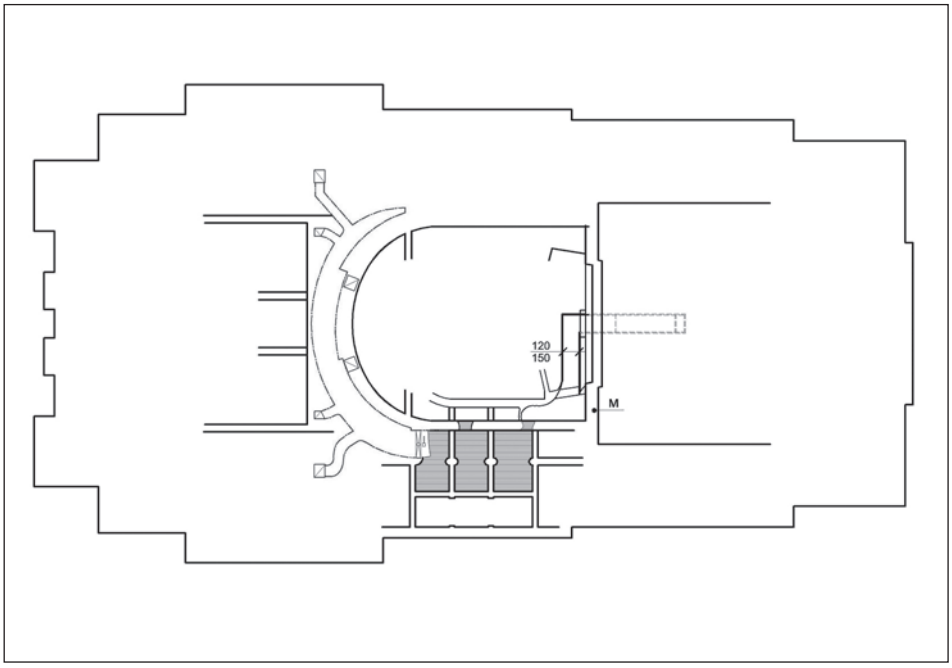

Fig. 4. The scheme of reconstructing airing, central heating and electrical temperature regulation systems. Basement – plan at the mark of –3,2 m

grids and balconies floor grids. The scheme cannot be used for air heating (heating ventilation) of the premises. Using such a scheme it is almost impossible to achieve the rated temperature uniformity tB and air velocities vb in the service zone.

In our opinion, in both warm seasons and cold seasons there can be an effective "down–up" scheme of air flowing through the auditorium premises using under-floor spaces of the stalls and balconies as the chambers of plus excessive pressure and floor, under-chair and chair air distributors (of the klimadrant type). The similar scheme of air flowing has been implemented for ventilating hall premises of the theatre in Milan as well as many other high-ceiling hall premises [1, 9, 10].

The initial project foresees the auditorium ventilation system operation in the mode of full and partial recirculation. It is assumed that during ventilation of the hall premises in the mode of full recirculation the exhaust air should flow through floor grids into the under-floor space of the stalls where ventilator W_1 creates rarefaction (at this, valve "E" should block the external air intake). Then, under the effect of additional excessive pressure of ventilator W1 the air moves through distributed horizontal and then vertical ducts and through loft distributed horizontal ducts to ceiling air distributors and is distributed by them in the auditorium premises as well as in the adjacent foyer and entrance premises. Operation of such a system without artificial air cooling in warm seasons and its heating

in cold seasons are not logical as the system does not provide cooling and heating of recirculation air.

Also foreseen, is the operation of the plenum-exhaust ventilation in the mode of natural (gravitational) flow of the air through the auditorium. The system of such ventilation of the premises using "up–down" air flowing scheme has low efficiency or is not able to function at all. It is known that pressure effects caused by convection streams from heat sources serve as a thermostimulating force causing air flowing by "down–up" scheme [3–5]. As a result of convection streams action, there appears maximum rarefaction in near-floor space of the stalls, and in the near-ceiling space of the auditorium there appears maximum plus excessive pressure. So, it is the "down–up" air flow scheme that is desirable for thermostimulating ventilation of the auditorium premises, including natural ventilation (aeration).

In the system of mechanical direct flow ventilation of the stage premises the external air is made movable by ventilator W_2 and before reaching the ventilator it is purified from dust particles by the texture filter F_2. Then the air is forced into the vertical ducts by the system of horizontal ducts, in two levels of height, where there are provided apertures with air distributors: the apertures of the low level are made at the height of 1/3 and apertures of higher level are made at the 2/3 of the height of the stage premises including its cupola part. As the system of mechanical exhaust ventilation of the stage premises is not provided, we can conclude that in the stage premises, ventilation of plus excessive pressure should operate.

If valve "a" of external air intake from underground duct is closed, the ventilation system of the stage premises will operate in the mode of full recirculation with the account of the air by ventilator W_2 .

In the initial project, also foreseen is the system of natural thermal ventilation of the stage premises but by the scheme of "upward–downward" air flow. Such a system will not be able to operate effectively because all aeration ventilation systems function by the "downward–upward" air flow scheme.

Analysis of the existing state of the ventilation system

At present the plenum – exhaust systems of the auditorium ventilation are not practically in operation due to the following reasons:

– horizontal duct of external air intake in the limits of the building is blocked by the transversal mortar walls which, together with the walls of the duct, form some spare space used for household needs;

– ventilator W1 of the plenum ventilation system mounted according to the initial project is misbalanced and cannot be activated;

– the number of ventilation grids in the stalls floor and their dimensions are unable to provide the flow of designed amount of the interior air; besides, perforated grooves are fixed to floor grids, they being additional aerodynamic supports but performing no positive functions. These grooves were mounted during the last reconstruction of the theatre building that was completed in 1983.

– the under-floor space of the auditorium is filled with concrete and blocked up, so it is practically unable to serve as a chamber for uniform air rarefaction (when there is a corresponding ventilator in the system of exhaust ventilation);

– ventilation ducts from the side of the loft are blocked with building wastes; besides, pressure equalizing chambers placed in the loft are also blocked up with building wastes, or the apertures in the walls of these chambers are filled with more or less air permitting walls made to weaken cooling of the auditorium in cold seasons and they block the air flow along ventilation ducts both in winter and in summer.

Recommendations concerning reconstruction of the original ventilation systems and their modernization

1. To restore the original state of the ventilation systems and to ensure functioning of air flow according to the initial "upward–downward" scheme.

2. To ensure the flow-in of the air into the auditorium by providing modern air-maker with appropriate functions instead of ventilator W_1, filter F_1 and some regulators of air streams expenses.

3. To measure and evaluate the efficiency of the primary modernized system of premises ventilation.

4. To retain the system of cooling ventilation of the hall with "upward–downward" air flow scheme, but to make mechanical the system of exhaust ventilation ensuring rarefaction in under-floor spaces of the stalls and balconies and equal fixing of inner air exhaust grids in the floor of the stalls and balconies. To place a ventilator of vertical ventilation system, an air expense regulator and a noise suppressor in thermo-, sound-, wind-isolated container on the roof of the building.

5. When the system of cooling ventilation of the auditorium with the up–down scheme of air flow is used, it is problematic to ensure uniformity of tb and vb with allowed deviations in the whole horizontal space of the service zone.

6. The most high-quality hygienic conditions in the auditorium service zone as well as uniform distribution of tb and vb can be ensured using the system of thermo expense ventilation, i.e. "upward–downward" air flow scheme with air distribution through floor, under-chair and chair air distributors.

Conclusion

1. It is necessary to restore the original state of the ventilation system and to ensure reliable flow of air through the auditorium by "up–down" scheme including due to minimization of air flow into the adjacent premises.

2. In the system of plenum ventilation it is necessary to provide a modern air-maker with corresponding functions, at least with such functions as filtering, heating and cooling of the prepared air, a noise suppressor and a ventilation unit with the changeable number of the ventilator turbine rotations. Additional isothermic moisturizing of the air being prepared, especially in the heating season of the year, should be provided using pipe-line electrical steam generator placed in the air duct of the ventilation system containing air-maker.

3. The air exchange in the auditorium in warm seasons should be determined with the account of the fact that ventilation temperature indicator is in "up–down" air flow system.

4. Thermal efficiency of the air-maker during heating season should be determined at rated expense of the external air and its plus temperatures, assuming 0º C as a calculation temperature; and a half expense at negative temperatures assuming tex,b as a calculation temperature. The larger figure of the above two is taken as a calculation thermal efficiency.

5. Modernization of the ventilation systems, including recirculation ventilation, will allow to minimize expenses of thermal cooling energy, first of all, due to controllability and manageability of ventilation processes and due to accounting heat and cold accumulating ability of the bulk of building constructions.

Acknowledgments

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References

[1] Баркалов Б.В., Павлов Н.Н.и др., *Внутренние санитарно-технические устройства. Справочник проектировщика*. Ч. 3. *Вентиляция и кондиционирование воздуха*, Кн. 2, Под ред. Н.Н. Павлова и Ю.И. Шиллера, М., Стройиздат, 1992.

[2] Горголєвський З., *Проєкт Великого театру у Львові*, Львів 1897.

[3] Жуковський С.С., *Термічна ефективність загальнообміної вентиляції*, Ринок інсталяцій, 2003, №7, с. 6–7.

[4] Жуковський С.С., *Ефективність гравітаційної вентиляції приміщень*. Науковий вісник Національного Лісотехнічного Університету України, Зб. наук.-техн. праць, Львів, НЛТУУ, 2007, вип. 17.7, с. 142–147.

[5] Жуковський С.С., *Оцінювання термовипиральності деяких сучасних вентиляційних систем приміщень*, Вісник НУ, Львівська політехніка, Теорія і практика будівництва, Львів, Вид-во НУ «ЛП», 2007.

[6] Немєрш В., *Проєкт вентиляції та обігрівання будівлі Великого театру у Львові*, Відень, Йоханес Хаар, 1897.

[7] Проєкт реконструкції провітрювання, обігрівання та електричного регулювання температур Великого театру у Львові, Львів, Міхальський і Хуперт, 1903.

[8] Проєкт реконструкції театру опери та балету ім. Ів. Франка в м. Львові, Діпроміст Держбуду УРСР в м. Львові, 1977.

[9] Стефанутти Л., *Малый театр становится ... Большим*, АВОК, № 3, 2000.

[10] Шубина Т.С., *Проектирование систем организации воздухообмена залов зданий зрелищного назначения*, АВОК, № 3, 2000.

Osobliwości wentylacji sali widowiskowej opery we Lwowie

Opera lwowska jest wyjątkową budowlą, która zajmuje bardzo ważne miejsce w architekturze i kulturze miasta Lwowa. Budynek zaprojektował w 1897 roku Zygmunt Gorgolewski, jeden z najwybitnych ówczesnych architektów.

Projekt wentylacji i ogrzewania budynku teatru został wykonany przez inżyniera Władysława Niemersza z austriackiej firmy projektowej „Johannes Haag" z Wiednia w 1897 roku. Pierwszy z projektów modernizacji wentylacji, centralnego ogrzewania oraz elektrycznego systemu regulowania temperatury był opracowany w 1903 roku przez Przedsiębiorstwo Urządzeń Zdrowotnych we Lwowie "Michalski i Hupert". W 1977 roku opracowano natomiast drugi projekt rekonstrukcji systemu wentylacji i centralnego ogrzewania oraz ich częściowego automatycznego sterowania.

System wentylacji hybrydowej sali widowiskowej zaproponowany w pierwotnym projekcie (wentylacja mechaniczna nawiewna z nawiewnikami powietrza "góra–dół" i wywiewna naturalna grawitacyjna z kanałami w podpodłogowym obszarze parteru) nie może funkcjonować skutecznie, ponieważ nie pozwala na regulację podciśnienia w podpodłogowym obszarze parteru. W wyniku tego podciśnienia i nadciśnienia w sali widowiskowej powietrze zostaje sprowadzane przez podpodłogowe kratki do podpodłogowego obszaru. Wywiew powietrza przez podpodłogowe kratki balkonów i lodgii w pierwotnym projekcie w ogóle nie był przewidziany.

Key words: Lviv, opera house

Słowa kluczowe: Lwów, opera

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Acoustic aspects of the Lviv Theatre of Opera and Ballet auditory usage

Introduction

For over one hundred years, the Lviv Opera (Ukraine) has been intensely used for theater, opera and ballet performances. Performers appreciate its interior for its exquisite appearance which is the result of great design and rich decorations as well as acoustics which make it possible for the sound to be heard very well both in the auditorium and on stage. Due to the building's technical deterioration, it was necessary to renovate it and restore some of the elements of its decor and consequently its original splendor. The modernization which was conduced in the 1980s was not positively received by the performers as the building's interior acoustics for symphonic music decreased. In order to avoid the same mistakes during the modernization of the hall in 2008, the authors of this paper were asked for acoustical consultations. As a result of detailed tests and analyses it was possible to maintain the acoustic features of the theater.

Description of the building

Lviv State Academic Opera and Ballet Theatre of Solomiya Krushelnitska (Lviv Opera) is a special building, very important for Lviv architecture and culture. It was designed by Zygmunt Gorgolewski – one of the best architects at that time (Fig. 1, p. 246). The construction works, which were supervised by Gorgolewski, lasted for three years [9]. The City Theater in Lviv was built during the theater construction boom in Europe. It demonstrates a synthesis of the achievements in theater architecture and technology. The grand opening night was on October 4, 1900 with great guests such as directors of the most famous European theaters and a lot of artists.

The theater features the Italian Renaissance details with classicistic elements [3, 10]. The Opera's auditorium has 4374 m^3 and 1050 seats. The stage section is equipped with advanced technology with moving platforms (hydraulic elements were manufactured by Polish railroad factory in Sanok).

Over the last few years, after a period of neglect, the building has been successively renovated and its original magnificent auditorium has been restored with the use of modern technology. In 1980, the first modernization was conducted. It included a replacement of the metal construction of the floor with concrete floor covered with pinewood boards on joists (Fig. 2, p. 246). At that time the boxes were decorated with lambrequins, which negatively affected the acoustics of the hall. Artists complained that the voice and music performed in the theater sounded more dull, which was caused by an increased absorption of high frequencies by soft elements. Due to the lack of acoustic documentation from that time it is impossible to objectively determine the impact of the first renovation on the interior acoustics. In order to eliminate the possibility of negative impact of the next modernization on the acoustics, their test was commissioned before the commencement of the renovation. The replacement of floors and renovation of the interior was scheduled to be conducted during the summer break in 2008 [8].

In order to maintain the acoustic parameters of the renovated hall, acoustic tests were conducted before modernization to determine a frame of reference as well as the parame-

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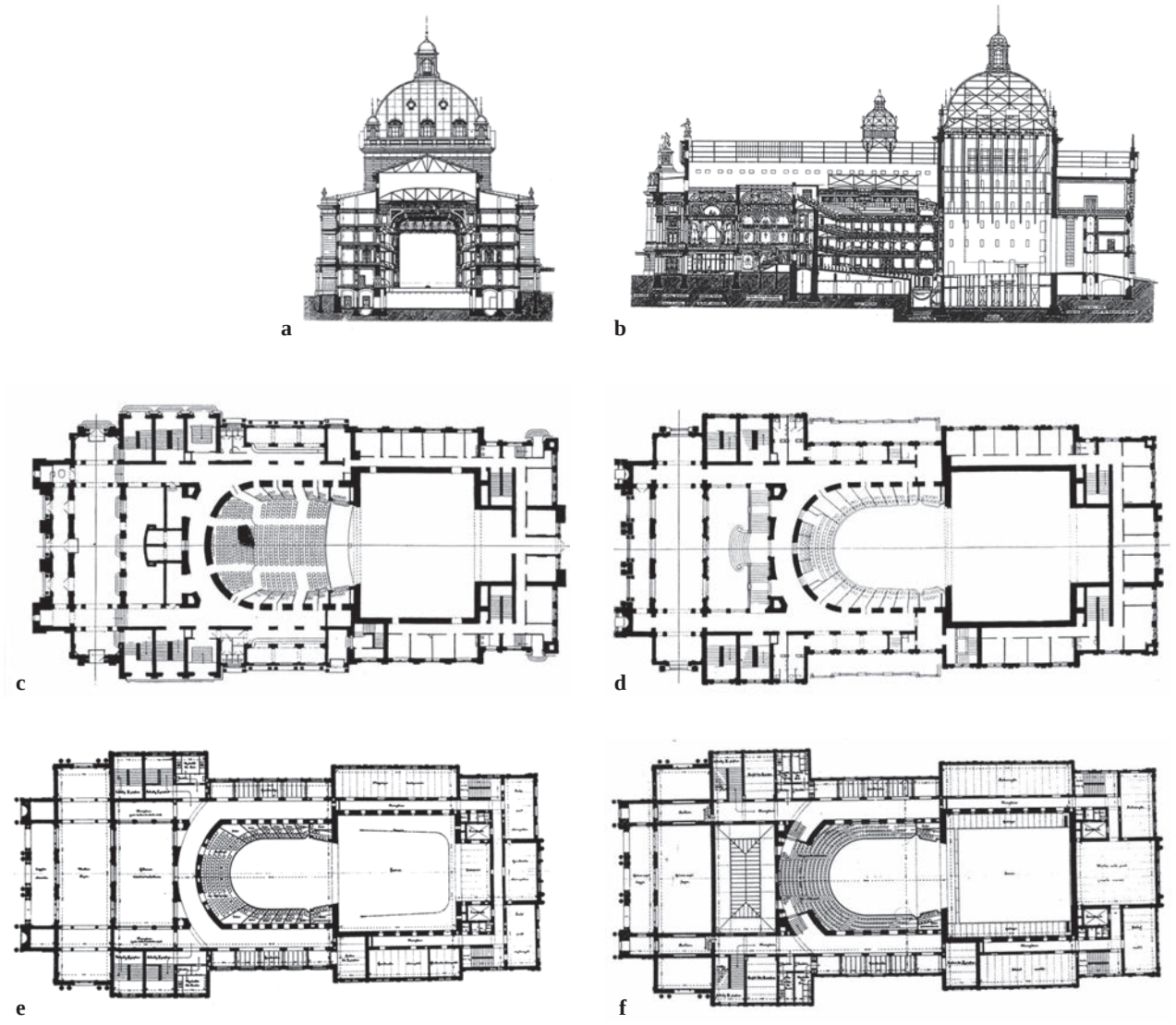

Fig. 1. Sections and plans of individual floors of the theater [9]: a) cross section; b) longitudinal section; c) ground floor plan; d) first floor plan; e) second floor plan; f) third floor plan

Fig. 2. Replacement of floor construction in 1980: a) view of disassembled floor construction; b) floor construction metal I beams

Fig. 3. Replacement of floor construction in 2008:
a) floor joists placed on reinforced concrete floor; b) parquet floor boards on plywood and joists

ters which as requested by the investor should be maintained. Laboratory tests of the selected interior decor elements to be replaced such as floor boards, carpets, and lambrequins were done. Important tests included the measurements of dynamic properties of floor samples with different layers. The natural frequencies of the floor layers were measured and the floor assembly method assuring the best sound-absorbing qualities was specified [5]. It was found that the solution planned by the investor, consisting in laying oak parquet on pinewood boards would decrease the acoustics of the hall. It was suggested that the boards be replaced with thin plywood, decreasing the gap between parquet and the reinforced concrete slab and sound dispensers be installed on the back wall of the cavity under the balcony [7].

Test of the hall's acoustics

The modernization of the hall included among others a replacement of the structure of the floor, armchair upholstery, lambrequins, carpets and renovation of interior decor elements. The works regarded the key elements creating the acoustic fields of the Theater so they needed to be designed in such a way as to improve the acoustic parameters of the interior.

