Stefan Kuryłowicz. Architecture of change 1989 - 2011

Marcin Goncikowski

1Laboratory of Industrial and Large Space Architecture, Department of Design and Architecture Theory, The Faculty of Architecture of the Warsaw University of Technology, Koszykowa 55 str, 00-659 Warsaw
gontbox@poczta.onet.pl

Abstract. The work of prof. arch. Stefan Kuryłowicz (1949-2011) marked a new chapter in the history of Polish architecture. His activity concurred with a profound socio-economic change that took place after the overthrow of the communist regime. For Polish architecture, this situation was a deeply pioneering one, as it brought the need of developing new types of buildings and a necessity to develop a different standard of architectural services. Design activities of prof. Stefan Kuryłowicz were combined with didactic and scientific work at the Faculty of Architecture of the Warsaw University of Technology. The result of his academic involvement were publications containing texts referring to: the theory of architecture, principles of practicing the profession and analysis of the change of public spaces. The paper shows architectural works of prof. Kuryłowicz and his theoretical description of the discipline on the background of the time in which both, building design and theory, were created and formulated by him. The main theme of theoretical achievements of prof. Stefan Kuryłowicz is the relationship of built architectural work and concepts of idea, expression and message. The idea is understood as principles formulated at the design concept stage. Expression of the work - as the sum of materially built means, that may realize the idea. The message - as a result of activities of all parties involved in the team's creation of the architectural object and the influence of the environment of realisation shaped a part of the meaning of the architecture. The message in his interpretation becomes a way of denoting a part of the possible meaning of architecture. The analysed objects are: competition works from which a set of buildings of the Baltic Opera in Gdańsk (1973) and a set of buildings of Operetta Dolnośląska in Wrocław (1975) were selected, sacral buildings from which the church in Nowy Dwór Mazowiecki (1979-1984) was chosen, commercial buildings of public utility - Fuji Film (1993), Zielna Point (1998), Nautilius (1996), Focus (1997), PLL LOT (1999), housing - Eko-Park estate (2002) and the National Forum of Music (2008). Buildings - awarded regularly - have become the determinant of the typology for Polish architecture in the environment of freedom after the transition of 1989. Prof. Stefan Kuryłowicz died in a plane crash in Spain in 2011.

1. Introduction
Professor arch. Stefan Kuryłowicz (1949 - 2011) was one of the most important Polish architects. He was a creative practitioner, as well as a researcher and an active academic didacticist. His achievements include both searching for new types of buildings, as well as theoretical reflection that concerns the impact of the new socio-economic situation in which architecture and the design practice found itself in Polish reality after 1989. Although he is perceived primarily as a practicing, prolific architect, focused on bringing about the construction of new buildings, his theoretical input, which he formulated during the years of work, deserves to be studied. Weight of this input makes an evidence of defining and updating views that were initiated and creatively theorized during the profound changes that after 1989 took place rapidly in the development of architecture in Poland.
This period may be characterized as a dizzying pace of change in practicing the profession which triggered the sharpening of his views and resulted in a reflection allowing to form a theory. The provoking transformation, which in other European countries took decades happened in Poland in just a few years.

2. Theoretical work
The basis of his theoretical attitude was perceiving the completeness of architectural work as a result of a collective process. This includes, on the one hand, the group of an architect together with specialists - designers of various fields, on the other - customer, user and audience which participate in the creation. Illustrating collectivism of the process of creating the architectural work prof. Stefan Kuryłowicz was citing the statement of AIA chairman Richard Clipston Sturgis from the first half of the twentieth century: "Architecture is not only art, but also scientific activity and a branch of industry. It requires a diversity of talents. An architect who can only offer one of these opportunities, is an incomplete professional and provides incomplete services as an architect. [On the other hand] A person who can meet all expectations rightly, be put in front of an architect and does it well, does not exist "

At the same time, this view was supported by his deep conviction that for the entire creation of an architectural work – from first concept stage to the construction on the site both: artistry and professionalism of action are indispensable. The collective, creative process completes itself by balancing the imagination of the architect with the context in which the work is created and the creative contribution of other participants.

Comparing the whole process of creating an architectural work, he often, in considerations, juxtaposed it with the creation of a theatrical performance, where the final result is influenced by actions of the group – the way the actor adds his creation to the very vision born in the imagination of the author of the play. Comparably - the architectural message which is the result of collective work will never be complete and true if it is limited only to the designer’s fantasy – a concept drawn on paper, omitting the remaining links of the creative process.