In order to establish a frame of reference for possible changes in the acoustics, acoustic measurements of the hall were conducted in its original condition [4]. By selecting the sound absorption coefficients corresponding to the materials used in the hall a model was adapted to the acoustic compliance with the results of the tests in the scope of selected acoustic parameters (T_{30} and T_{15}). A simulation was made with the use of CATT-Acoustic v.8.h computer program.

Analysis of the diagram in Fig. 4a demonstrates that the reverberation time characteristics have not significantly changed after the renovation, however, the slight differences which have been detected between the characteristics are within expected tolerance. The correct selection and application of the floor layers, carpets and lambrequins had the most evident influence on the maintenance of the original acoustics of the hall after modernization. The values measured before and after modernization as well as the results of the simulation of the parameters are very similar

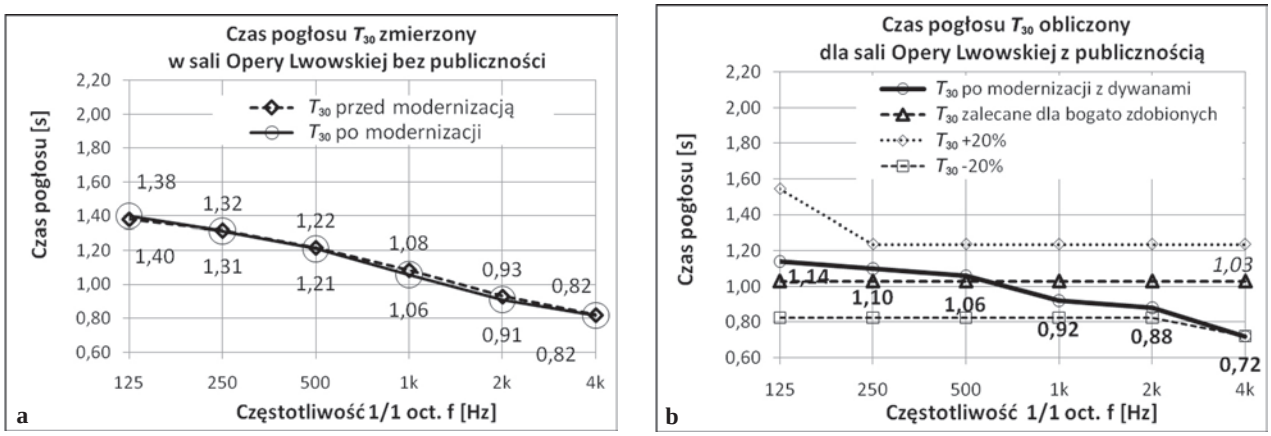

Fig. 4. The Lviv Opera – real and simulated average value of the reverberation time T_{30} depending on frequency:
a) measured; b) from computer simulation

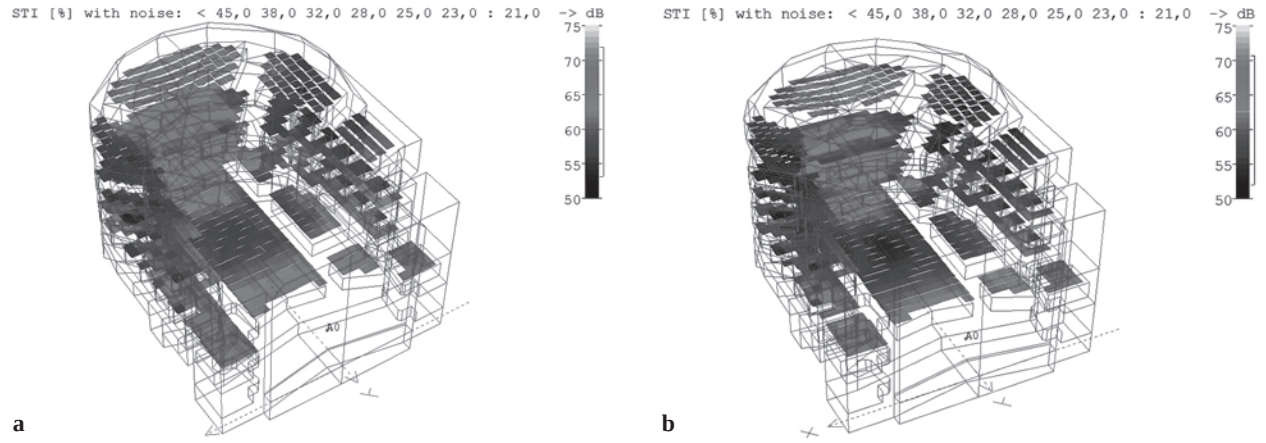

Fig. 5. The Lviv Opera. Computer simulated distribution of STI parameter in the auditorium (without audience): a) before modernization, b) after modernization

and they fall within the scope marked in Fig. 4b. of the values recommended for opera halls, so it was possible to assume that the acoustics of the renovated interior would be positively received by the performers and listeners. The measurements conducted after modernization confirmed the correct selection of new materials and the compliance of the numerical model with reality. The positive reception of the acoustics of the renovated interior by the performers and listeners enabled the final determination of the correctness of the measurements and the simulation.

It should be noted that the shape of the reverberation time characteristics in opera halls should be as close as possible to the horizontal line [1] and [2] so all design and execution activities were aimed at achieving these parameters. In this context it should be also noted that all soft elements additionally introduced to the auditorium space adversely affect the characteristics to decline more. The authors suggested to the investor eliminating the lambrequins and the carpets from the auditorium space to extend the reverberation time to high frequencies. However, the activities aimed at improving the acoustics of the hall were not in line with the conception of the interior decor and they were rejected. After the analysis of the tests, a replacement of sound-absorbing with sound-dispersing material in the cavities under balconies and boxes was suggested in order to additionally improve the acoustic parameters of the whole hall.

Figure 4 shows the real/measured (4a) and computer simulated (4b) average values of the reverberation time T30 for the auditorium of the Opera. Fig. 4b shows also the method of assessment of the reverberation time characteristics developed for the opera interiors with rich decorations [6]. The theater interiors designed on a horseshoe plan with carpets, lambrequins and rich upholstery demonstrate shorter reverberation time than it is assumed in literature for theaters. Figure 5 shows a simulated distribution of STI parameter in the auditorium before and after modernization. An improvement of the speech transmission quality in the middle section of the auditorium on the ground floor is evident. A decisive majority of the seats in the auditorium has STI parameter within the scope of good speech transmission.

Final notes

The natural acoustics are extremely important in every concert hall, opera or theater. Poor audibility makes it difficult for the performers to perform and for the listeners to enjoy listening. That is why if the acoustics of any interior co-create the artistic message, it should be considered a priority. As a result of great commitment of the management of the Lviv Theater, it was possible to appropriately execute the modernization. The acoustic tests before and after modernization as well as the model and simulated tests enabled the determination of reference conditions and specification of the objective to be achieved. With the use of multi-variant simulations, measurements and precise workmanship, it was possible to achieve the assumed acoustic conditions. The objective measurements were supported by a positive reception among the performers and listeners, which confirms their reliability. Further improvement of the acoustics by eliminating soft elements is impossible, and that is why cladding the back wall with sound-dispersing materials was suggested in order to improve the audibility in the section of the auditorium under the balconies.

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References

[1] Barron M., *Auditorium Acoustics and Architectural Design.* E & FN SPON, London 1993, Chap. 9.6.1.

[2] Beranek L., *Concert and Opera Halls: How They Sound.* Acoustical Society of America, New York 2006.

[3] Janasz J., *Architektura teatrów Lwowa (koniec XVIII wieku i pierwsza połowa XIX wieku),* Iwan Franko University of Lviv, Lviv 2003.

[4] Kamisiński T., Kinasz R., Pilch A., Rubacha J., *Badania doświadczalne parametrów akustycznych sali widowiskowej opery we Lwowie,* [in:] 16th Conference on Acoustic and Biomedical Engineering: Kraków–Zakopane, March 30–April 03, 2009, PTA Branch in Cracow, AGH University of Science and Technology, Department of Mechanics and Vibroacoustics, Faculty of Mechanical Engineering and Robotics, Kraków: s.n., 2009, pp. 16–17.

[5] Kamisiński T., Kinasz R., Rubacha J., Pilch A., Flach A., *Badania akustyczne wybranych materiałów dla renowacji wnętrza Opery we Lwowie,* [in:] Physics of Buildings in Theory and Practice: 12th Polish Science and Technology Conference: conference materials: abstracts. Łódź 2009, pp. 65–66.

[6] Kamisiński T. *Acoustic simulation and experimental studies of theatres and concert halls,* Acta Physica Polonica A /Polish Academy of Sciences, Institute of Physics, Warszawa; 2010, Vol. 118, No. 1, pp. 78–82.

[7] Kamisiński T., Kinasz R., Rubacha J., Pilch A., *Korekta akustyczna wnęk podbalkonowych w sali Opery Lwowskiej,* [in:] *Problemy projektowe w kontekście nowych technologii budowlanych.* 8th International Science and Technology Conference: Cracow, October 22–23, 2009, Wacław Celadyn (ed.); Section of General Building of the Commission of Urban Planning and Architecture O/PAN in Cracow, Institute of Building Design, Faculty of Architecture, Cracow University of Technology, Kraków 2009, p. 40.

[8] Kamisiński T., Kinasz R., Pilch A., Rubacha J., *Analysis of the Lviv opera hall acoustics after the modernization,* [in:] *Proceedings of the 6th symposium on Environmental effects on buildings and people: actions, influences, interactions, discomfort:* Cracow, Poland, October 11–13, 2010, Andrzej Flaga, Tomasz Lipecki (eds.), Kraków 2010, pp. 251–254.

[9] Szuliński J., *Teatr Miejski we Lwowie,* Warszawa, „Neriton", 2002, p. 108.

[10] Tereszczenko A.K., *Lwiwskij Theater Opery Ta baletu im. Iwana Franko,* Kijów, Muzyczna Ukraina, 1989, p. 208.

Aspekty akustyczne użytkowania sali widowiskowej opery we Lwowie

Lwowski Narodowy Akademicki Teatr Opery i Baletu im. Salomei Kruszelnickiej jest szczególną budowlą, zajmującą ważne miejsce w architekturze i kulturze Lwowa. Obiekt zbudowany w 1900 roku zaprojektował Zygmunt Gorgolewski, jeden z najwybitniejszych ówczesnych architektów. Widownia posiada kubaturę 4374 m^3 i mieści 998 osób. Budynek jest sukcesywnie remontowany, zaś sala jest doprowadzana do pierwotnej świetności. W celu zachowania parametrów akustycznych sali, w trakcie prac modernizacyjnych prowadzono bieżące ekspertyzy akustyczne. Przeprowadzono wymianę podłóg i elementów wystroju wnętrza. W celu zachowania parametrów akustycznych remontowanej sali wykonano badania laboratoryjne wybranych materiałów wystroju, takich jak: deski, dywany, lambrekiny i elementy tapicerki. Wykonano również badania akustyczne sali widowiskowej przed wykonaniem prac renowacyjnych, w trakcie oraz po zakończeniu. Po analizie badań można stwierdzić, że charakterystyka czasu pogłosu po remoncie nie uległa istotnym zmianom. Zwrócono uwagę na wnęki podbalkonowe parteru i loże, gdzie istniałaby możliwość zamiany wybranych okładzin dźwiękochłonnych na rozpraszające, co korzystnie wpłynie na wybrane parametry akustyczne sali.

Key words: Lviv, opera house, acoustic aspects

Słowa kluczowe: Lwów, opera, akustyka

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Maciej Kowaluk*

Construction quality of architecture

The first thing is an idea which is disturbing enough to prevent a peaceful sleep. It needs to be worked out and broken into its component parts and all pros and cons need to be thought through. Then it is slowly transferred to paper to develop a project which is often subjected to evaluation and changed finally to meet all possible requirements and recommendations. Construction: transformation of a vision into reality, erection of walls and unbearable expectation of the final result.

However, this is not the moment when the last brick is laid that the work is complete. The real test and the only true verification is time. The evaluation of the quality of buildings includes a lot of factors, the most important of which seems to be the durability of architectural solutions and their correct application.

Not all of them can stand the test of time. More importantly, some of them which at first seem to be world scale events and the keys opening new doors cannot bear the burden of the load placed on them. Constructed with the spotlights directed at star-architects, the buildings' foundations are supported only on their fame. Often the renown is not coupled with construction quality or diligence.

Fortunately, some real gems can be found in the star architecture firmament. Works that not only defend themselves but also combine finesse, artistry and functionality as well [2].

Simplicity, work at the grass roots, quality, and transparency are only some of the distinctive features of the designs by Peter Zumthor. The number of structures designed by him is not too high. However, that too works to his advantage. Rejecting the model of run-of-the-mill designs and a model of a factory worker, Zumthor relies on work quality, attention to detail, and uniqueness. Just like a real carpenter, he cuts each structure in a unique way. His work, which can be easily called a masterpiece of a good craftsman, focuses on details, keeping in mind one of the most fundamental features of any building: functionality. Although buildings are rightly predestined to be called works of art, it should not be ignored that they are constructed primarily to be functional. In the case of architecture, the category of aesthetics is as important as meeting the usability requirements in everyday life.

Zumthor perfectly combines care for beauty with care for functionality.

This can be easily exemplified by for instance the Kolumba Diocesan Museum in Cologne. First of all the space which had already existed was used: the new building was erected in the place of a cathedral or more specifically on its remains. Building an addition, Zumthor incorporated it into the city and did not invade the character of that space. Special bricks which were used are simply laid with gaps in between them, thus rendering an extraordinary effect. Light which is allowed into the interior delicately penetrates through the cracks, bends in specific places and the visitors can admire its exceptional display. It slowly trickles inside, creating a unique atmosphere of the place.

Another example of his works is his design of the hotel/spa facility in Vals. In this case he applied narrow rubble stones and ultimately created an impression of exceptional mass and weight. Thick, seemingly too thick, walls themselves would appear huge, overwhelming, heavy and providing little interior space. However, combining them with water, its delicate structure, subtlety and peace tames the walls. This combination provided balance between two opposites. Placing them on one scale pan was a good idea because they in fact do not repel each other in a vulgar way; on the contrary, they harmonize and create a space which perfectly serves the designed purposes [3].

Another example of Zumthor's artistry is the museum of modern art in Bregence which perfectly demonstrates the frail nature of glass. He achieved it by emphasizing and presenting its edges. Presented in this way, glass displays its truly delicate structure additionally contrasted by application of bare concrete inside. The elements combined in this way create an intricate structure which displays cold, austere, and neutral features. This is important

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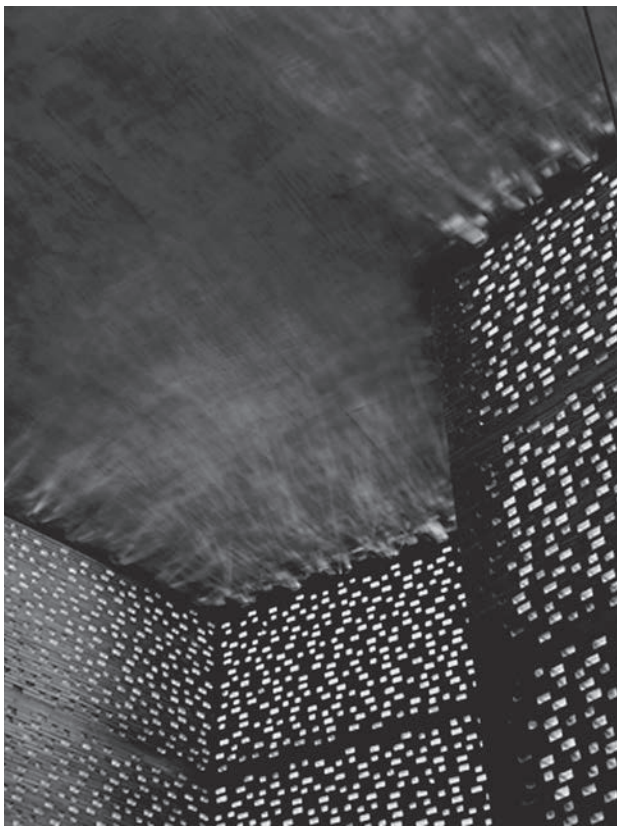

Fig. 1. Kolumba Diocesan Museum in Cologne,
designed by Peter Zumthor, photo by Helen Binet.
Source: http://www.wallpaper.com/gallery/art/helene-binet

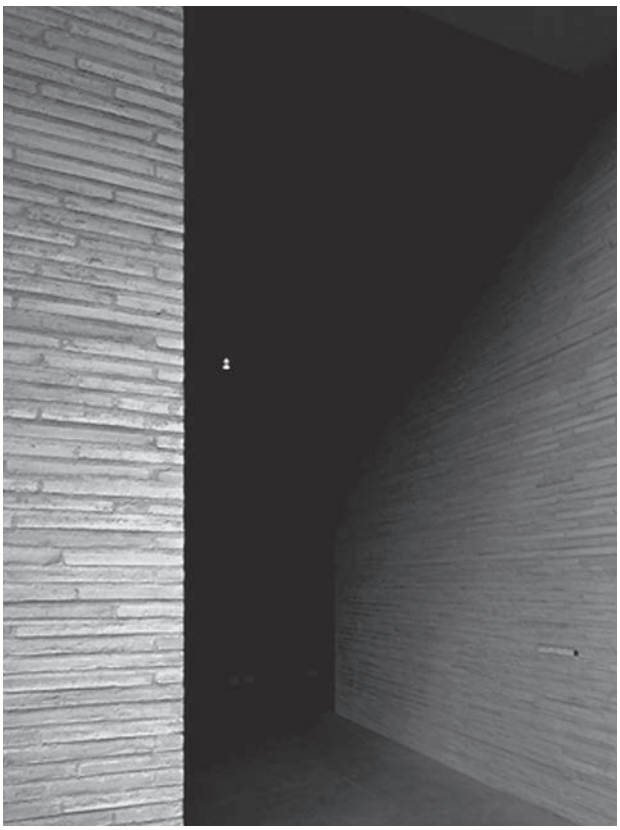

Fig. 2. Kolumba Diocesan Museum in Cologne,
designed by Peter Zumthor, photo by Helen Binet.
Source: http://www.wallpaper.com/gallery/art/helene-binet

Fig. 3. Therme Vals in Vals,
designed by Peter Zumthor, photo by Helen Binet.
Source: http://www.wallpaper.com/gallery/art/helene-binet

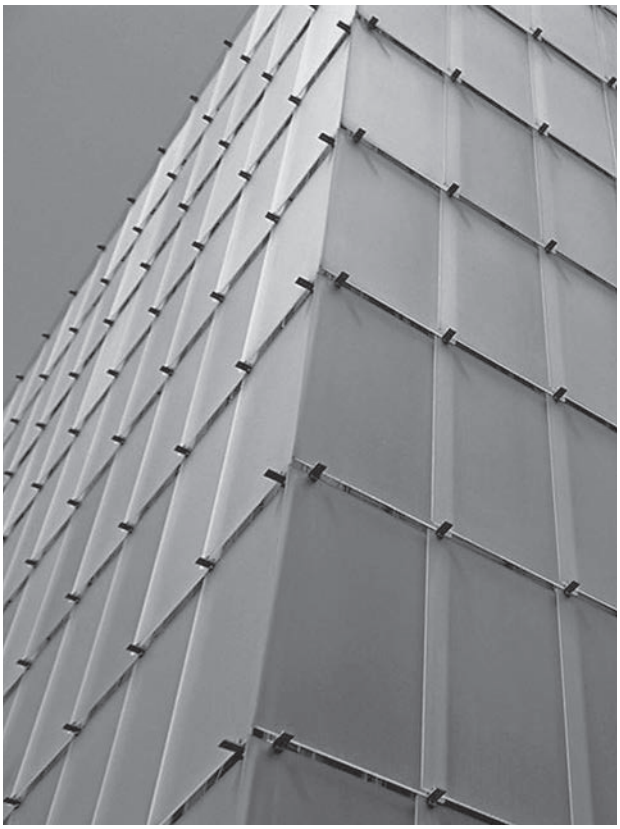

Fig. 4. Art Museum in Bregenz, designed by Peter Zumthor,
photo by Hans Peter Schaefer.
Source: http://www.reserv-a-rt.de

for the function of that facility as it is not supposed to be a work of art – it is indeed 'only' its aesthetic packaging – its true objective is to make people anxious to see what's inside.

Passing time terrifies everybody, including architects who frequently look at the struggle of the buildings they designed with its passage. Not everybody wins that fight. Some buildings, maybe as a result of the lack of precision or their excessive form, deteriorate in time and fade into oblivion. Others prove triumphant and go down in history as designs which are one of the kind and unique.

The example of Peter Zumthor demonstrates that it is not only about aesthetics and care for external beauty but also about a job well done, taking into account all aspects and nuances, including those connected with the usability of the structures, that provide the result which is praiseworthy and timeless [1].

Quality is not about how quickly a structure can be built or about the use of most innovative solutions but about the ability to combine this with its usability and sound workmanship.

This is what every architect should remember.

References

[1] Pontopulos K., Peter Zumthor, *Office designer,* 2009, 3, pp. 28–81.
[2] Stec B., *Droga. Kaplica brata Klausa.,* Architektura & Biznes, 2007, 7/8, pp. 38–43.
[3] Stec B., *Trzy rozmowy z Peterem Zumthorem,* Architektura & Biznes, 2003, 2, pp. 20–39.
[4] www.archdaily.com
[5] www.mimoa.eu
[6] www.wallpaper.com

Budowlana jakość architektury

Podstawą pracy architekta jest akt kreacji. Proces projektowania wieńczy budowa. Jest ona finalnym efektem naszej pracy, a zarazem jej weryfikacją. Wyznacznikiem dobrej architektury może być funkcjonalność, estetyka, wpisanie w tkankę miejską, kompozycja przestrzenno-bryłowa.

Jednak prawdziwym sprawdzianem dla obiektu budowlanego jest czas. O jakości budynków decyduje trwałość rozwiązań architektonicznych i ich poprawność budowlana.

Niektóre budynki są ogromnymi wydarzeniami medialnymi za sprawą star-architekta. Jednak w przypadku, gdy za rozgłosem nie poszła jakość budowlana, obiekty te nie wytrzymują próby czasu. Na uwagę zasługują prace Petera Zumthora. Tworzy on projekty niepowtarzalne, bardzo medialne, ale zarazem oparte o doskonały detal architektoniczny.

Należy podkreślić, że poprawność rozwiązań budowlanych jest podstawowym elementem zawodu architekta. A w oparciu o solidny detal można stworzyć niezwykłe obiekty i przestrzenie.

Key words: constructions, quality, architecture

Słowa kluczowe: budownictwo, jakość, architektura

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Hubert Mełges*, Małgorzata Mełges**

The principle of building processes staging during the renovation of church towers and the exchange of a roof framing in neo-Gothic St. Martin Church in Krzeszowice

Introduction

Decapitalization of buildings constitutes an unavoidable process as the years pass. A technical state and material condition of the building construction show the extent to which it was exploited and its usefulness of further exploitation. There are many factors which decide about the rate of particular parts of the building exploitation. However, the most important are the following: a place of localisation, an influence of the climate conditions and economical possibilities of the owner or investor. In some regions of the world the architects must deal with, for instance, earthquakes, typhoons, hurricanes and frost. The Polish climate with four characteristic seasons is not free from surprising meteorological phenomena (heavy rainfalls, floods, hurricanes and extreme snowfalls) and therefore, a lot of requirements must be met, for example, for a design, construction and restoration lines. There are often complex problems of the geotechnical character, which impose a complicated specificity of the building's foundation. Therefore, during the compilation of a design concept and later a building documentation, the above mentioned aspects must be taken into consideration and expected early on. In the situation where big decapitalisation of the building takes place (e.g. a historical building), material and technological solutions as well as the type and method of refurbishment and restoration works should be appropriately chosen. All these things should be preceded by specialist diagnoses which specify material deprecation and the level of technical wear and tear of the building. The level of subject matter and practice preparation of contractors along with reliability of executed building works constitutes an important criterion in the process of refurbishment works. In order to avoid unexpected exploitation results in, for example, historical buildings, a permanent control and supervision of qualified staff are necessary [2, 3].

Restoration and building issues in St. Martin Church in Krzeszowice

Neo-Gothic church in Krzeszowice, which is an indisputable piece of work of a remarkable Berliner architect Karl Schinkl, after 136 years of a relatively short time of exploitation requires a lot of restoration and renovation works. The first construction works on it started in 1832, but it was fully used after its consecration in 1874. General renovation of the church towers and the whole roof of the church along with the exchange of the roof framing (reconstruction) and the cover were considered to be priority tasks. There were many reasons for such a radical decision as regards the execution of works. The old roof was leaking and decapitalized. The parish priest asked the experts to examine technical condition of the endangered parts of the church and then decide on the method of their protection. The basis for starting any repair works was the compilation of inventory taking into account in particular a restoration method of registering all kinds of decapitali-

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Fig. 1. Fragment of the destroyed roof framing construction

zation processes of the roof framing and cover. On the basis of this inventory, thorough entomological, phytopathological and mycological examinations of fungal condition and the extent of destruction of the wooden elements of the church roof framing were conducted. When the level of destruction of the roof framing constructional elements was specified, a constructional expertise of the roof framing technical condition was provided. Entomological and phytopathological examinations confirmed high biological wood corrosion where constructional elements were depreciated in large parts by the fungus *Coniophora cerebella* which caused brown decay as well as destructive presence of vermin called old-house borer (*Hylotrupes bajulus L*) and house grinder. Additionally, growing moulds from Micromycetes class caused complex processes of biologically depreciated elements of the roof framing [1].

On the basis of the total number of expertises and the level of damage of particular constructional elements it was ascertained that circa 60% of the construction wood was worn out and consequently the final decision was taken as to a complete replacement of the roof framing. During a demolition of the roof framing and a detailed analysis of technical condition wear and tear, it turned out that the particular constructional elements are damaged in 70%. Finally, on the basis of the inspection carried out by Provincial Monument Protection Organisation in Cracow the Restoration Opinion was issued which gave permission to conduct the renovation works. Thanks to these preparatory procedures, the parish was able to apply for a renovation works subsidy in the Ministry of Culture and National Heritage from the program of Cultural Heritage as a priority of Monuments Protection. The whole

Fig. 2. Execution of the reconstructed roof framing trusses

documentation, which was compiled and enclosed to the application, was given a positive opinion by the Ministry of Culture and National Heritage. Thanks to the granted subsidy, the renovation works started. The catastrophic condition of the church roof posed the question as to the possible reasons of such extensive damage. The answer to this question is complex because the existing damage is quite common and refers not only to sacral buildings, but also to historical ones and others. In the case of the church in Krzeszowice, where an accelerated process of decapitalization of the roof and towers took place, at least several factors were decisive. One of the main reasons was the consequences of World War II. At that time, for the needs of the war sheet copper was removed from the roof and replaced by sheet zinc and during the period of war the roof was covered again but not carefully enough. The church location in the area of Silesia and Cracow agglomeration, where emissions of sulphur dioxide and carbon exceeded the permissible concentrations, constituted, among other things, the reason of the accelerated process of the cover corrosion. There were numerous punctures in the cover of the church towers, which were probably caused by machine-guns missiles. The roof projection with a roof slope under the angle of circa 19° was wholly surrounded by an open drain channel (water from roof slopes flowed down to the open drain channel) which adjoined a stone attic. The existing tilts in the open drain channel in the direction of down pipes as well as internal areas of down pipes were not sufficient for draining water from the roof surface. As a consequence, the system did not function well enough as during winter periods the ice from the attic balustrade and arcade cornice melted and leaked into the inner parts of the building. When ice and frozen snow formed there, it was impossible to drain water and remove snow effectively. Post-war poverty and total lack of any building materials as well as problems with experts contributed to the increase in decapitalisation processes.

The principle of renovation processes staging as regards the church roof and towers

Fig. 3. Fixing the roof truss on the wall crown

A decision as to the replacement of the roof construction, planking and cover, which consisted in the exact reconstruction of the roof framing construction, was made as a result of expertises. This complicated 'operation' required thorough logistic preparation in the scope of the conducted works sequence as well as ensuring people's security and protecting the church against water leaks caused by the rain. During the execution of works, the church had to continue its liturgical functions in a normal way, which additionally hindered and complicated the range of indispensable operations. Firstly, a part of the church surroundings was cut off during the renovation period so that the people were effectively isolated from the places which could be dangerous for them. Considering a strictly determined deadline of the renovation completion, the works were planned in a two-line system from July to the end of November. The works were located in two independent places because of the area around the renovated church was too small. In the first-line system the works were prepared in the church, while in the second line-system the renovation material was prepared, which took place in the area outside the church.

Before starting the demolition works on the church, a special base on a separate place outside the church was organised, where particular roof trusses as well as woodworking and wood preservation works took place.

Fig. 4. One of the fixing stages of the roof truss above the presbytery

A necessary restoration requirement was a total and exact reconstruction of the roof truss (of all elements and details along with carpenter's joints). It should also be mentioned that the size of wood in the roof truss was, for example, 25×31 cm. The size and weight of these elements caused many difficulties in the execution of the works. On the designated place outside the church, a special wooden platform was made in order to conduct on it a precise process of fixing the roof trusses. All parts of the roof trusses were made on the basis of the previously detailed inventory. The smallest mistake or inaccuracy could rule out a possibility to conduct the process of fixing and connecting the roof trusses with other elements of the roof framing construction. The reconstructed elements of the roof framing were numbered and described and then the roof construction trusses were put together according to the principle regarding the roof truss typing, which was established some time earlier. The sizes of the roof trusses were very big; therefore, they had to be taken apart in order to be transported to the church. Finally, the process of the whole construction fixing took place at the yard near the church. The particular roof trusses were fixed by means of the crane according to an established order.

The roof trusses were additionally reinforced by means of special steel anchors which were regained after the removal of decapitalized elements of the roof framing. Owing to the necessity of guaranteeing safety and in order to avoid roof leaks (taking into account the weather anomalies, the year 2010 was not conducive to the execution of such works), the old elements were replaced by the new reconstructed elements after the preparation of the background (plates, floor beams) and the reinforcement of the walls crown. During the execution of the works, absolute precision was required with error tolerance of some millimetres.

The new fixed and embedded roof parts were protected with special canvas covers from which water could be drained down to the newly constructed drainage basin which was in turn connected with down pipes. All of the roof framing and planking elements were subjected to whittling in order to remove characteristic 'moss' from the wood, which appeared after the wood was cut with saw blades. The reconstructed roof framing was covered with a special foil and then planking was made on which sheet copper was to be fixed. The open drain channels, which drained water from the roof by means of appropriate tilts in the direction of baskets into the down pipes, were profiled and properly located. The renovation works of the tower hexagonal copulas consisted in removing the steel, planking under sheet and the corner construction rafters specially moulded. Towers and copulas on the hexagonal projections (in form of pyramid) were made of brick. In the corners the reconstructed elements of corner rafters were fixed, which served the purpose of the support frame for planking under the sheet copper. There were also new crosses made of steel, which surmounted the church towers. The designed crosses refer to the neo-Gothic stylistics. The previous crosses with no style (secondary) were made of steel pipes. One of the reasons why they were replaced was the method of their fixing on the towers, which caused leakiness between the towers construction and the place of fixing the crosses. New crosses were fixed on the towers in such a way as to make it impossible to let the water leak into the inner parts of towers. The roof cover was made of sheet cooper on full planking on the so called narrow strips on a double standing seam made of strips at the width of 25 cm. Prepared strips of sheet were additionally subject to a special method of moulding in order to improve their rigidity. Fixing the sheet to the planking was made on the so called special 'connectors' moved from the stainless sheet. All the roof sheet works on the contact between sheet and wall as well as open drain channels were made with great diligence and introduced a method of leak tightness on the contact between sheet and wall. Three additional elements of styl-

Fig. 5. Final stage of the tower copula renovation surmounted by the cross

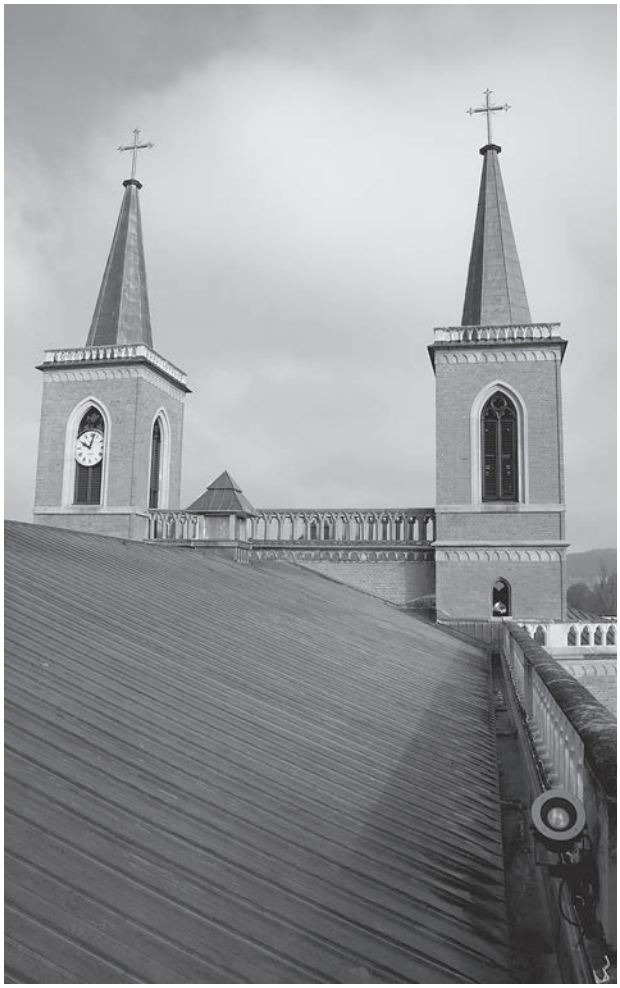

Fig. 6. Final view of the roof slope after renovation

ised small signature forms (which were made earlier before the renovation) were restored, which mainly fulfilled the function of gravitation ventilation from the inner parts of the church. When the roof framing and cover works were finished, insulation of the church vault was made with the use of mineral wool at the width of 20 cm [4].

Conclusions

The method of the roof and church towers renovation as well as the replacement of the roof framing and sheet cooper cover proved that it was necessary to prepare the sequence of logistic activities in the situation in which the building is still used by the congregation for normal church activities during the conducted renovation. During the execution of the renovation works (similarly to the case described by the authors), it is necessary to combine traditions and modern methods of the works in the technical and organizational aspect maximally and universally. Without a detailed research and executive program of the work schedule, we risk unpredictable effects in the renovation process which may endanger the safety of people and buildings. If we neglect a proper inventory measurement, we run the risk of wasting materials, time and money. The precision, quality and aesthetics of conducted works ought to be given a special priority.

References

[1] Czuba M., *Ochrona i konserwacja zabytków Podkarpacia w latach 1999–2001,* Renowacja i zabytki, 2002, No. 3.
[2] Golat R., *Ustawa o ochronie zabytków i opiece nad zabytkami*. Kantor Wydawniczy Zakamycze 2004.
[3] Pevsner N., Fleming J., Honour H., *Encyklopedia architektury,* WAF, Warszawa 1992.
[4] *Przekształcenia i modernizacja zabytków i budowli historycznych,* Renowacja i Zabytki, 2002, No. 2.

Zasada etapowania procesów budowlanych przy pracach remontowych wież kościelnych i wymianie więźby dachowej w neogotyckim kościele św. Marcina w Krzeszowicach

W zdekapitalizowanych obiektach sakralnych lub w ich częściach dobrze przyjęta logistyka etapowania i kolejności prac montażowo-budowlanych w działaniach naprawczych i remontowych ma decydujący wpływ na pozytywny efekt i czas ukończenia zamierzenia inwestycyjnego. Ważną bazę do opracowania logistyki prac budowlanych stanowią szczegółowe dane etapu rozpoznawczego, zawsze poprzedzającego wszelkie działania w naprawczym procesie budowlanym. Doświadczenia związane z wymianą skomplikowanej więźby dachowej oraz remontu wież kościelnych i pokrycia blachą miedzianą, na przykładzie kościoła św. Marcina w Krzeszowicach, są tematem tego artykułu. Należy też wspomnieć, że konieczność wymiany całej więźby podyktowana była jej totalną dekapitalizacją w około 70%. Z analiz badawczo-rozpoznawczych wynikało, że jedyną słuszną metodą w tym przypadku jest wymiana całkowita więźby dachowej. Przyczyną dekapitalizacji drewnianej konstrukcji dachowej były owady zasiedlające więźbę. Rozpoznano w niej następujące gatunki owadów: kołatka domowego (*Anobium punctatum Deg.*), kołatka upartego (*Anobium pertinax L.*) i spuszczela pospolitego (*Hylotrupes bajulus L.*). Szkodniki drewna rozprzestrzeniły się głównie w konstrukcjach belek drewnianych, krokwiach, stolcach oraz murłatach.

Key words: roof framing, wood vermin, decapitalization

Słowa kluczowe: więźba dachowa, drewnojady, dekapitalizacja

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Małgorzata Mełges*, Hubert Mełges**

Research method in recognizing the causes and level of destruction of the roof construction in the neo-Gothic 19th century St. Martin's Church in Krzeszowice designed by Karol Fryderyk Schinkel

Historical outline

The St. Martin's neo-Gothic parish church in Krzeszowice (Little Poland Province) has been preserved in an unchanged condition until today. The church was built thanks to the artistic patronage of Count Potocki – the owner of Krzeszowice holdings who decided to build the church and very carefully selected the best design conception. The first drafts of the design of the church were made by two excellent Parisian architects Percier and Fonteine. The final design, however, which was the basis for building the church was made by a famous architect from Berlin Karl Schinkel. In 1832, the design was approved and the construction of the church without its interiors was completed in 1844. It was another architect from Berlin and his student Wilhelm Hofbauer who was the direct builder and executed Schinkel's vision. The works, including the furnishing of the interiors, were completed in 1872. Over the period of about 140 years the church has been used without any problems despite the fact that since its erection the number of people living in Krzeszowice has grown a few times. The church is on the permanent conservation list. It was built with the use of stones and bricks as a single-nave church on the layout of a Latin cross closed with a polygonal chancel. The front facade, pedestals, the rose window above the entrance, cornices, window frames, traceries and some details of interior decoration were built of stone (sandstone) and they demonstrate excellent workmanship.

The external walls were built of bricks with characteristic buttresses and two towers with octangular spires and a decorative viewing terrace between them. The nave is covered with a pointed ribbed groin vaulting with lunettes. The church has pointed windows with neo-Gothic traceries and one of its characteristic features is a stone attic with an ogival motif on arcade cornice.

Above the nave there is a gable roof with a gradient of 18° and a polygonal (pentagonal) one above the chancel. When looked at from the man's eyes' level the roof is not visible as it is concealed by the attic. The roof framing is made from different species of conifers (spruce, pine and larch) with the original strutting beam structure with full roof boarding for copper sheets [1, 2].

Current condition of the church

The general condition of the church building, with the exception of the roof framing, is good (assuming the necessary maintenance works are conducted). The result of different destructive exposure to which the roof framing has been subjected over about 150 years is a serious technical and biological decapitalization. In order to determine the condition and degree as well as the reasons of its destruction a number of special tests have been conducted and a number of expert opinions have been made.