This view was rooted in architectural practice and academic interests which were the base of his capturing the process of conceptualization and reception of an architectural work into a triad of "idea (concept) - expression (built) – message (information)".

The essence of this theoretical model was the conviction that the completeness of the architectural work is the sum of the actions of the parties involved in its creation, which leads to a unique, characteristic message that is denoted by an individual, built work of the architecture. The message in this approach is a part of a possible meaning of the architectural work. In turn, the idea of the project is included in the message, but it is not identical with it. The idea is the very starting point and can move in a world of unlimited imagination or touch simple, practical or mundane issues. The message, in turn, results not only from the idea itself, but also from factors that shape it in the way of an idea’s implementation. Conceptual, theoretical projects have a reference primarily to the idea, whereas the message is on the other hand the property of completed buildings. The message contains both the idea and the imprinted realities in which the project was being created, and which had a greater or lesser impact on the realisation of the idea. Therefore, the message reflects all the links that contribute to the creation of the work. At the same time prof. Kuryłowicz clearly states: "a message without an idea does not exist".

Here it should be stipulated that according to this theory the basis for valuing an architectural work should be, according to prof. Kuryłowicz, not a message or an idea, but the sum of meanings that such a work brings. These meanings, in turn, are born as a result of the reception of the work by the audience. For the very transfer of the meaning, all material architectural means and their quality used by the

---

1 Ewa Kuryłowicz, Stefan Kuryłowicz, "Pasja i pragmatyzm. Człowiek, architektura, wolność", Argraf, Warszawa 2010.
2 Stefan Kuryłowicz, „Architektura – idea i jej realizacja”, Politechnika Krakowska, Kraków 2000.
creators are relevant. These means form the expression of architecture, which is a part of the message and which are material realization of the idea.

The entire theoretical approach of prof. Kuryłowicz is complemented by underlying the role of the audience and the client in creating the message of architecture. The client's role is emphasized as an active agent, contributing to the project, and at the same time - as a recipient of the message. The role of the audience - as a silent part - the final user of the work - and as the recipient of the message. He acknowledges to the client the importance of stimulating the creation, even though criticism and requirements that translate into realisation of work. This input often gives an important contribution to the final creation of the object, and the aspect of the client’s role in his view of the message of architecture cannot be overlooked.

The role of the audience is understood in two ways.

Firstly, the audience is a collective user for whom the public object is designed. This user in the process in creation of work is usually imagined by the architect intuitively or the architect states that the fact that he can be a user himself entitles him to knowledge about audience’s preferences. These preferences can as well be recognized through collaboration with specialists - environmental psychologists or sociologists.

Secondly - the role of the audience in shaping the architectural message is complemented by the fact, that without the audience - the buildings would be just a collection of materials and nobody could discuss both the idea and the message of architecture. The audience is essential for the very notion of the message of architecture to exist.

From the point of view of the theory formulated in this way, one can ask how the creative activity of prof. Stefan Kuryłowicz influenced its formulation? In particular - how the changing socio-economic reality in Poland affected both the projects and the conclusions drawn from working on them and expressed in the form of academic texts? Finally - using his own theory - what was the impact of the reality in which he was working on the expression of architecture of those times?

3. Projects
First projects – competitions 1970-80

![Figure 1. Baltic Opera, Gdańsk](image)

The first important works of prof. Stefan Kuryłowicz that were discussed in a wider architectural environment were winning completion projects, done with different teams. The examples of which are:
The Baltic Opera in Gdańsk (Figure 1) and the Lower Silesian Operetta in Wrocław. They make the first evidence of fully blown creative attitude of the young architect.

The Baltic Opera - a project from 1973 was proposed as a structure located on the top of a narrow hill, towering over the Plac Zebrań Ludowych – People’s Gathering Square and Gdańsk. To strengthen this effect, the building's body, containing the main hall intended for about 260 performances a year and the chamber hall, was raised above the area on communication cores and pillars, so that it could be seen from the Old Town and the Shipyard.

Visible from all around, the Opera was supposed to "stimulate the spiritual development of the inhabitants". Its location was placed on the axis of the Old Town, which was to emphasize the continuity of the city's development. The very proposal of hovering, solid mass, its location and expression in relation to the city was itself an operatic and theatrical gesture.