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Program of tests

The basic criterion of evaluation was the necessity to make a survey of the roof framing indicating its decapitalized fragments. The survey was the basis of further works such as statistical and strength analysis aimed at determining the safety of construction elements of the roof framing with conclusions and recommendations regarding the necessity to save the building from unpredictable consequences of such loads as e.g. of snow, ice, wind, etc. In order to get the full picture of the damage of the roof framing it was necessary to conduct phytopathological, entomological and mycological tests [3].

After conducting expert evaluations and thorough analysis it was possible to determine the scope of threats and their origin. This was the basis of conclusions as to the method and effectiveness of corrective actions regarding the historical roof framing. All tests and expert evaluations evidently indicated a very serious technical destruction and extensive damage of the biological loadbearing structure of the roof framing. The wood samples which were taken for analysis (phytopathological, entomological and mycological tests) demonstrated a huge degradation caused by the destructive activity of insects – mainly old-house borer, deathwatch and wood-rotting fungus (*Poria vaporaria*). The condition of damaged construction elements, sheathing and roofing indicates that the loss of structural strength of those elements exceeds 60% and they should be either repaired or replaced. Otherwise and in the case of additional unpredictable exposure to the elements the roof might collapse.

Selected examples of survey measurements

One of the characteristic features of historical sacred buildings is their individualism. This is the surveying method which was applied in the case of the St. Martin's church in Krzeszowice.

Firstly, new surveying methods should be mentioned. They apply CAD, photogrammetry and laser scanning in measuring historical and contemporary architecture, technical infrastructure and industrial installations. Engineering geodesy and photogrammetry have been employed for years in performing comprehensive architectural surveys. The measurements were taken with the use of a reflectorless tacheometer (close range surface measurements of e.g. walls), e.g. semi-metric camera to make ortophotoplans. At present as a result of the digital technology development new measuring devices have been developed such as lasers and laser scanners, in particular with the use of 3D measurement technique (vector file with refraction linesand a grid of points). These tools take measurements of hundreds of thousands of points, recording the geometry of large objects. Despite their great capabilities the new measuring devices do not perfectly render the reality of objects (e.g. the 'edge sliding effect' which ultimately generates a corrupt measurement). It is true that the use of new photogrammetric technology in taking measurements in connection with a laser scanner, visualizations and animations influence the duration and effectiveness of the measurement work. When deciding to use the new generation equipment, one should analyze the object and a possibility to get with that equipment to the place of measurements. Nowadays, the application of the above-mentioned measuring methods is required. There are, however, situations, especially in historical objects when making manual drawings and measurements is more useful (especially in the case of inaccessible and concealed places).

The method of performing the architectural survey of the roof framing of the church in Krzeszowice

The nave and the pentagonal chancel are covered with a pointed ribbed groin vaulting above which there is a strutting roof framing system with a very unusual construction. The shape of the vaulting and the location of roof trusses in relation to it created a limited accessibility of the place needed to take measurements with the use of new generation equipment. Some places needed for the inspection of the construction system as well as to make drawings and measurements were practically inaccessible or at best one needed to crawl to get there.

The unusual character of woodwork solutions as well as geometry required a precise manual measurement.

In order to make a drawing of the roof framing of the church the following were performed first: a detailed survey of the church floor plan at ground level, cross and longitudinal sections with views of the church interior, plan of the vault above which there is a roof framing, cross sections of the roof framing with views of special main trusses and plan of the fifth elevation that is of the roof with gradient of planes and water drainage system. The other type of performing a survey was photographic documentation which resulted in the development of so called research cards. The objective of this type of survey was to precisely establish the location and type of construction, details and degree of technical decapitalization. A specially developed method of assigning numbers to construction elements (trusses and woodwork connections) corresponding to their specific location in the plan and cross sections was applied in each research card. This

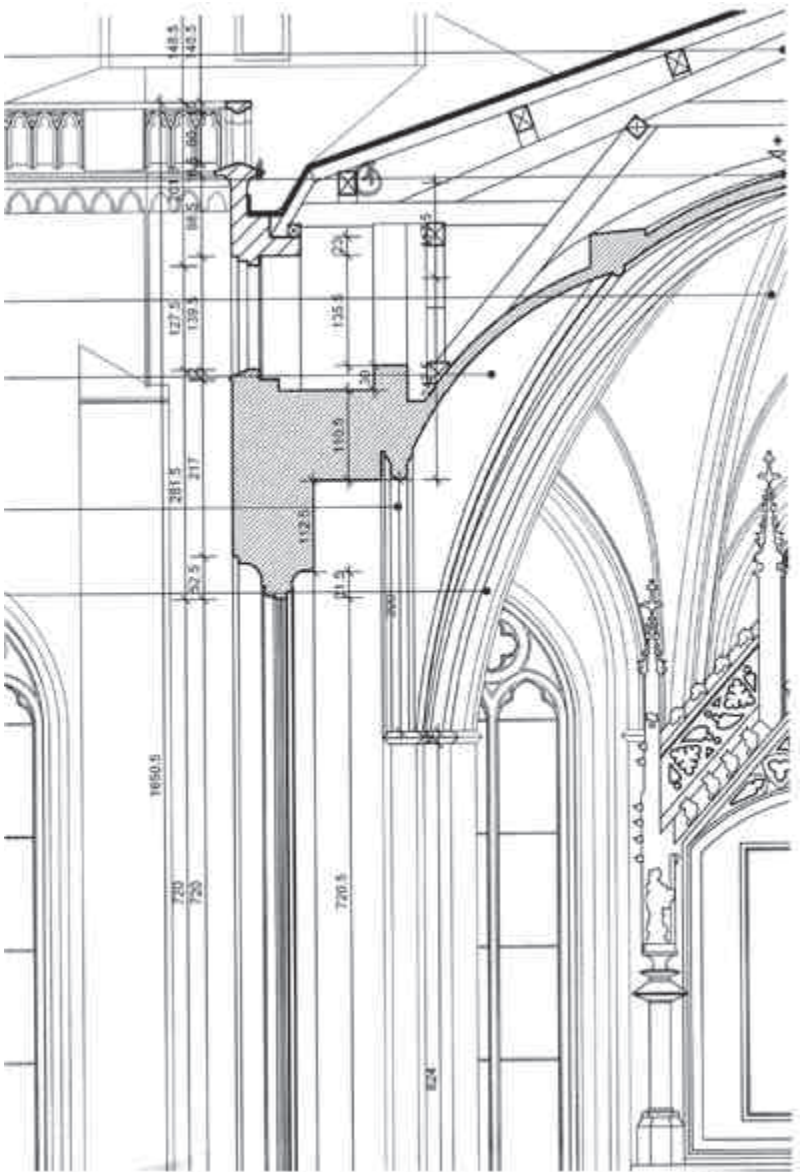

Fig. 1. Cross section of the nave of the church with the view of one of the main trusses

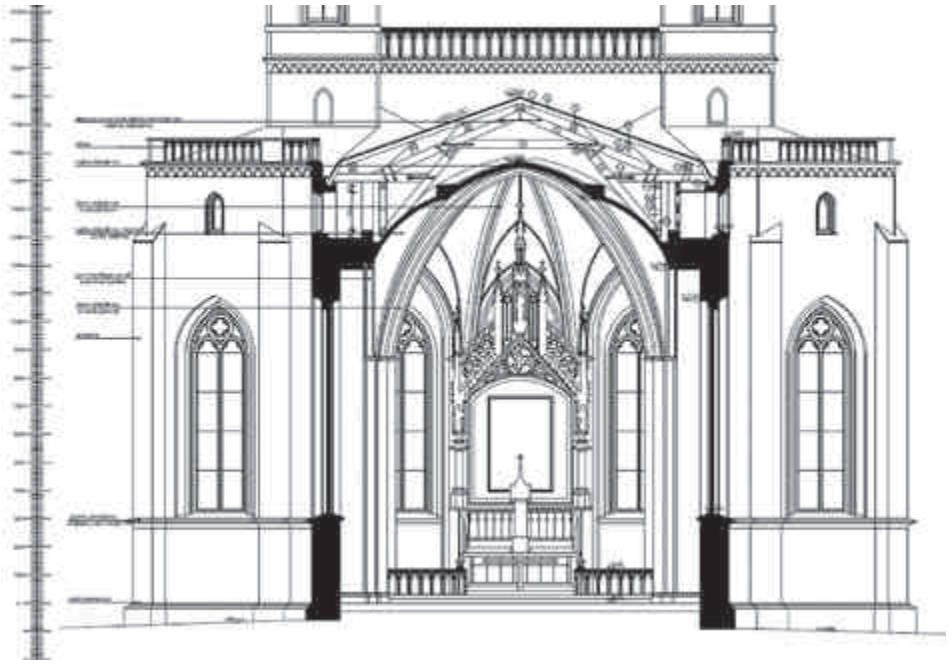

Fig. 2. Initial plans of the particular fragments of the church in order to check the accuracy of measurements with the use of laser equipment

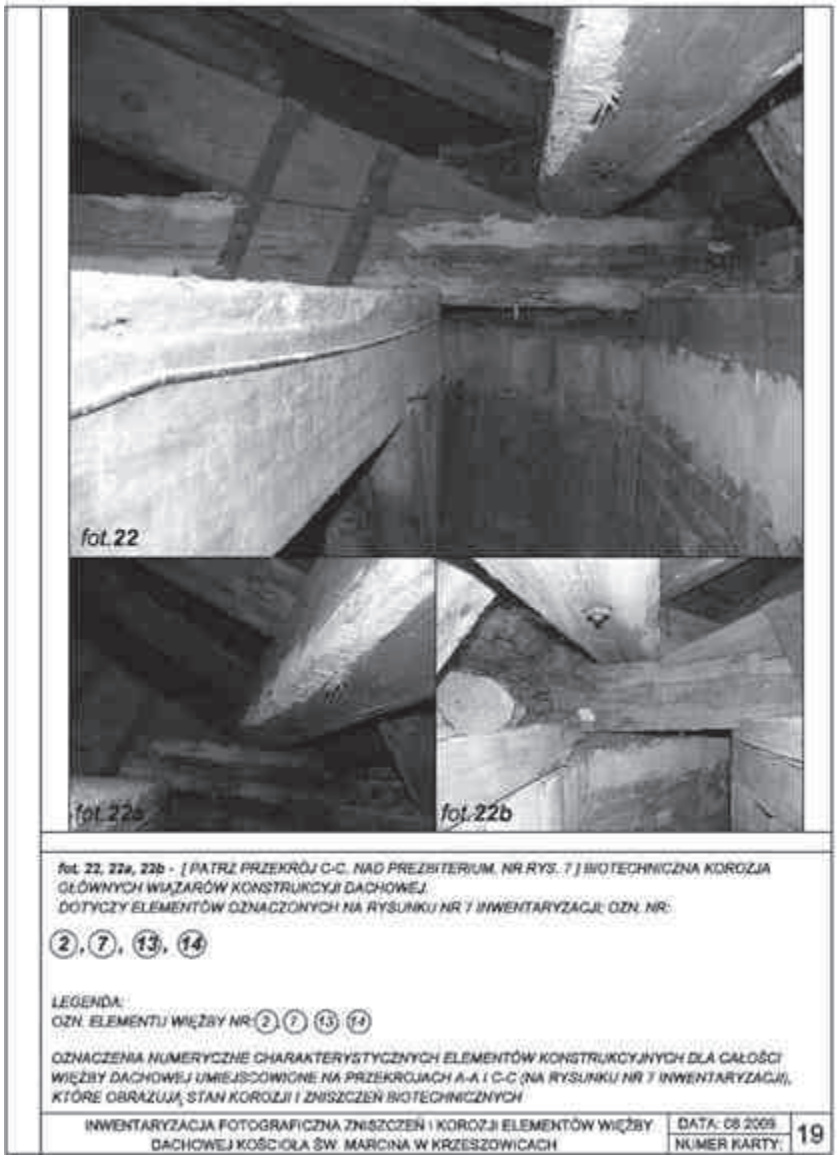

Fig. 3. Research Card

Fig. 4. Markings of various types of main trusses and places of destruction

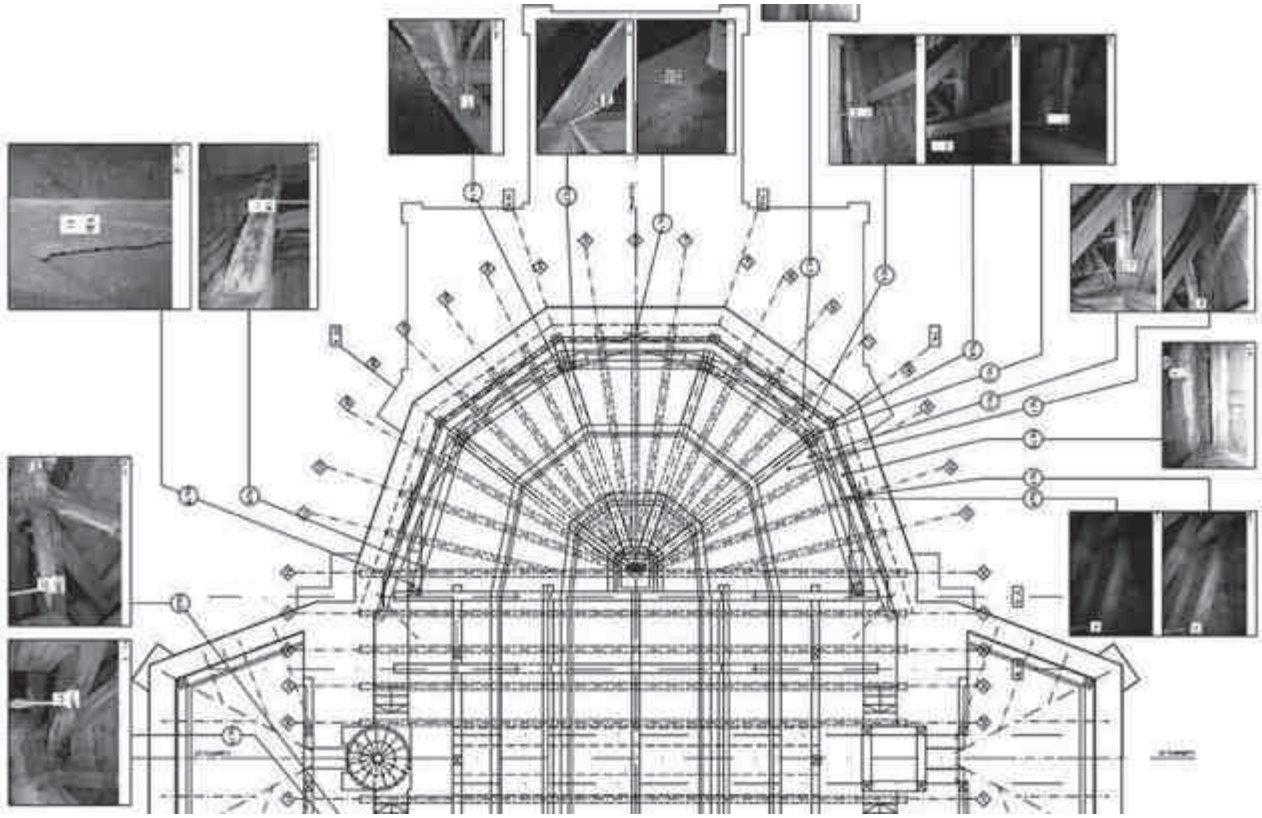

Fig. 5. Fragment of roof truss projection with the accepted system of markings in relation to research cards

method significantly facilitated the detection of damaged places and their scope. Because of very special and unusual joints and woodwork connections, all details required a careful analysis, inspection and measurement from all sides with the use of traditional manual technique. What proved especially helpful in recognizing the complicated woodwork details was the free-hand sketches drawn in perspective which helped to precisely reconstruct the original roof framing. The complicated system of the main trusses, which were applied in different variations, required a precise determination of different gradients of the roof planes above the nave and the chancel as well as side chapels. The precisely performed survey was the basis of the design of the whole roof framing replacement. The bigger interior spaces which were not concealed were measure with laser equipment; these measurements were in special cases verified by manual measurements with the use of measure tapes. The whole architectural survey documentation was ultimately made with the use of computer graphic in the following scales 1:50, 1:10 and 1:2. Color icons of pictures which presented appropriate places and their degree of destruction were placed on the basic plans of the location of specific construction elements of the roof framing.

Conclusions

In conservation works in historical buildings, the basis for the beginning of any work is the necessary detection of different details in the scope of damage, repair or replacement of necessary elements, etc. The complete and precisely performed survey is the basis of precise analysis of different kinds of damage. An architectural survey is primarily used as a basis for plotting the scale of damage and different types of deformations on it. A good graphic survey with a photographic survey and other necessary tests should constitute a concise and comprehensive document which is the basis for the determination of the extent and percentage of damage as well as for the selection of repair method and estimation of costs.

References

[1] Baraniewski W., *Projekty Karla Friedriecha Shinkla dla Krzeszowic,* Kwartalnik Architektury i Urbanistyki XXVII, 1982.

[2] Baraniewski W., *Zespół rezydencjonalny w Krzeszowicach w XIX w.,* [in:] *Dzieła czy kicze*, Warszawa 1981.

[3] Mierzwa W., Rzonca A., *Skanowanie powierzchni, jako nowa metoda rejestracji i interpretacji szczegółów architektonicznych*, Archiwum Fotogrametrii, Kartografii i Teledetekcji, Vol. 13, Wrocław 2003.

Metoda badawcza w rozpoznawaniu przyczyn i stopnia zniszczenia konstrukcji dachowej w zabytkowym neogotyckim XIX-wiecznym kościele św. Marcina w Krzeszowicach autorstwa Karola Fryderyka Schinkla

W artykule przedstawiono zagadnienie wskazujące, że zabytkowe budowle sakralne, których stan techniczny i estetyczny uległ dekapitalizacji, wymagają opracowania indywidualnego programu badawczego, szczególnie w takich branżach, jak: architektoniczna, konstrukcyjna, konserwatorska oraz charakterystycznych specjalistycznych ekspertyz. Specyfiką zabytkowych obiektów sakralnych jest ich indywidualizm wynikający z: okresu powstania (styl), miejsca usytuowania, konstrukcji, budulca, kubatury i kontekstu klimatycznego. W pracach badawczych należy przyjąć sprawdzone metody tradycyjne, nowoczesne oraz indywidualne metody dostosowane do indywidualnych charakterystycznych cech budowli. Wyniki opracowania rozpoznawczego są istotną bazą do przyjęcia prawidłowej logistyki przebiegu wymaganych prac budowlanych i konserwatorskich. Należy nadmienić, że obiekty, które zgłaszane są o dofinansowanie z puli Ministerstwa Kultury i Dziedzictwa Narodowego powinny być wnikliwie rozpoznane, w celu dokładnego określenia kosztów inwestycji. Podjęte działania rozpoznawcze prezentowane są tu na przykładzie neogotyckiego kościoła św. Marcina w Krzeszowicach i dotyczą remontu kapitalnego wież i więźby dachowej

Key words: roof framing, decapitalization, reconstruction

Słowa kluczowe: więźba dachowa, dekapitalizacja, odtworzenie

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Educational issues

Anetta Kępczyńska-Walczak*, Bartosz M. Walczak*

Contemporary architectural practice – a challenge for educational process

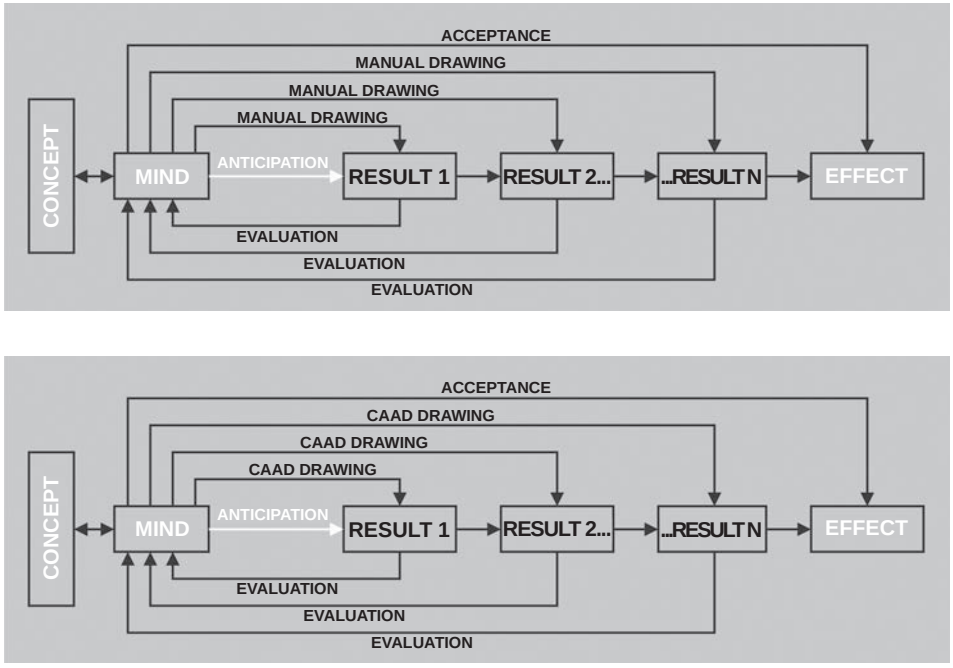

Fig. 1. The process of the project creation on the basis of traditional architect's practice – freehand or computer drawing (by authors)

Builders used drawings from the earliest times. The statue of the Sumerian ruler of Gudea (circa 2500 BC) – kept in the collections of the Louvre Museum – who is sitting on the throne and keeping a drawing of the temple plan on his lap can be considered to be the oldest drawing representation of the structure. Ancient civilizations contributed to the development of mathematics and geometry as well as the studies on proportions and in this way they set the trends of architectural thought development for the next centuries. The Roman creators of architecture commonly used drawings of projections and facades. In order to make the communication with clients easier, some of them tried to present a project by means of perspective drawings. Such a method of presenting the space developed and was popularized only in the period of the Renaissance.

* Technical University of Łódź, Institute of Architecture and Urban Planning.

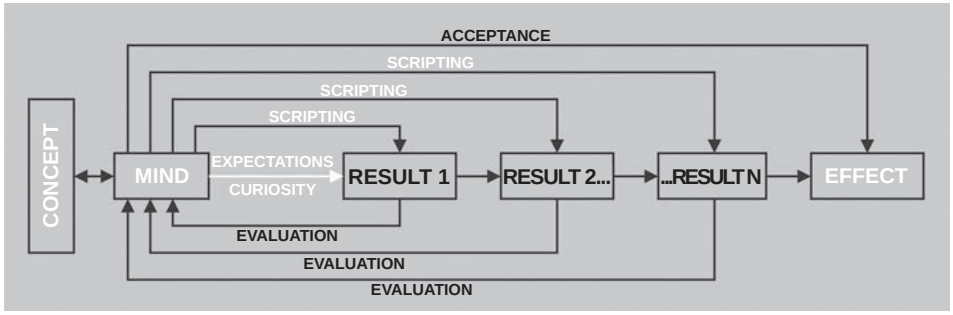

Fig. 2. The process of the project creation on the basis of parametric and generative methods (by authors)

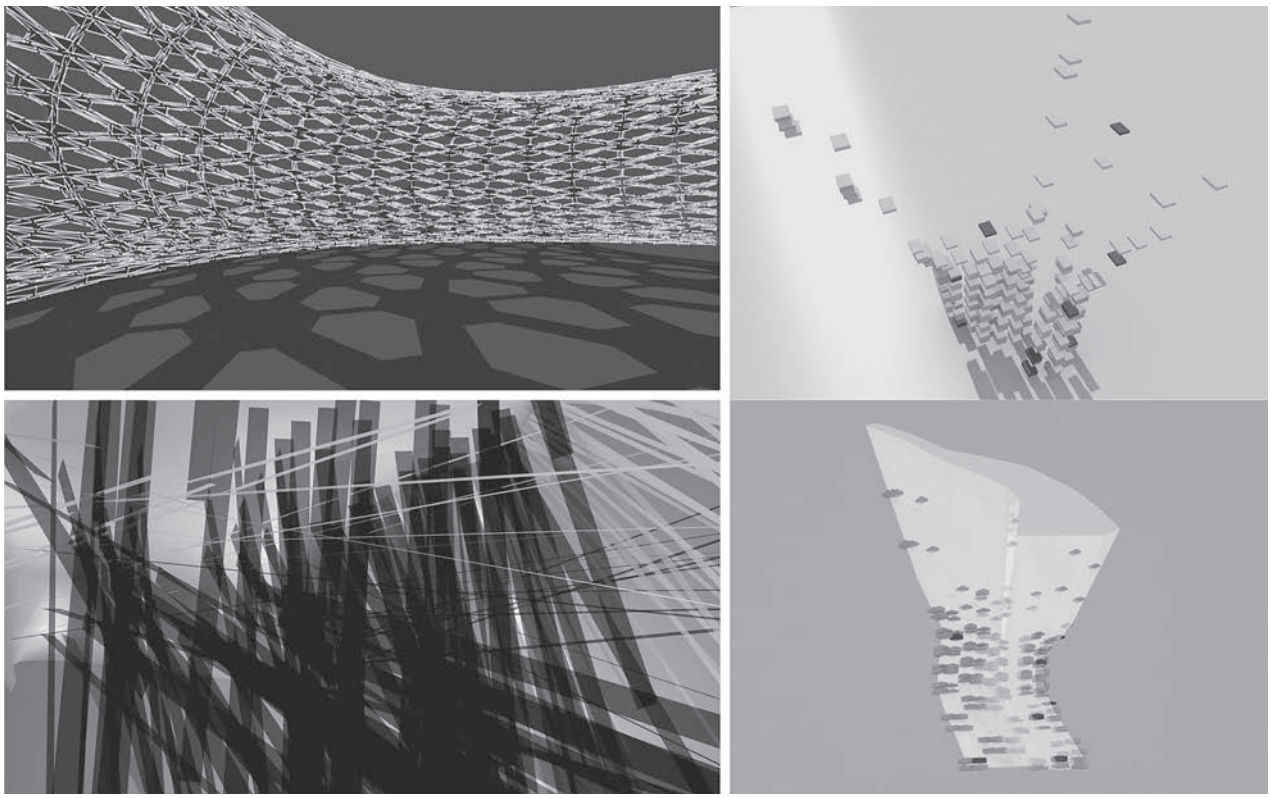

Fig. 3. Designs of IAiU students created during the first workshops (by authors on the basis of students' designs)

The architect was responsible not only for the project but also for its realization. He lived and created in the direct contact with constructions, materials and the process of actual building. Architects, who not only designed buildings but also used their profound knowledge and numerous skills in painting, sculpture and widely-understood engineering, performed a particular role in the period of the Renaissance. Dissonance between aesthetics and technology appeared only in the 19th century. S. Giedion confirms that a particular feature of the architecture of that period was isolation from technological development, in which he observes the manifestation of a division into architects and constructors[1] [1, 3]. From that time, architects were concerned with designing and construction engineers dealt with the realization of projects. Thus, no wonder architects were associated first of all with a drawing board, T-square and pencil until recently.

The process of creating a design can be regarded as invariable through centuries. It consisted in presenting the concept, which was first commenced in the architect's thoughts, in form of flat drawings. The eye and hand were responsible for the most precise imitating of the expected effect. Basically, this method has not been changed even after the introduction of programs which aid designing (Fig. 1). It should be explained that initially CAD abbreviation stood for Computer Aided Drafting or drawing. In other words, architects started using electronic drawing boards. The moment the systems were developed to the level of spatial modelling, the letter D was extended to designing.

Apparent simplicity of operating the programs, which dealt with composing simple objects with ready-made elements and with the possibility of seeing them in 3D (without the necessity to have the knowledge of descriptive geometry as it used to be) gave the impression that at the beginning of the 21st century it was possible for everyone – at least in theory – to become a creator and designer ('design your garden!'). Fascination with spatial model-

[1] Giedion S., *Space, time and architecture*, Harvard University Press, Cambridge 1959, pp. 209–216 (chapter „The schism between architecture and technology").

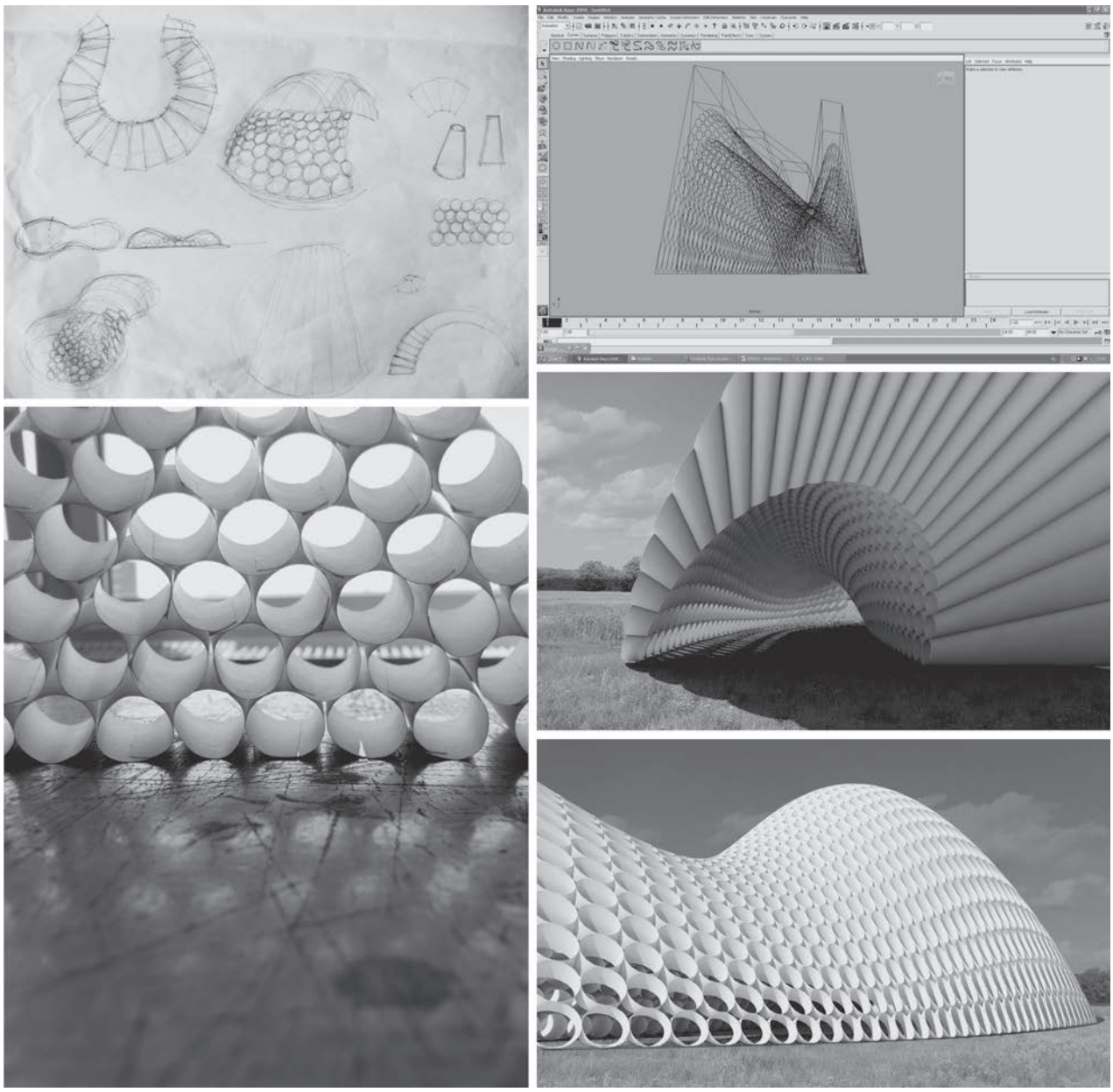

Fig. 4. Designs of IAiU students created during the second workshops (by authors on the basis of students' designs)

ling, visualisation and creation of technical documentation programs even made some people draw conclusions that 'thanks to new technologies architecture shall not be the faculty of university of technology any longer but it will come back to the academy of fine arts'[2] [4, 7].

During the recent years, numerous studies have been written about new possibilities which are provided for architects who use computer aided architectural design[3] [14]. Advanced tools and CAAD software, which in fact is within each contemporary designer's reach, allow creating and describing complicated forms and constructions[4] [8]. Thanks to new technologies, which made 3D designing possible, architects who solve complex spatial problems do not have to use complicated models as Antoni Gaudi used to do who constructed vault inverse systems by means of cords and plummets[5] [11]. Modern architects have at their disposal a wide range of programs which support designing, management, realisation and exploitation of the structure. BIM programs (Building Information Modelling) support not only the creation and transforma-

[2] Knap J., *Wirtualny architekt*, Wprost No. 28/2001 (972).

[3] *Inter alia*: Świt-Jankowska B., *Współczesne narzędzia pracy architekta, a jakość nowo projektowanej przestrzeni mieszkalnej*, ARCHITECTURAE et ARTIBUS, No. 2/2010, pp. 79–85; Krzaczek M., *Inteligentny Modeler Graficzny w komputerowych systemach wspomagania projektowania budowlanego*, typescript, Politechnika Gdańska, 2004; Górska A., *Integrating CAD and Manual Design Methods for Visual Science*, „Materiały Seminarium Geometrii i Grafiki Inżynierskiej", Script 8, Gliwice 2000, pp. 14–19.

[4] Kocaturk T., Veltkamp M., *Interdisciplinary Knowledge Modelling of Free-Form Design – An Educational Experiment*, [in:] Martens B. Brown A. (eds.) *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 465–474.

[5] Moravanszky, A., *Antoni Gaudi*, Arkady, Warszawa 1983, pp. 26–29.

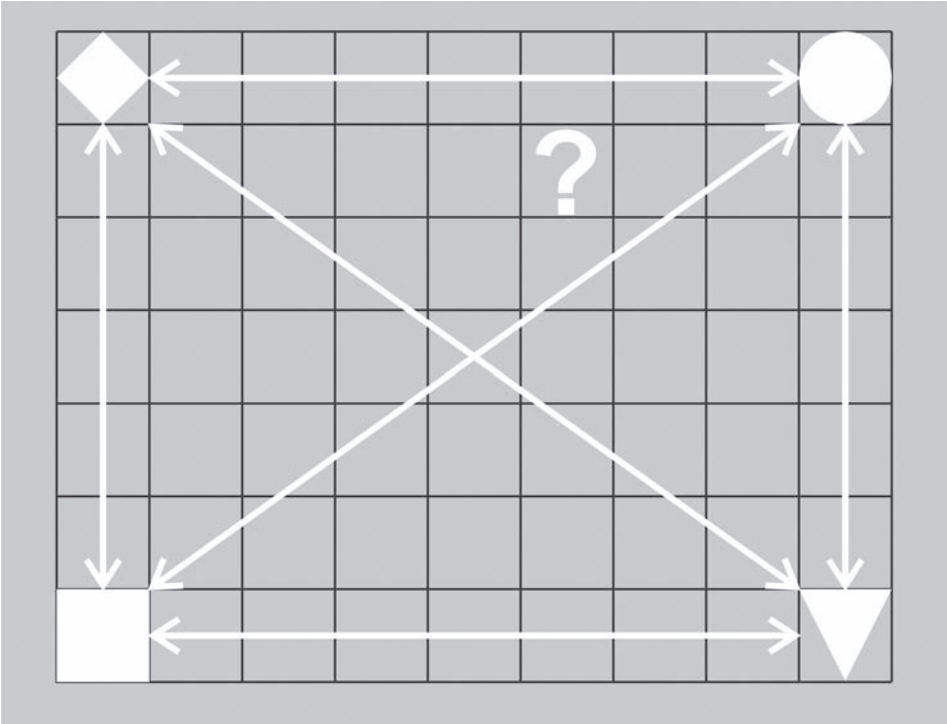

Fig. 5. Matrix illustrating the problem of designer's imagination limits. The arrows indicate transformations of figures. With appropriate software, we are able to obtain the shape which ought to be in the square with the question mark. But are we able to imagine it before we see the result on the screen? (by authors)

tion of geometry in the computer environment but they also control the construction of the structure, quantitative, materials, areas and cubage statements. Architects can also operate new methods of communication and information transmission, which are different from the old ones.

This breakthrough that we have been witnessing nowadays consists in another transformation of the architect's work. It is connected with a fluent transition from the design phase to its realisation, which is carried out totally on the basis of the digital platform. It is possible thanks to scripts (i.e. a kind of the computer programming language), which has been a domain of computer technologists and programmers. In this way, architects are faced with new challenges. 'In generative methods the architect does not directly model the form (…). In spite of this, the form is generated by the computer, while the architect controls it by means of a code or script. The designer's work starts resembling the work of the computer programmer very much (…). It consists in writing a computer program'[6] [12]. Moreover, designing of this type requires a high level of mathematical knowledge which in most cases the graduates from architecture schools do not have[7] [13].

For the first time in the history of architectural designing the process of creation is changing so diametrically. A different cognitive model appeared – digital continuum – smooth transition between architectural designing, engineering and realization. This introduces new conditions and dependencies between interdisciplinary domains which are connected with the designing process. With the usage of generative methods, designing does not consist in imitating a vision which was intended by the architect. It rather constitutes a quest for computer generated forms and their transformations until a satisfying effect is achieved. At the same time, the forms, which were not possible to be achieved, became feasible thanks to the usage of generative methods of designing (Fig. 2).

Faculties of Architecture of Warsaw and Wrocław Universities of Technology are proud to have introduced the newest solutions to the didactic process. Also in the Institute of Architecture and Urban Planning of Łódź Technical University some actions were taken up in this matter. Already in 2007 computer work-rooms were equipped with Autodesk Maya Complete 8.5 software. In the same year, similarly to the next years, several-day workshops of generative programming were organized in which invited foreign lecturers as well as designers from well-known architectural studios such as SOM – Skidmore Owings and Merrill oraz Zaha Hadid Architects took part.

At that time these precursory actions were carried out additionally to the obligatory schedule of classes. They aroused a lot of interest and a wide response from students. Unfortunately, so far this aspect has not been taken into account as regards the program of education.

During the first workshops, students were familiarised with the possibilities of Maya program and MEL script language (Maya Embedded Language). They experimented with simple software and checking effects in the virtual space. Later, they tried to write a script in order to achieve a spatial form in a control way – assumed *a priori* (Fig. 3). During the second edition, the participants had an opportunity to experience a real designing process a bit – from the idea, through its development, to the realization of the designed structure. It should be emphasized that thanks to such workshops, students are able to understand

[6] Piasecki, M., *Architektura generatywna*, http://www.sztuka-architektury.pl/ (access: 13.10.2010).

[7] Pottman H., Asperl, A., Hofer M., Kilian A., *Architectural Geometry*, Bentley Institute Press, Exton 2007, pp.i–iv.

the concept of generative designing but it requires a lot of time and exercises to acquire skills allowing them to operate the software fluently. The results of the workshops depended on the skills in using a new tool which aided designing and to a lesser extent on spatial imagination as well as a designer's concept (Fig. 4). It is not the case with CAAD 'traditional' software in which limited possibilities of the program along with the lack of skills in operating it did not allow visualization of the idea and imagination[8] [6, 15].

In consideration of the above, an appropriate introduction of programs which support designing in the education of future architects acquires particular significance. Unfortunately, it often happens that the so called 'CAD education' is identified with learning about a chosen computer program and this makes the students passive and unaware users of tools which they are not able to use in a complete way. In order to realise how challenging generative methods of designing are, it is enough to point out that a popular CAD application has about several thousand commands which an average user uses in 10 per cent only[9] [5, 9].