The Lower Silesian Operetta - the winning project in the competition from 1975 - was located in a different context.

Admittedly, both in Wrocław and in Gdańsk – the historical context was present – as the cities were one of the most important medieval metropolises in Europe, but this time - the plot was located in the very center of the town, surrounded closely by historic buildings.

The project has been carefully written in the neighbourhood. The irregular shape broke the scale of the design and inscribed the project in the silhouette of the downtown. The height of the building was minimized. In this case, instead of being a visible signal over the city - the building was linked to the surface: the streets, the space of the square located in front of the entrance, and the very atmosphere of the city centre environment. The project’s scheme was meant to co-operate with the street. The ground floor of the building was part of the frontage of the city. The foyer was an extension of the square, and open cafes were located along the streets. Intentionally, the building was meant to be a background for events and people - an unfolding all around city spectacle.

Both projects have not been built, despite the loud announcements of the authorities. The Baltic Opera remained only a competition work, and in the case of the Lower Silesian Operetta, only a more advanced project development was made in state-owned architectural offices.

Frustratingly for Kuryłowicz, inefficiency and inertia of the system made the investor - the communist authorities - used both projects as an element of empty political propaganda aimed to tone down social moods, though both were designed to be built in specific places with important functions.
In parallel with the design of important public investments like the projects of the Opera, Operetta or the Okcie Airport development complex, which got stuck in the ineptitude of the system, prof. Stefan Kuryłowicz dealt with the implementation of projects for a completely different client - the Church. This quasi-social activity was carried out in a situation in which the institution of the Church was a mainstay for the opposition, especially after the martial law introduced in 1981, and when the funds for project implementation came from collections organized among people. Projects and their long-term realisation burdened with systemic harassment of the state power. The mere undertaking of work for the Church was in this oppressive situation, the declaration of libertarian attitude and holding civic convictions completely different from those praised by the communist governments. Professor Stefan Kuryłowicz in the 1980s and early 90s designed in various teams 7 churches, 5 of which were realized.

An example of these projects is the church in Nowy Dwór Mazowiecki – the project from 1979, put into use in 1984. The plot is the area of the parish dedicated to Saint. Michael Archangel (Figure 2), located in the middle of a small Mazovian town. At the site there was an existing listed, classicist church which was built by the eminent architect of Polish Enlightenment - Piotr Aigner. The construction of the new church was dictated by the growing size of the existing parish, which could not be accommodated within the existing building. The context has contributed to modest solutions, constituting a background for an existing building and despite the required size - non-dominant space.

Selected materials - brick and metal façade treatments constitute a neutral background associated with the old architecture. At the same time, they were chosen in a thoughtful way so in order to erect the new church using the simplest available technologies by individual builders. Construction companies were part of the communist state structures at that time.

The project creates new open space for the public around the historic church: an open courtyard forming a passage to the new building, an intimate patio connecting the courtyard with the entrance and meeting rooms. The courtyard is flanked by the facade of the existing church, a wall containing the representation of the Way of the Cross and the façade of the complex. The largest volume - the nave of the church hides behind the existing building and is devoid of high accents. It blends into a mass of brick forming a new building and fences, but inside it offers a spacious, homogenous interior with carefully introduced daylight. The presence of a new sacral space is being announced by a delicate silhouette of metal sign, echoing the finals of the church towers, the contour of which is drawn from the background of the sky. None of the newly built elements exceeds the height of the existing church, and the

**Figure 2.** St Michael Archangel church, Nowy Dwór Mazowiecki

In parallel with the design of important public investments like the projects of the Opera, Operetta or the Okcie Airport development complex, which got stuck in the ineptitude of the system, prof. Stefan Kuryłowicz dealt with the implementation of projects for a completely different client - the Church. This quasi-social activity was carried out in a situation in which the institution of the Church was a mainstay for the opposition, especially after the martial law introduced in 1981, and when the funds for project implementation came from collections organized among people. Projects and their long-term realisation burdened with systemic harassment of the state power. The mere undertaking of work for the Church was in this oppressive situation, the declaration of libertarian attitude and holding civic convictions completely different from those praised by the communist governments. Professor Stefan Kuryłowicz in the 1980s and early 90s designed in various teams 7 churches, 5 of which were realized.