A digital revolution in architectural designing as well as CAD implementation in the construction industry are considered to be the most radical technological leaps in the history of architectural designing. This revolution requires from a designer algorithmic and procedural thinking as well as the skill of programming. The software is more and more complex and more difficult in operating. It also requires a specialist and computer science knowledge from the user. In the nearest future, education of the architect will be based on computer studies to a much larger extent, similarly to a situation in other engineering domains[10] [5]. In other words, the requirements and skills, which modern designers need, result in the fact that architecture must again be connected with engineering more strictly, but this time with the domains of computer studies and automatics. Therefore, can we say that – as it used to be in the past, when no difference between an architect and engineer-constructor was to be found – it is possible that the difference between an architect and a computer scientist will gradually be blurred now? Where are the boundaries of architecture and designing? Are we able to predict the final shape that is expressed by means of mathematical parameters before we see its visualization on the screen (Fig. 5)? Who is the real author – a human being or a machine?

In the past, buildings used to be materialized drawings. At present, they are rather materialized digital information – designed and documented by means of techniques of computer aided designing. Buildings are also constructed thanks to the machines which are computer controlled (MAD – *Machine Aided Design*) [11] [10]. Thus, we should appreciate great masters like Gaudi who were able to imagine complicated spatial forms and carry out their projects without having at their disposal computer techniques, in this way creating works of art which permanently entered the history of architecture[12] [2].

[8] Kępczyńska-Walczak A., *Contemporary Renaissance Architect – Yet Architect?,* [in:] Muylle M. (ed.), *eCAADe 2008: Architecture 'in computero' Integrating methods and techniques*, eCAADe/Artesis University College, Antwerp 2008, pp. 445–450.

[9] Kacprzyk Z., *Wirtualne modelowanie w projektowaniu*, II Krajowa Konferencja Naukowo-Dydaktyczna „Kształcenie na kierunku Budownictwo – problemy studiów wielostopniowych*"*, Politechnika Świętokrzyska, Kielce 2005.

[10] Kacprzyk Z., op. cit.

[11] Mitchell W.J., *Constructing Complexity,* [in:] Martens B., Brown A. (eds.), *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 41–50.

[12] Cf.: Burry, M., *Digitally Sponsored Convergence of Design Education, Research and Practice*, [in:] Martens B., Brown A. (eds.), *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 3–40.

References

[1] *Architectural Theory from the Renaissance to the Present*, Taschen, Koln 2006.

[2] Burry M., *Digitally Sponsored Convergence of Design Education, Research and Practice*, [in:] Martens B., Brown A. (eds.), *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 3–40.

[3] Giedion S., *Space, time and architecture*, Harvard University Press, Cambridge 1959.

[4] Górska A., *Integrating CAD and Manual Design Methods for Visual Sience*, „Materiały Seminarium Geometrii i Grafiki Inżynierskiej", Zeszyt 8, Gliwice 2000, pp. 4–19.

[5] Kacprzyk Z., *Wirtualne modelowanie w projektowaniu, II Krajowa Konferencja Naukowo-Dydaktyczna „Kształcenie na kierunku Budownictwo – problemy studiów wielostopniowych"*, Politechnika Świętokrzyska, Kielce 2005.

[6] Kępczyńska-Walczak A., *Contemporary Renaissance Architect – Yet Architect?,* [in:] Muylle M. (ed.), *eCAADe 2008: Architecture 'in computero' Integrating methods and techniques*, eCAADe/Artesis University College, Antwerp 2008, pp. 445–450.

[7] Knap J., *Wirtualny architekt*, Wprost, 2001, No. 28.

[8] Kocaturk T., Veltkamp M., *Interdisciplinary Knowledge Modelling of Free-Form Design – An Educational Experiment*, [in:] Martens B., Brown A. (eds.), *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 465–474.

[9] Krzaczek M., *Inteligentny Modeler Graficzny w komputerowych systemach wspomagania projektowania budowlanego*, typescript, Politechnika Gdańska, 2004.

[10] Mitchell W.J., *Constructing Complexity*, [in:] Martens B., Brown A. (eds.), *Computer Aided Architectural Design Futures 2005*, Springer, Dordrecht 2005, pp. 41–50.

[11] Moravanszky A., *Antoni Gaudi*, Arkady, Warszawa1983.

[12] Piasecki M., *Architektura generatywna*, http://www.sztuka-architektury.pl/ (access: 13.10.2010).

[13] Pottman H., Asperl A., Hofer M., Kilian A., *Architectural Geometry*, Bentley Institute Press, Exton 2007.

[14] Świt-Jankowska B., *Współczesne narzędzia pracy architekta, a jakość nowo projektowanej przestrzeni mieszkalnej*, ARCHITECTURAE et ARTIBUS No. 2/2010, pp. 79–85.

[15] Yüce Gün O., *Anti UV: Progressive Component Design in Cross Platforms*, [in:] Muylle M. (ed.), *eCAADe 2008: Architecture 'in computero' Integrating methods and techniques*, eCAADe/Artesis University College, Antwerp 2008, pp. 69–75.

Współczesny warsztat architekta – wyzwanie dla procesu dydaktycznego

Czy rzeczywiście istnieje architektura bez granic? Zależy jak zdefiniujemy to pojęcie. Czy granicę stanowi wyobraźnia?, zdolności rysunkowe?, wykonalność projektu?, umiejętność obsługi programów komputerowych wspomagających projektowanie?, ograniczenia oprogramowania CAAD?, a może jeszcze coś innego?

Współczesne pokolenia architektów dla rozwoju zawodowego i osiągnięcia sukcesów potrzebują wiedzy i umiejętności wykraczających poza zakres tradycyjnego warsztatu projektowego. W czasach renesansu architekci nie tylko projektowali budynki. Swoją głęboką wiedzę i liczne umiejętności wykorzystywali w malarstwie, rzeźbiarstwie, szeroko pojętej inżynierii.

Obecnie projektanci, podobnie jak wówczas, penetrują niezbadane rejony architektury i sztuki, stając przed wyzwaniami, jakie stawiają przed nimi nowe rozwiązania technologiczne.

Dzieła największych współczesnych architektów nie mogłyby powstać bez zaawansowanych technologii komputerowych. Należałoby postawić pytanie: Czy technologie CAAD nie wyprzedzają wyobraźni kreatora, podsuwając/dając gotowe rozwiązania? Jakie w związku z tym są potrzeby i oczekiwania w stosunku do procesu dydaktycznego? Dla pełniejszego zobrazowania problematyki przedstawiono wyniki warsztatów zorganizowanych w Instytucie Architektury i Urbanistyki Politechniki Łódzkiej.

Key words: architecture, education

Słowa kluczowe: architektura, edukacja

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Halina Łapińska*

Culture and education – how to teach non-architects about architecture – report from the workshop in the rural area of the Białowieża Forest

Taking care of the values of the cultural and natural environment, with regard for the needs of future generations as well as behavior, growth and development of civic and cultural awareness of the residents – is the statutory obligation of the local authorities provided for in their strategies. The strategy of Podlasie Province which is implemented through the "Program of Development of Culture of Podlasie Province until 2020" [2] provides the guidelines in respect of the protection of cultural heritage. It contains the permanent and long-term actions in the area of protection of material and non-material culture. The current expenditure on preservation of historical monuments is still too low and still, in spite of the needs, it is not of primary significance among many programs and undertakings which are being executed. In general it can be said that the management of historical monuments and buildings of cultural value by local authorities is not satisfactory, despite a considerable progress over the last few years and the growth in awareness of the necessity for protection of cultural heritage. Furthermore, the Program defines the role of local communities through their identification with the region and integration around specific plans and objectives of growth.

The mission of the "Program of Development of Culture of Podlasie Province" is: "To strive for social improvement in satisfying cultural needs, including the quality and level of participation in culture and creating its value by as many people living in this province as possible". Consequently, the biggest possible participation of the society and its education is of great significance. The non-governmental organizations also play a role in this process.

Podlasie Province demonstrates a high national, ethnic and religious diversity. The multicultural character of the region is its main asset and it should constitute the potential for its economic growth. Culture is one of the key areas of social and economic life. It builds the regional identity based on cultural heritage as well as modern achievements and it stimulates economic growth and creates new workplaces. It provides a great potential contributing to increasing regional competitiveness. "In Podlasie Province, which is neither an industry nor a financial center, culture should be one of the most significant growth and modernization factors but it's not and furthermore in popular awareness culture very seldom is connected with the problem of regional growth. Culture is thought of more as a kind of spiritual addition – valuable and needed yet often – last on the list of priorities which require support" [3].

The European funds can be a source for investment in culture. The high level of operations of non-governmental organizations, conducting educational, cultural and promotional activities in the region is a positive thing in Podlasie Province. The operations of cultural institutions supported by non-governmental organizations, schools, parishes and private persons help to activate local communities and get to most people living in Podlasie Province. The assessment of activity of the younger generation which was made in the program [3] indicates that it is small and unevenly distributed over the area of the province. The disproportions result from the differences in cultural infrastructure, lack of interesting offers, no access to those offers and economic barriers. It looks best near city communities, whereas remote towns and villages require special activities.

The rural areas in the Białowieża Forest region are a near border region which constitutes a complex economic, social and cultural organism. The location near the most valuable forested area in Europe should be an elevating factor for people who live there and their places of residence. In reality, however, the tourists are directed to different hiking trails and educational paths leading

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through scenic forests and avoiding villages, whereas the cultural treasures of the Białowieża Forest region are in fact extremely valuable. The area where such nations as Poles, Belarusians and Ukrainians have been living next to each other for many years has grown a specific character. Old customs, traditions and local language have been preserved there. Different religions are practiced and services are held in churches which people attend in large numbers. This also applies to the tradition of building. Wooden buildings are a characteristic feature of the forest villages. The wooden churches as well as residential buildings with their exquisite ornaments are marvelous. The process of replacing old wooden buildings with the buildings made of bricks or wood erected with the use of modern construction technologies is slower there. Many homesteads still maintain their original shape with unchanged buildings and facilities. However, transformations, modernizations and adaptations are visible practically in all villages. The traditional rural systems are extended on the outside, whereas new infill buildings are erected inside them with a strange, catalog architecture and modern design. This is done by new owners who are children or grandchildren of former owners as well as by new owners who bought abandoned homesteads as a bargain or willingly chose their place of residence in the country. These people, after years of living in a different environment where they moved to continue their education or to look for work, bring from there new experiences and new solutions. The application of the solutions brought from other places, sometimes from other countries, during renovation or adaptation causes damage to the old fabric. This poses a great danger to the traditional shape of forest villages. The resources which have been preserved until today should be protected against such activities. The best way to achieve this goal is still "work from scratch" that is education of as many people involved in this process as possible.

The Podlasie Heritage Society [3] is a non-governmental organization operating since 2004 (the author is one of its founders). The statutory objective of the society's operations is "to undertake and execute projects aiming at a sustainable development of the Podlasie region while observing the principles of the protection of its natural and cultural values". The areas of operations of the society include: activities supporting education and upbringing, culture and art, protection of cultural assets and national heritage, protection of natural heritage, activities supporting the growth of local communities, maintaining and popularizing the national tradition, cultivating Polish identity, development of national, civic and cultural awareness, supporting and popularizing the physical culture, sport, tourism and sightseeing as well as organizing recreation for children and youth. The following archeological workshops can be considered valuable projects executed by the society: "Let's Discover Our Past" as well as such subjects as "To Know, To Understand and To Accept", "Art Without Borders That Is Meeting Of The Generations" or "Rafting Through The Forest".

At present the Society is doing the project titled "School of Architectural Traditions of Northern Podlasie Region" [4]. Over the last two weeks of August 2010 architecture and ethnography workshops were organized within the framework of that project. The participants included the secondary school and university students from the Białowieża Forest region, from Hajnówka and Bielsko districts.

The objectives of the classes included the following:

– methods of conducting ethnographical and historical research,

– methods of making architectural and urban survey of valuable resources of wooden architecture in the Białowieża Forest region,

– creation of professional databases on the basis of Geographical Information Systems.

The program included meetings, lectures and talks by experts in history, architecture and culture of the region as well as time for fun and recreation. The workshops were free. All costs of accommodation and food as well as transport during the workshops were covered by the organizer. The participants lived on the farms which offer accommodation for tourists, where they would listen lectures as well as talks and where they would also describe the data collected in the field. The participation in the workshops was encouraged by the slogan: "Sign up to participate, it's free! You will spend time among friendly and competent people and at the same time you will help to save the cultural heritage of the Białowieża Forest region"[4].

The objective of the workshops was to educate the younger generation – secondary school and university students from the Białowieża Forest region – to teach them how to notice and experience the beauty of the area where they live by showing its value on sight as well as the features which build the "spirit of the place" where they, their parents and grandparents spend their everyday lives.

The most valuable buildings which are typical of the specific place were selected for the field workshops in the villages from eight districts. The selection was supported by local registers of historical monuments as well as by local officials who indicated specific buildings and places. The field classes were preceded by lectures given by specialists in the protection of historical monuments, ethnographers, historians, town planners, architects and photographers who presented some methods of documenting the existing resources, pointing to their value and the need to improve the quality. The workshop program was as follows:

Stage I – lectures, talks and presentations.

1. The workhops began with an introductory lecture on methodology of making architectural and urban survey, given by the author. It included the presentation of the successive steps of the procedure: from collecting input materials (information, maps, publications, field survey, photo-inventory, on sight measurements to the methods of describing the collected materials. The youth also learned about the examples of architectural and urban survey, made during vacation trainings by the students of the Faculty of Architecture at Białystok University of Technology. They included field sketches (Fig. 1), color urban inventory maps, drawings of facades, village houses and architecture, survey drawings of buildings and their decorative details (Figs. 2, 3).

2. The next lecture regarded the ways of photographing objects of architecture. After a theoretical introduction

Fig. 1. Free-hand sketch of surveyed and mapped building, by Monika Maksimowicz

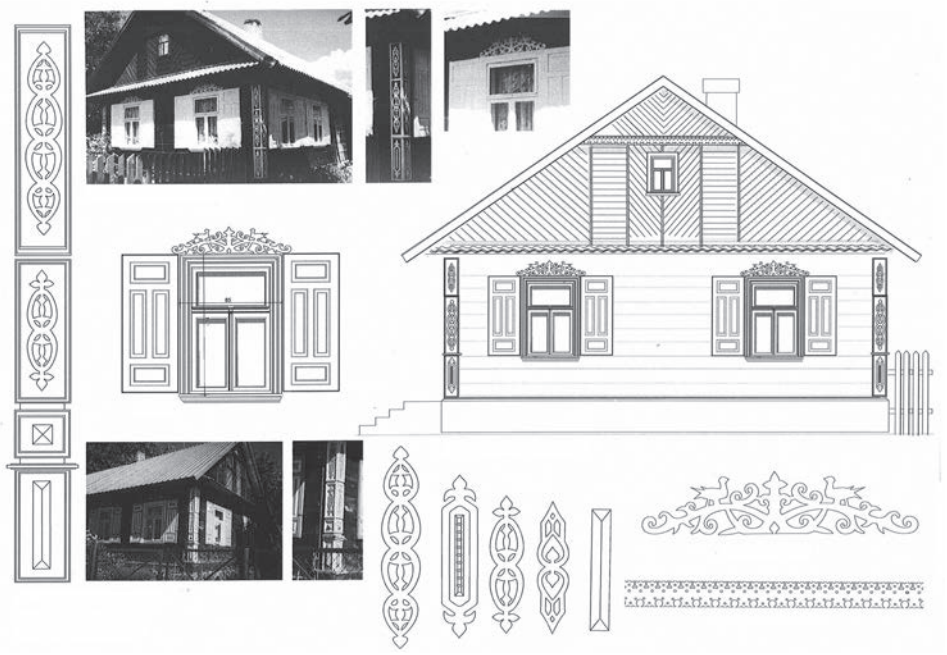

Fig. 2. Inventory drawing of residential building's elevation and decorative details, by Monika Maksimowicz [2]

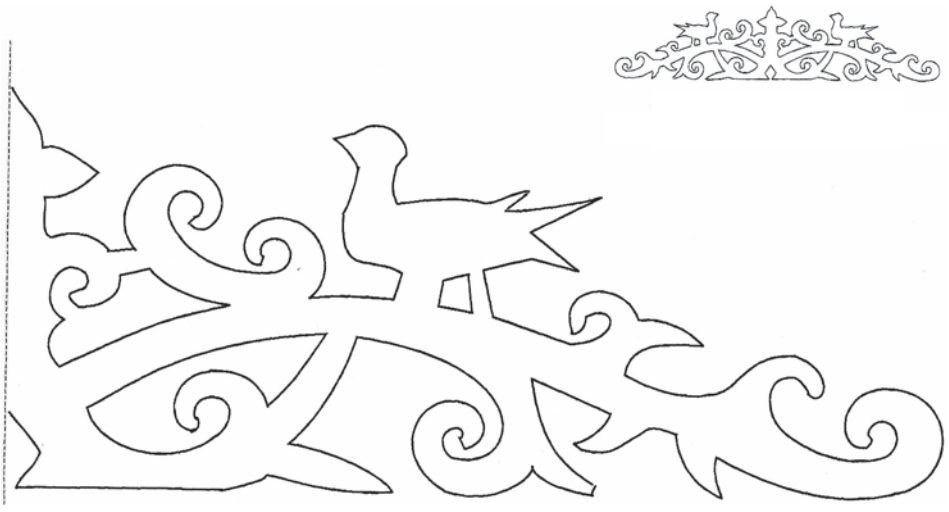

Fig. 3. Stencil-model of decorative window head, by Monika Maksimowicz [2]

Fig. 4. Group patron's explanation concerning the precision of measurements. Photo by author

the participants under supervision of professionals took pictures of landscape and architecture, individual buildings and decorative details from proper perspective.

3. The most interesting objects of architecture in the Bialowieza Forest were described by a worker of the Museum of Podlasie Region in Białystok.

4. The first stage was closed with a lecture on the use of the Geographic Information Systems in creating the database about architecture.

Stage II – field work – every day in a different village in eight selected districts.

1. The field inventory classes under supervision of academic teachers were conducted in groups (Fig. 4). Specific members of the groups were assigned specific tasks. Two persons were collecting data on the buildings being surveyed from their owners, residents and local officials. While doing that they used the questionnaire prepared by the workshop organizer in which the most important issues were listed e.g. general data such as the name and address of the building, including their name in local dialect, date of construction, history of erection, builder and owner as well as a sketch of location of the building in the homestead, names of individual rooms, building and finishing materials, description of decorative details, information about tools and furniture. The data regarding renovations, modernizations altering the original shape were also important. Other persons were responsible for taking pictures of buildings, interiors, furniture as well as details. Still others were making an inventory note, detailing a sketch of the layout of the rooms in the building with their names, a drawing of elevations and a drawing of decorative details. Three other persons were taking

Fig. 5. Measurement of corner decorations of residential building, Czyże village. Photo by author

Fig. 6. Measurement of the kitchen stove, Czyże village. Photo by author

measurements with the use of a tape measure and gave readings to be included in the drawings. The field sketches are an indispensable element of collecting data, and the participants were encouraged to make them. The explanations of the principles of the perspective, presentation of free-hand sketches (Fig. 1), drawing techniques, methods of application of different techniques and drawing instruments: pencil, pen and ink, charcoal proved helpful. The students were willing to present their own drawing skills and attentively listened to professional advice.

2. Small group classes covered the description and analysis of collected materials.

3. The youth participated also in the ritual of blessing of the fields and homesteads.

4. As a part of learning about the traditional house building crafts there was a visit to the open-air ethnographic museum in Ciechanowiec and Białystok Museum of Village.

Over two weeks of classes the following were surveyed: rural systems, typical farmsteads, individual wooden buildings and their ornaments. During the workshop it became clear that the traditional cultural resources which build the identity of the village are not appreciated by the people who need to be shown their great value and realize it. This can be done most effectively by working together in the field under supervision of professional patrons. Collecting data made the youth realize the existence of elements creating the valuable fabric in the villages, whose presence they had not noticed earlier. It was surprising to see their interest in local names of furniture, rooms in village houses and traditional names connected with the farmstead. They were thrilled to remember the names which they knew as they were used by their grandparents. They were eager to find out the history of the buildings, names of the builders, craftsmen and their apprentices. The traditional old living quarters, which earlier had been considered unattractive, became valuable in their opinion.

One should hope that the workshops would help their participants to notice, appreciate and correctly interpret the reality surrounding them. May the saying of one of the participants: "Now I know what's nice in my village" be a good omen of that.

References

[1] Łapińska H., *Inwentaryzacja zagospodarowania terenu – propedeutyka metod sporządzania*, Architektura, 1999, Zeszyty Naukowe 18, Białystok, p. 105.

[2] Łapińska H., *Krajobraz kulturowy gminy Narew – próba skatalogowania cech urbanistycznych, architektonicznych oraz elementów zdobnictwa*, Białystok, 2005 (typescript).

[3] Program of Development of Culture of Podlasie Province until 2020 (ww.wrotapodlasia.pl/pl/cultura/program_rozwoju_cultury)

[4] http://narew.home.pl/

[5] http://www.podlasie.org/

Kultura a edukacja – jak uczyć o architekturze nie-architektów – sprawozdanie z warsztatów inwentaryzacyjnych wsi rejonu Puszczy Białowieskiej

Obszary wiejskie są obecnie w różnym stopniu zagospodarowywane i przekształcane. Ich współczesny obraz oraz tempo przekształceń zależy od czynników natury ekonomicznej, zaś kierunki zmian, jakim są poddawane, zależą od stopnia świadomości mieszkańców. Istnieje potrzeba edukacji wszystkich uczestników tego procesu, poczynając od młodzieży szkolnej.

Właściwym miejscem dla przeprowadzenia tak rozumianej edukacji były warsztaty, zorganizowane przez Stowarzyszenie Dziedzictwo

Podlasia (z udziałem autorki) dla uczniów szkół średnich, mieszkających w rejonie Puszczy Białowieskiej. Polegały one na inwentaryzacji istniejących tradycyjnych zasobów architektonicznych wsi, w których mieszkali uczestnicy. Zajęcia w terenie poprzedziły wykłady pracowników uczelni oraz specjalistów: architekta, urbanisty, etnografa, informatyka, fotografika, którzy przedstawili metody dokumentowania istniejących zasobów, wskazywali na ich wartość oraz potrzebę poprawy jakości. W ciągu dwutygodniowych zajęć zinwentaryzowano: układy ruralistyczne, charakterystyczne zagrody, poszczególne budynki drewniane oraz zdobienia.

W trakcie zajęć okazało się, że tradycyjne zasoby kulturowe, stanowiące o tożsamości wsi, nie są dostrzegane przez mieszkańców, wymagają pokazania i uświadomienia im ich wartości. Najefektywniej można tego dokonać, pracując wspólnie w terenie.

Key words: culture, architecture, education

Słowa kluczowe: kultura, architektura, edukacja

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Ewa Łukaszewicz-Jędrzejewska*

Architecture in painting – in search of third dimension

Two white rectangles

A huge while rectangle put on the easel and a huge white rectangle on the drawing board – two planes creating a coordinate axis. What's important for an art historian is the points where y-axis and x-axis cross, creating a drawing, illustration of synergy of both media of artistic expression. Vitruvius – lover of eurythmy, symmetry, illusionistic painting and a module based on human body as a pattern of good proportions – is the person who symbolically combines these two areas of expression.

Vitruvius demands that artists only precisely imitate reality and especially the illusions of spatial depth and third dimension. There is one more aspect of the Vitruvian lecture – a colorful tale of antiquity that actually could be the basis of the scenario of a virtual game called "the world of an architect" whose main characters would be a hero-superman and an environmentalist, an incorruptible architect. a philosopher and a poet, an expert in painting and a constructor of "ballistas, scorpions and other war machines" [7, pp. 16–17].

Huge white rectangle put on the easel

In my teaching classes I have students of the Academy of Art and Design, Faculty of Ceramics and Glass who chose the specialization in restoration and reconstruction of ceramics and glass. These are difficult studies which require adequate knowledge of all strictly artistic subjects obligatory for all students of the Academy such as drawing, painting and sculpture as well as perfect ceramic craftsmanship. This area of knowledge requires not only knowledge of application of the techniques and technology of ceramics and glass but also specialist knowledge in the scope of chemistry, physics, and technical drawing required in the designing process. The selected specialization – restoration and reconstruction of ceramics and glass – requires knowledge of history of architecture, with special attention to the history of details and architectural decorations, ability to recognize, date, analyze, document, restore and stylize them. It requires from the students almost "Vitruvian" inquisitiveness and work discipline, which is often difficult to find among the temperamental students of the Academy of Art and Design.

The course of studies teaches humbleness towards material and technology. The simple basic ceramic forms made on the wheel or built from rolls of clay gradually introduce the students to the world of spatial geometry – the third dimension. During classes on style recognition the students begin their journey to the past and they learn about the canon of divisions of entablature, composition of friezes, discipline of architectural compositions employed in the Middle Ages and modern times as well as to solve puzzles of eclectic decorations.

During the classes in conservation documentation, which the students take at the same time, they deal with the basic technical problems connected with the drawn copies of details as well as terminological, stylistic and typological problems. The students stand in front of artifacts without any basic description tools which would enable them to understand their contexts and relations with the history of architecture. The sensitive students who developed a sense of form and acquired manual skills as well as knowledge of compositions of architec-

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tural details begin with micro-scale structures, studying historicizing and eclectic furnaces where they see architectural details in most fantastic relations. However, due to the fact that the students lack any specific knowledge of art history – that subject is not included in the curricula of public secondary schools – the knowledge they learn in classes is often not connected with specific cultural context.

Describing architecture

Since the 1950s cultural studies have been an interdisciplinary field of research dealing with relations between artifacts, objects or phenomena within the scope of material culture in its broad sense and its recipients. For an art historian operating in that domain what is especially interesting is the area of visual culture studies. It is a task of a researcher dealing with the history of architecture to look at an object in the whole context of aesthetic phenomena accompanying that object and place it in the postmodern discourse which is sometimes far from a positivistic description [1, pp. 133–135] [1].

The specific features of my classes with the students require also research of the ability of an object of architecture to communicate with contemporary recipients who mentally operate in two spheres – material world and virtual world. In that relation an object of architecture becomes one more visual message searching for a way to the consumer of the mass media culture. The reception of such a message depends not only on the cultural foundation of the recipients but also on the degree of their current activity in culture. The students of the Academy of Art and Design constitute a specific target group, meeting at the same time the specific criteria of the author (sender) of the visual message as well as exceptionally critical and detached recipients. The educational content dedicated to that group should then demonstrate features that would distinguish it from the information noise and the visual pulp of the mass media. In such a context the way in which the visual information is read and absorbed or rejected will depend on decisively subjective factors. In extreme cases it will be an outright rejection of the didactic proposal, manifested often by such claims as: *We won't ever need it* or *We've already seen it.*

Such attitudes – seen only too often – on the part of the recipients practically discredit the traditional method of a positivistic lecture on the history of architecture. In the light of the multitude of biographical, historical and topographical information in the area of art history which is readily available to the Internet users, it does not seem necessary to further create or copy the encyclopedic texts. In contemporary didactics it is more important to ask questions which would enable studies of contextual art history and opening historical and artistic canon for works which are present in the visual sphere is only tenuously or which are absent in that sphere altogether.

[1] Positivism is a term describing a research method which relies exclusively on facts, excluding their interpretation. In art history it is a method of detailed description of a formal work of art, taking into account the history of its creation, symbols, motifs and biography of the artist.

Fig. 1. Hubert Robert, *View of the Grand Gallery of the Louvre*, 1796

Fig. 2. Paul Delvaux, *Temple,* 1949

Reading architecture

The theory of *reader-response* assumes that the significance of text "occurs" as a result of reading and it does not exist as an earlier imposed element of text [2]. Art historians have adapted that theory to research visual art where each cultural phenomenon which is subject of interpretation is the "text". Wolfgang Kemp, who created the methodology of the aesthetic of reception, was critical of the traditional techniques of transfer presenting works of art as lonely beings with no contextual connections and described them as *ubiquitous, homeless, relocated* [4, pp. 180-196]. Introducing the term of "implied reader", Kemp also assumes the existence of a specific viewer with specific visual experiences and he considers reading architecture to be another visual experience. It corresponds to the opinion of Roland Barthes who, while discussing the practical applications of the *reader-response* theory, states that *the pleasure of the text lies not in pinning down meaning, but in enjoying the free play of words – the gliding of signs – as the reader catches provocative glimpses of meanings that surface only to submerge again*[2]. While preparing the presentation material for classes in style recognition I used the *reader-response* theory. An image of architecture in painting was the "text" and the student of the Academy of Art and Design was the "implied reader". While selecting iconography I also tried to go beyond the "historical and artistic canon"[3].

[2] Quote after D'Alleva A., *Metody i teoria historii sztuki*, Kraków 2008, p. 135.

[3] This is what I call the artworks which are universally recognizable, copied in various forms and at present in the social visual sphere as well as in the media.

Lecture structure

Condition 1

Determining the degree of satisfaction

I will go back to Roland Barthes' statement: *the pleasure of the text lies not in pinning down meaning, but in enjoying the free play of words – the gliding of signs – as the reader catches provocative glimpses of meanings that surface only to submerge again.* I make an interpretation of text in such a way as to introduce categories referring to the process of viewing understood as one more visual experience: *the pleasure of the view is not the pleasure of the text lies not in pinning down meaning, but in enjoying the free play of visual associations – the gliding of details – as the viewer catches provocative glimpses of details of the described images that surface only to submerge again.* In practice this means that the selected image should have the qualities stimulating the viewer to perceive it actively, to analyze its cultural context, to discover its message; it should demonstrate the features evidently distinguishing it from the series of postcard-like "objects of architecture" – slides used for decades in lectures on the history of architecture. Only in this way can the first condition be met – "the pleasure of the view".

A good example of meeting that condition is the reaction of the viewers when they are in contact with the painting by Hubert Robert *View of the Grand Gallery of the Louvre* (Fig. 1).

The basis of the discourse is the situation of "a painting within a painting" with some narrative motifs – a study of copies made by people in an interior. During the projection three levels of perception connected with the *reader-response* process were observed. The first one – comparing the composition of the painting to framing a movie shot, long perspective and closing up in a long shot. The viewers felt "ushered into" an architectural interior of the painting, the perspective of the gallery. The term *virtual gallery* was used. It was the key moment before going into the second level of perception, consisting in discovering the disposition of the interior and the architectural decorations of the Grand Gallery of the Louvre. In the conversations about the painting, they recalled their trip to the Louvre and the crowds of visitors everywhere *blocking the view.* The objective of their trip was *the paintings not the architecture*. The painting by Robert became a pretext to discover the components of the architectural interior, to search for details and elements of architectural decoration. The next step was the attempts at reading the "paintings within a painting" and recognizing the ancient buildings presented in them. The classes were open, the attempts at identifying the motifs were corrected by the teacher, and the correctly identified and named details were incorporated into the dictionary. The third level of perception was connected with the attempts at making a drawing copy of the identified details and finding templates [5, 6, 7, 8]. The drawing exercises were connected with the subject of style recognition and with specific requirements of the conservation documentation – making a drawing copy on the basis of iconographic presentation.

Condition 2
Competences of the "implied reader"

The second stage of learning the canon of ancient architecture with the use of the *reader-response* method was the analysis of the painting by Paul Delvaux, *Temple* (Fig. 2).

That painting was selected because of the fascination with the world of surrealists which is popular among my students – so the competences of the readers – universally limited to one author – Salvador Dali. In this case the "pleasure of the view" was connected with the element of surprise and the anxiety to learn about the works of a different artist. Additionally, the third condition was met, namely opening of the historical and artistic canon by introduction to the illustration material an artwork by Paul Delvaux – a painter who is poorly represented in the popular presentation of art.

During the conversation about the painting it was important to read its symbols and identify the surrealistic dictionary as well as to notice the code applied by Delvaux to make contact with the viewers. The key moment was achieved in this way to get to the second level of perception, consisting in discovering the principles of construction of an ancient temple, disposition of its interior and the components of architectural decorations.

The third level of perception was connected with the attempts at making a drawing copy of identified details and finding templates, finding analogies and deviations from the canon. The drawing exercises connected with classes were by their topics connected with the subject of "style recognition" and the requirements of the conservation documentation – making a drawing copy on the basis of iconographic presentation as well as comparative analysis of architectural details and elements.

Conclusions

The classes were conducted in a small group of six students, so it was possible to concentrate, exchange information freely and talk with the lecturer as well as do some exercises. Apart from the multimedia presentation of a series of paintings, additional aids included the templates used by Alberti, Vignoli, Dolmetsch and Koch's tablets, fine art dictionaries and lexicons of iconography. The basis of the didactic success is in this case individual participation of the students, use of their sensitivity and emotions. The *reader-response* theory, being an extremely subjective learning tool used in the analysis of an artwork – artifact – object – requires such a commitment. In the case of presented classes the theory becomes practice which I called a *visual-response.*

References

[1] D'Alleva A., *Metody i teorie historii sztuki*, Kraków 2008.
[2] Barthes R., *Przyjemność tekstu,* przeł. A. Lewańska, Warszawa 1996.
[3] Hall S., *Culture, Media, Language: Working Papers in Cultural Studies 1972–1979*, London 1980.
[4] Kemp W., *The Work of Art and its Beholder*, [in:] *The Subjects of Art History: Historical Subjects in Contenporary Perspective,* Cambridge 1998.
[5] Koch W., *Style w architekturze*, Warszawa 1996.
[6] Palladio A., *Cztery księgi o architekturze, 1570*, przeł. M. Rzepińska, Warszawa 1958.
[7] *Witruwiusz, o architekturze ksiąg dziesięć*, przeł. K. Kumaniecki, Warszawa 1999.
[8] Vignola J.B., *Zasada pięciu porządków architektury, 1562,* przeł. K. Tymiński, Warszawa 1956.

Architektura w malarstwie – w poszukiwaniu trzeciego wymiaru

Tematem referatu jest metoda nauczania historii architektury, jaką autorka prowadzi ze studentami Akademii Sztuk Pięknych we Wrocławiu, którzy wybrali specjalność rekonstrukcja i restauracja ceramiki i szkła. Studenci – artyści – są specyficzną grupą docelową, która z trudem przyjmuje tradycyjną formę wykładu, często wprost manifestując swój brak zainteresowania zagadnieniami pozaartystycznymi. Założeniem merytorycznym programu było wykorzystanie na zajęciach ze stylo-znawstwa i dokumentacji konserwatorskiej zainteresowania studentów historią malarstwa do prezentacji wątków ściśle związanych z wiedzą o architekturze i dekoracji architektonicznej. Ideą programu było praktyczne wykorzystanie w procesie dydaktycznym teorii *reader-response* Rolanda Barthesa i metodologii estetyki recepcji Wolfganga Kempa. Bazą ilustracyjną wykładu, prowadzonego z zachowaniem rytmu chronologicznego, stał się zbiór obrazów pochodzących spoza kanonu historyczno-artystycznego, w których przedstawiono wizerunki obiektów architektury w różnych kontekstach. W wykładach-prezentacjach znalazły się dzieła, w których detale i elementy architektoniczne oraz ich relacje przedstawione zostały w sposób niemal wzornikowy. Znalazły się w nich obrazy z obiektami architektury w tle – architektury realnej i utopijnej – które, towarzysząc narracji sceny, stawały się dla studentów „tajemniczymi obiektami w tle", obiektami pobudzającymi ciekawość i chęć ich poznania. W referacie przedstawiono teoretyczne podstawy metody oraz przykłady realizacji dwóch spotkań – wykładów, połączonych z praktycznymi ćwiczeniami.

Key words: architecture in painting

Słowa kluczowe: architektura w malarstwie

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Barbara Misztal*

Domes in architecture

Introduction

Architecture structures are a form of presentation of significant message of the period when they were built. Architecture of centers of power, religious cults or culture is the synthesis of knowledge about communities that built them. Ecclesiastical and prestigious structures were often crowned with domes to develop a prominent structural landmark. In Eastern and Western civilizations, domes were built in order to emphasize the prestige of the structure and develop representative interiors of representative buildings. The construction designs of domes reflect the technical knowledge and culture of specific epochs.

Selected elements of the history of construction of domes

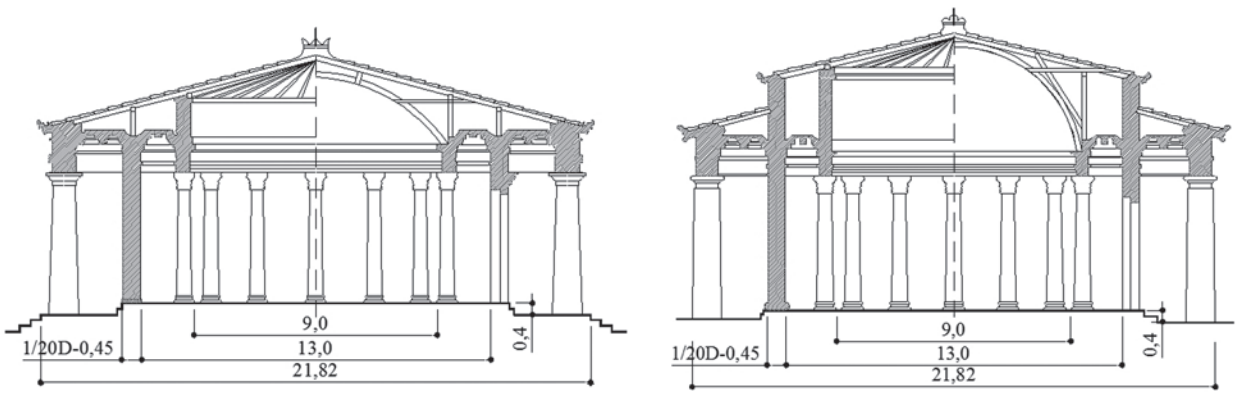

Fig. 1. Reconstruction variants of the roof on the Aeschylus' Temple in Greece according to [2]

Depending on geographic location, in different proportions, the first materials which were used to build domes included stone, clay, and wood. Due to its availability in the Mediterranean region and its greater durability, stone was applied in construction of monumental structures in Egypt, Greece, and Rome.