An example of these projects is the church in Nowy Dwór Mazowiecki – the project from 1979, put into use in 1984. The plot is the area of the parish dedicated to Saint. Michael Archangel (Figure 2), located in the middle of a small Mazovian town. At the site there was an existing listed, classicist church which was built by the eminent architect of Polish Enlightenment - Piotr Aigner. The construction of the new church was dictated by the growing size of the existing parish, which could not be accommodated within the existing building. The context has contributed to modest solutions, constituting a background for an existing building and despite the required size - non-dominant space.

Selected materials - brick and metal façade treatments constitute a neutral background associated with the old architecture. At the same time, they were chosen in a thoughtful way so in order to erect the new church using the simplest available technologies by individual builders. Construction companies were part of the communist state structures at that time.

The project creates new open space for the public around the historic church: an open courtyard forming a passage to the new building, an intimate patio connecting the courtyard with the entrance and meeting rooms. The courtyard is flanked by the facade of the existing church, a wall containing the representation of the Way of the Cross and the façade of the complex. The largest volume - the nave of the church hides behind the existing building and is devoid of high accents. It blends into a mass of brick forming a new building and fences, but inside it offers a spacious, homogenous interior with carefully introduced daylight. The presence of a new sacral space is being announced by a delicate silhouette of metal sign, echoing the finals of the church towers, the contour of which is drawn from the background of the sky. None of the newly built elements exceeds the height of the existing church, and the
horizontalism of the composition, proportions and materials of the new building are the means by which its expression gives the message that both parts - new and old naturally belong to each other.

Figure 3. Fuji Film Building, Warsaw

The building was erected at the very beginning of profound political changes in Poland, according to a design that won the investment competition in 1991 (Figure 3). The situation at which it was created was a completely new one: a non-state industrial investor, a corporation from behind the iron curtain, a company coming from a distant country with a distinct, different from Polish culture. The author reports that when designing he was not aware that it was to be part of the corporate architecture, examples of which were absent in Poland at that time. The ambition underlying the project was the perfection of spatial and material solutions. The object was to be read as a sign - a metaphor, but not by direct quotes but by the use of Japanese architecture features: lightness, synthetically defined spaces, greenery. The building consists of an office building and a warehouse. The solid office building is a cube, covered with a plastic roof stylized to Japanese Tori gates. The expression of the building was to emphasize not only the brand of the client's company, but also reflect the optimism with which the future was viewed, despite the radical and difficult changes that took place in the country. Materials were carefully selected and their bringing to Poland was, according to the report of prof. Stefan Kuryłowicz, carried out thanks to private correspondence and contacts connected with the architect’s belief that no producer will refuse to enter the post-soviet market. The situation, inherited from the previous system, was characterized by a complete lack of developed market of finishing and construction materials. Practically, most of the materials used in the implementation were pioneering for Poland: facade sandwiches made of aluminium plates, conglomerates, suspended ceilings from pressed mineral wool. The entrance to the building is marked with polished stainless steel, and the shape is covered with a stone conglomerate.

3 Architektura Murator 1/94, „Siedziba Fuji”, pp. 8-12.
The building was awarded in 1992 for the best project, in 1993 it received the SARP award, in 1994 the Building Design House award, and became an icon and measure of quality in the new chapter of the history of Polish architecture.

![Nautilius Building, Warsaw](image)

**Figure 4.** Nautilius Building, Warsaw

The building is located in Warsaw at 9 Nowogrodzka Street in a residential district, the part of which was rebuilt with government buildings implemented at the beginning of the communist government era (Figure 4). Most of the plot is located in the depths of the building quarter and contact with Nowogrodzka Street is ensured only by narrow, several-meter long boundary located in the northern frontage of the street. The building was designed as an office building for rent, and the headquarters of the investor's corporation. The object was supposed to stand out in the surroundings and manifest its presence for the public using Nowogrodzka Street as well as to open the majority of the plot area located in the depth of the quarter to the street space. A higher and larger portion of the building in the form of a compact prism with slightly sloping walls was placed deep in the plot. It was rendered with dark, polished granite with rich coating. Users approach the building along a lower portion, covered with a metal cladding, the top wall of which has been sculpted and overhung over the sidewalk of Nowogrodzka Street. Coming to the main entrance located in the depths, the audience passes a characteristic, softly shaped form which hides the evacuation staircase, along the elevation of the wing perpendicular to the street which contrasts with the main granite office block. This metal elevation is decorated with carefully exposed, scaled joints of silvery metal claddings. Above the pavement of Nowogrodzka street, there is also a balcony in the overhanging facade, expressively emphasizing the building in the perspective of a narrow street. The building, lower than its surroundings, was designed with care for the 5th elevation, bearing in mind that it will be received by the users of the office space located above. A strong, homogeneous expression of its architecture clearly detracts from the mood produced by existing buildings, introducing the message of energy and new values in a landscape dominated by ministerial buildings of communist provenance.