Ancient Greece contributed to building its innovations which made the most of the best properties of stone and wood. In Greek temples, the walls were built of stones whose thickness was 1/20 of the distance between the walls. Such proportions were achieved for instance in the temple of Aeschylus in Epidauros, designed by Theodoros from Samos which was built around 370 B.C. The small thickness of stone masonry walls indicates that they supported light timber roofs. The distances between walls and piers show that they could not have been simple beam

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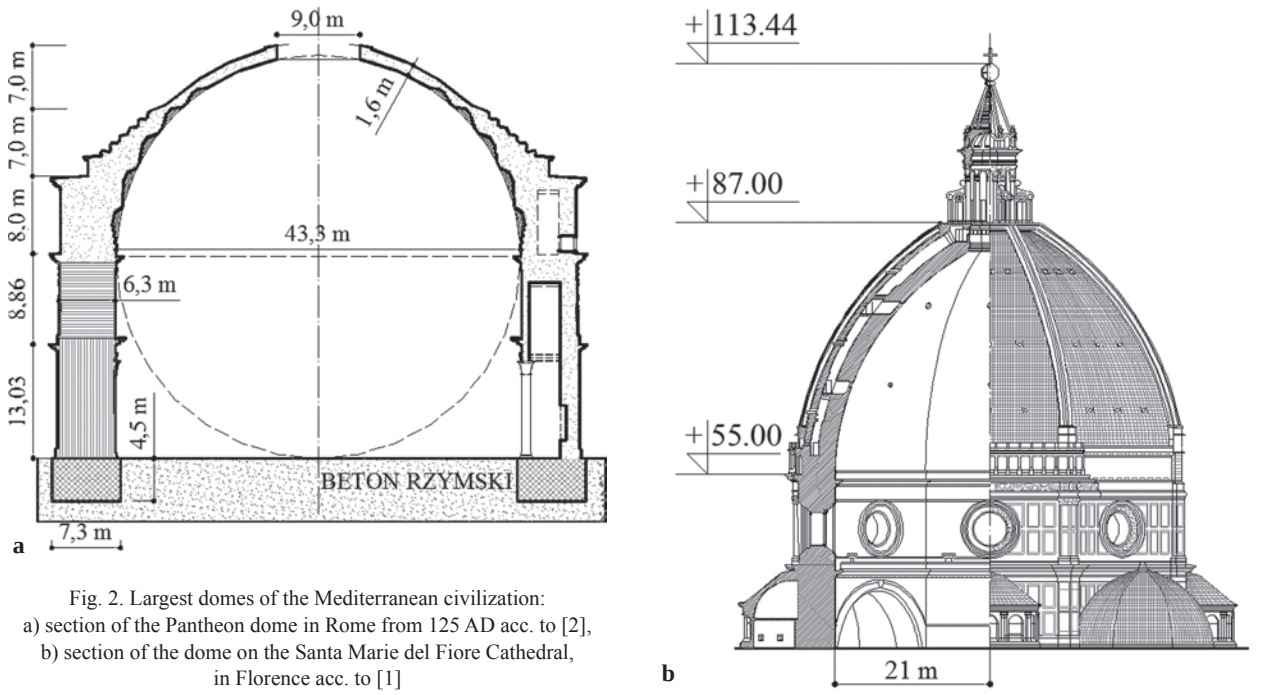

Fig. 2. Largest domes of the Mediterranean civilization: a) section of the Pantheon dome in Rome from 125 AD acc. to [2], b) section of the dome on the Santa Marie del Fiore Cathedral, in Florence acc. to [1]

roofs. The distances between piers indicate a system of trusses or arches. Figure 1 shows two variants of the roof on the Aeschylus by A. Kuźniecow [2]. The construction design of the temple's walls and roof can indicate that the Greeks possessed knowledge of the polygon of forces and knew how to apply it in building designs.

The development of stone domes in ancient Rome is connected with the increasing demand for prestigious structures with large representative interiors. Romans could adjust the shape of domes to pressure lines. With greater dimensions of representative rooms, the application of fully stone domes was connected with the use of a lot of materials. That is why the thickness of the walls in the prestigious structures in Rome topped with domes was 1/6 to 1/7 of their diameters [2]. However, due to their durability, the domes were built concrete and stone so they would survive wars and barbarian raids. It resulted in strengthening the patterns and facilitated their repetitions. It also contributed to the development of many masonry domes in the south of Europe.

In ancient Rome in 125, the largest axially symmetrical dome – Pantheon was built under supervision of Apollodoros [1]. The construction of the dome was made of Roman concrete, and the mass of the shell calculated for 1 m^2 of the section was about 6000.0 kg [3]. Figure 2a shows the section of the Pantheon dome and its dimensions.

The search for lighter solutions of sail masonry roofs and sufficiently strong timber scaffold needed for their construction lasted for thirteen centuries. In 1412, the construction of the double-shelled dome of the Santa Maria del Fiore Cathedral in Florence (Fig. 2b) [1] began; its outer 75.0 cm thick masonry shell was placed on octagonal drum with its 17.0 m long sides, 55.0 m above the floor level.

Attempts at erecting a scaffold under a double-shelled masonry dome demonstrated how difficult it is to build a sufficiently strong scaffold made of wood – which was

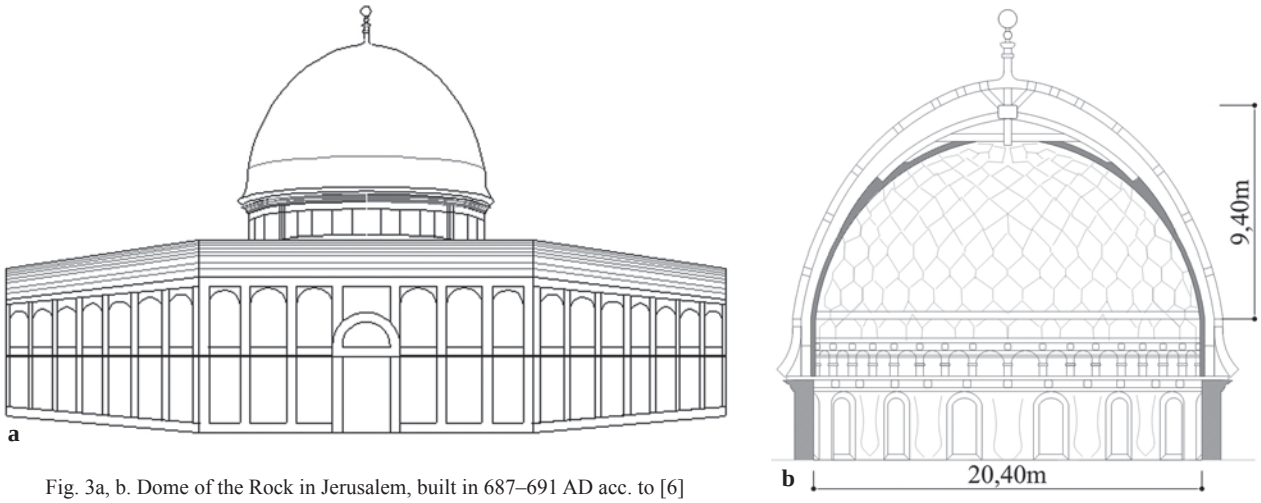

Fig. 3a, b. Dome of the Rock in Jerusalem, built in 687–691 AD acc. to [6]

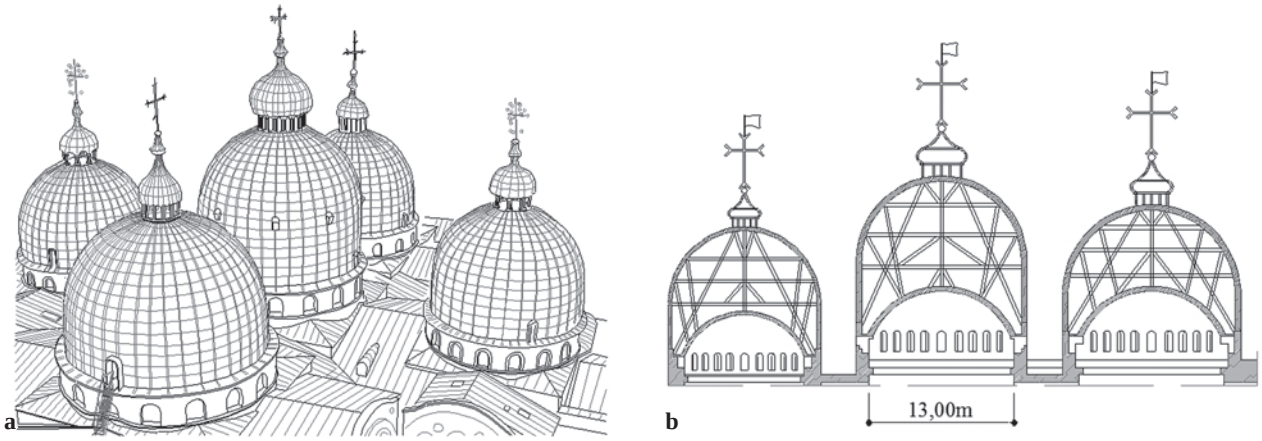

Fig. 4. Venice - Saint Mark's Cathedral, 1063–1031 according to [1]:
a) view of the roof, b) cross section of the three domes acc. to [1]

the only known technology then – to hold the massive masonry dome shells.

In 1542, the double-shelled dome of St. Peter's Cathedral in Rome (42.52 m in diameter and 52.0 m high) designed by Michael Angelo was built. The mass of that dome is about 6800.0 kg per 1m^2 of the section [3].

In the 7th and 8th centuries, double and triple-shelled domes appeared in Arabian architecture. In the years 687–691, [6] in Jerusalem a dome was built from Lebanon cedar wood as a double-shelled semicircular dome 20.4 m in diameter (Fig. 3).

The unknown constructor of the dome deliberately applied knowledge of possible separation of external and internal loads in order to build a double-shelled dome. The builder of the dome 745 years before the construction of the Santa Maria del Fiore Cathedral in Florence, designed and built a double-shelled dome. Probably this is the very first rod construction where the outer wooden construction bears the weather loads, and the inner one bears its own dead load and interior decoration. The dome's double-shelled construction consists of the outer shell, king-post truss construction, and the inner brick dome braced at the keystone to the outer dome. It is unknown whether this building technology was introduced in this area by the builders from the areas full of forests or these are examples confirming high development of civilization and technical of Arab craftsmanship in the Middle Ages in comparison to medieval w Europe.

As a result of the prestige requirements in Europe and increasing dimensions of masonry domes, their weight exceeded technological capabilities. In order to satisfy the ambitions of wealthy investors it was necessary to apply lighter solutions of dome construction. What appeared was double-shelled masonry domes combined with wooden scaffold needed in the dome construction stage. On the basis of preserved accounts, it was found that the invention of a lighter double-shelled masonry dome with the shells connected with the use of inner wooden construction was known in Europe in the Middle Ages. Examples include the domes from the years 1063–1031, described in [1] (1996), built in St. Mark's church in Venice. Figure 4a and b show the view and section of the dome, the biggest of which in the middle has the 13.0 m long span between the walls. Lighter than the masonry single- and double-shelled, the triple-shelled dome enables the separation of loads. The lower masonry shell bears its own dead load and interior decoration. The upper one, strengthened by the inner wooden construction bears the weather loads.

Figure 5 shows another example of application of wooden scaffold creating the third shell of the dome. This

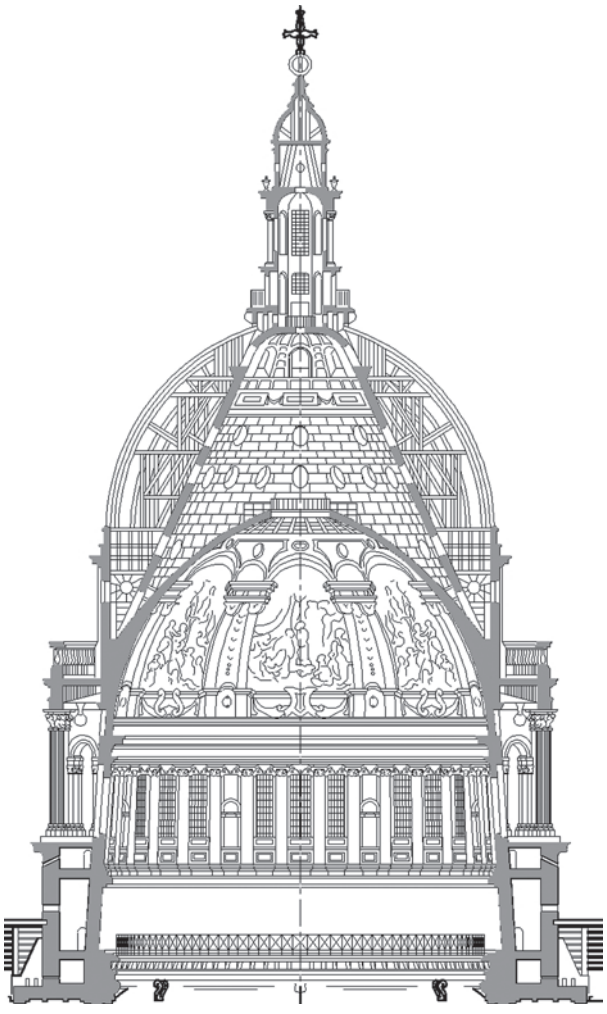

Fig. 5. London – Saint Paul's Cathedral, 1710 acc. to [1]

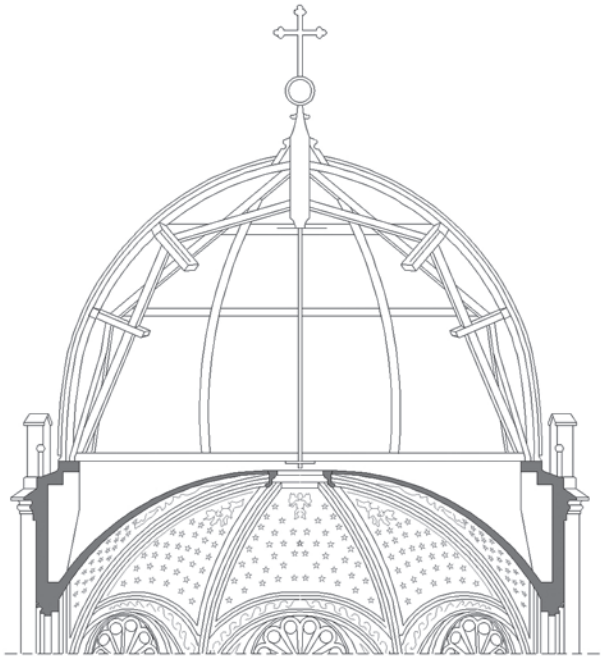

Fig. 6. Stüler's Dome in Berlin acc. to [6]

is the triple-shelled dome built on the tower of Saint Paul's Cathedral in London [1]. After the earlier tower roof was destroyed by fire, the rebuilders were afraid to erect a traditional masonry dome on the building whose structure was weakened. Designed by the astronomer Christopher Wren, the new dome of Saint Paul's Cathedral in London was built in about 1710. Two slender masonry domes braced to the third outer dome on post and beam scaffold were built. After the construction was completed the outer scaffold was left as a shell protecting the two inner domes against wind. The masonry domes of Saint Paul's Cathedral: the semicircular one and the conical one (Fig. 5) jointly transfer the vertical loads. The conical dome bears the load of the lantern, transferring the vertical forces to the ring beam which is the same for both inner shells. The lower dome transfers its dead load and rich architectural detail demonstrating the structure's prestige and function.

External scaffolds protecting double-shelled masonry domes were built in many multi-shelled domes in Baroque and later.

In the first half of the 19th century, the German architect Stüler A.F. replaced the post and beam construction protecting masonry domes with a system of trusses. Figure 6 shows such a solution applied in construction of the wooden outer dome of the church designed by Stüler A.F. in Berlin. The transformation of the external scaffold into a system of meridian trusses with parallel braces was a breakthrough.

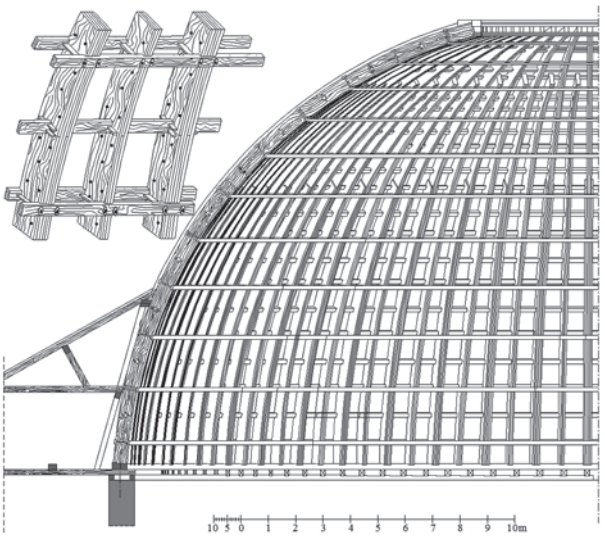

Fig. 7. View of the dome construction by Möller G. acc. to [6]

The principle of construction of domes introduced by Stüler A.F. was also applied by other architects (Weinbrener F.), which popularized in Western Europe building of dome structures based on scaffolds used to build masonry vaults which, however, already featured separate load bearing meridian and parallel elements, typical of domes. Instead of posts and beams, the scaffolds often used meridian trusses with parallel braces, with the curvature formed by centerings adjusted to the radius of the domes. The timber centering, which was used for centuries in wooden scaffolds, was the element which was most developed in this construction technology.

The system of meridian and parallel ribs, which was gradually improved in timber protecting domes, resulted in the development of simple and economical constructions of ribs built from timber centerings.

Figure 7 shows one of the first such domes – dome designed by G. Möller with the diameter of 33.5 m which was built in the middle of the 19th century for a catholic church in Darmstadt, Germany. The dome by Möller G. is the first wooden dome described in [6] (1900) with minimalistic ribbed construction. This is the result of the evolution of timber scaffolds used to build vaults and masonry domes which lasted for two thousand years. The timber centering which is the external element of the scaffold supporting the masonry dome became an independent load-bearing rib of the dome. Its supporting scaffold was eliminated. The division of the construction into meridians and parallels resulted in a clear distribution of forces in the dome and facilitated static calculations of load-bearing elements.

Möller's idea was improved in the following designs of structures topped with domes.

Conclusions

Domes are the works of architecture which present the technical culture of the times when they were constructed. The form of domes developed over centuries along with the structure best suited for them. Depending on the building material which was used, dome constructions were different. The paper presented one of the directions of

evolution of timber dome structures. It evolved from the transformation of timber scaffold used to build heavy masonry vaults into a dome load-bearing system. The transformation of the protecting post and purlin scaffold into a system of meridian and parallel load-bearing elements was a breakthrough. At first it was a system of wooden meridian trusses with parallel braces, protecting sensitive masonry domes. As a result of experience gained over the years, the external members of trusses made of centerings were transformed into a load-bearing system of ribs typical of a spherical form of the dome.

The minimalistic ribbed construction made of timber centerings developed over time into various load-bearing systems of domes made of solid wood.

References

[1] Heinle E., Schlaich I., *Kuppeln aller Zeiten aller Kulturen*, Stuttgart, Deutsche Verlags Anstalt, 1996.
[2] Kuzniecow A.W., *Tektonika i konstrukcja cientriczeskich zdani,j* Moscow 1951.
[3] Lisowski A., *Projektowanie dome obrotowych,* Biuro Studiów i Projektów Wzorcowych Budownictwa Miejskiego, Warszawa 1955.
[4] Murray P., *Architektura włoskiego renesansu,* Wydawnictwo VIA 1999.
[5] Stierlin H., *Skarby Orientu. Architektura i sztuka islamu od Isfahanu po Tadż Mahal,* Arkady, Warszawa 2002.
[6] Warth O., *Die Konstructionen in Holz,* Gedruct von A. Th. Engelhardt, Lipsk 1900.

Kopuły w architekturze

Architektura obiektów w kulturze Wschodu i Zachodu obejmowała dachy zwieńczone kopułami. Kiedy masa kopuł murowanych przekroczyła możliwości techniczne konstruowania podpierających drewnianych rusztowań, rozpoczęło się poszukiwanie lżejszych rozwiązań konstrukcyjnych. Ewolucja rusztowania stosowanego do wznoszenia ciężkich powłok betonowych i murowanych była jednym z kierunków powstawania konstrukcji kopuł z drewna jednolitego. W toku trwających kilkaset lat doświadczeń przekształcono tradycyjne rusztowanie w konstrukcję z kratownic o układzie południkowym, stężonych równoleżnikowo. Podział konstrukcji na elementy południkowe i równoleżnikowe wpłynął na rozwój statyki i konstrukcji kopuł żebrowych z drewna jednolitego.

Key words: domes, architecture

Słowa kluczowe: kopuły, architektura