In 1999, the building received the prize "Favorite of Warsaw 1989-1999" awarded by the residents of Warsaw.
The facility is located in the centre of Warsaw, at the corner of Zielna and Próżna Streets (Figure 5). The plot is adjacent to a 50-meter office building from 1908, called PASTA. A neighbouring listed building, 50 meters high, built of steel was one of the highest and most modern buildings in Europe at the beginning of XX century. Its authors were recognized Polish architects - Bronisław Brochwicz-Rogoyski and Izaak Gustaw Classon. Built as the headquarters of the Swedish telephone company Cedergren in 1922 became the headquarters of the Polish Joint-Stock Phone Company the abbreviation of which - PAST-a gave the building an accepted name that made its mark on the map of Warsaw architecture. On the other, west side of the corner, from Próżna St., there was a residential building from the 19th century.

The idea of the project was to mark the continuity of the quarter's development honoring the significant building of Pasta by becoming a modest variation on the form of the pre-war Warsaw tenement. The object has a compact body with a separated pedestal and a crowning part, with a disciplined arrangement of window openings. From the side of the PASTA building, there was introduced a part of the elevation which contrasts with the main portion of the building being a mark of an extension of the divisions of PASTA building. The softness of the façade highlights the corner in the urban tissue. The travertine-covered façade gives to the building the expression of stability and durability. The very culmination of the building is the glass façade of the last storey, slightly removed from the face of the main part which gives to the upper offices the terrace running around the external walls. All is crowned with a prominent cornice.

Though designed as a building for offices to be rent, it passed on, unfamiliar to the majority of office buildings existing in Poland at that time the expression of ennoblement. This expression reflected by the building made it be entirely leased as the headquarters of Dresden Bank in the final stage of construction.

Figure 5. Zielna Point Building, Warsaw
Figure 6. Focus Building, Warsaw

The Focus Filter building (Figure 6) is one of the first large office buildings built for rent in post-communist Poland. Its area is about 62,000 m². It is located by the city communication artery running on this section between Warsaw Centre and the largest downtown park - Pola Mokotowskie. At that time the task of the project was unusual of in the changing economic situation of Poland.

The idea of analogy to the autonomous organism - the city - was the chosen solution for an idea of the plan, shape and internal structure of the Focus. This was dictated by its the scale and location. The similarity to the city was considered, as reported by the author, quoting L. Kahn as the highest possible level and quality of the building's possibilities. The building consists of four independent parts, grouped around a covered courtyard - an atrium being an echo of the city's central markets. The ground floor and the first floor of the building is of open commercial use, accessible from galleries connected to the courtyard. The front, south façade of the building opens to the park's outskirts, and the link with it is provided by the big glazed void located in the centre of the façade which includes a multi-storey internal garden, connected to conference rooms. After completion, the building began to determine the scale of the south perimeter of the centre of Warsaw, and buildings of similar scale began to be built along the street. The scale and reception of the building from further perspectives and fast-moving cars along the street became a contribution to the scaling of the details of the building, being a technological interpretation of the ornament, visible not only from a close distance. The representative courtyard of the building has become the favourite place for organizing conventions and election evenings of one of the two largest political parties in Poland - the one, which wanted to be associated with openness, Europeanism and modernity.

The building was awarded the Best 2001 Construction Prize, a mention in the SARP 2001 award for the best building, the Main Prize of the Polish Association of Cement Producers in 2001.

Architektura Murator 3/00, pp. 13-14, 57.
The building was designed as the headquarters of the Polish airline LOT (Figure 7). It is located in close proximity to the Okęcie airport, which, despite being the largest in the country is placed in the very urban zone of Warsaw. Due to the noise, the façades were designed as double glazed. The building itself is equipped with the latest installation systems - ceilings integrated with the cooling and heating system, double glass facades with integrated sun shades. The expression of the building consciously emphasized the evolution of the national air carrier using the latest aviation technologies, freeing itself from the dominance of the aircraft fleet bought in the USSR. Selected façade materials were designed to deliberately obliterate the material structure of the building and blur the boundaries between the building and the surroundings. The façade - designed with low-emission spot-mounted glass is a uniform sheet, without protruding mullions and pillars. The interior is dominated by the expression of technique achieved by using metal, carefully included in technological details.

The tradition of the company of one of the oldest, pre-war airlines is honoured with a memory room designed as a valuable wooden box placed in a central atrium on its own chassis. The stairs leading to the box recall the entrance to the aircraft and the room is equipped with round, airplane-like windows.

In 2003, the building received the nomination for the SARP year award and the prize for them. Mies van der Rohe, in 2016 he was awarded the President of the Capital City of Warsaw.

---

5 Architektura Murator 7/2002, “Biurowiec Lot” pp. 16-27
Ekopark is an urban project development covering an area of 18 hectares near the centre of Warsaw in the Mokotów district (Figure 8). It was an example of a comprehensive development of a significant area in the city by a private and not a public investor intended for a residential area. The area, contrary to the paradigm of maximization of profit in by 25% percent, was allocated to open spaces: greenery, walking aisles and its structure was designed as 19 quarters ready to accept housing projects of different heights: from high-rise buildings to the south, to a zone of four-story buildings in the north. The center of the estate is occupied by a square surrounded by service and office buildings, which, mixing functionally with residential buildings, enlivens the operation of the mini-district. Buildings for parts of the quarters were designed by prof. Stefan Kuryłowicz and his team, winning a number of awards: the SAPR award in 2003, the nomination for the Mies van der Rohe award. The housing estate itself was recognized in 2010 as one of the 20 most favoured sustainable development projects.

Architektura Murator, 10/02, pp. 27-37
The National Forum of Music is a project which won the 1st prize in the international architectural competition in 2005 (Figure 9). The building was finally put into use in 2015. It is equipped with the main concert hall for 1800 seats and 3 chamber halls. It is the first large public cultural centre dedicated to music, the implementation of which began after 1989. The expression of the building was supposed to bring associations with a precise musical instrument. The solid is a soft form clad in a wood-like cladding that echoes the lute mandor boxes. The front of the building located at the closure of the Freedom Square, opens onto it through use of a large glass wall of the main foyer. It is a monumental portal through which the audience is introduced in the intention of the creator to a place where one can listen to live music which is supposed to evoke a sense of sublimity and unusual situations in a world dominated by the immediate availability of digital recordings. The acoustic solutions of the rooms have been designed precisely in cooperation with Takeo Nakajima of Artec and are one of the best contemporary large acoustic rooms.

The building was nominated in 2015 for the SARP main prize, in 2016 for the prize of Mies van der Rohe, in 2016 he won the grand prix in the Beautiful Wrocław competition and the Architectural Award of the Polityka weekly.

4. Conclusions
Professor Stefan Kuryłłowicz died on 6.06.2011 in the plane crash of the plane which he piloted himself. His architecture reflected the changes that have taken place in society since 1989: a fundamental change in the political, economic and cultural system of the country.

From 1989, he managed to shape the canon of corporate architecture, new housing development in Poland and start the implementation of the determinant of public facilities for cultural purposes - a music forum. The latter, as the buckle links his work, because it is realized in a place where as a 26-year-old who took his first steps as an architect won the competition for the Lower Silesian Operetta.

References
[1] S. Kuryłłowicz, „Architektura - idea i jej realizacja”, Politechnika Krakowska, Kraków 2000.
[2] E. Kuryłłowicz and S. Kuryłłowicz, “Pasja i pragmatyzm. Człowiek, architektura, wolność”, Argraf, Warszawa 2010.
[3] Architektura Murator, Architecture Art, Publisher MURATOR S.A. 1/94, „Siedziba Fuji”, pp. 8-12, 1994.
[4] Architektura Murator, Architecture Art, Publisher MURATOR S.A. 3/00, pp. 13-14, 57.
[5] Architektura Murator, Architecture Art, Publisher MURATOR S.A. 7/2002, “Biurowiec Lot” pp. 16-27, 2002.
[6] Architektura Murator, Architecture Art, Publisher MURATOR S.A. 3/01, pp. 32-43, 2001.

Figures [www.apaka.com.pl] published with a kind consent of prof. Ewa Kuryłłowicz.