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THE BRICK FACE OF MODERNISM AND ARCHITECTURE OF GUSTAV OELSNER

Abstract: There are many reasons that make the work of Gustav Oelsner worth to present. One of the reasons is comparison of two different ways of development of two cities, Gdynia (an exhibition of work of Gustav Oelsner was presented in Gdynia in April and May of 2011) and Altona, where Oelsner created his architecture. These two cities has grown at the side of their big neighbours, Gdansk and Hamburg. They are harbour cities and their full bloom took place in the beginning of XX century, in the time of revolutionary changes in architecture and urbanism. It gives possibility to compare two different faces of Modernism. It gives also chance to compare contemporary reception and the problem of protection of heritage of Modernism. Next important reason is the question of a role of a City Architect in creating of contemporary image of a city. Gustav Oelsner was not only the administrator of problems connected with architecture. His social awareness and aesthetic sensitivity gave his vision of city development a timeless value, that makes Altona even now one of the most attractive parts of Hamburg. Oelsner's life is a picture of dedication to architecture, but also a picture of complicated and difficult history of 20th century. He was persecuted because of his Jewish background and had to escape to Turkey during Second World War.

What makes Oelsner particularly interesting in the history, is his brick architecture, original clinker façades that have no equivalent among other brick architecture works.

Keywords: Brick architecture, brick Expressionism, brick Modernism, clinker façades, Gustav Oelsner.

Introduction

This article was inspired by the exhibition “Architect Gustav Oelsner – Light, Air, Colour”, which was presented in Gdynia 1.04-29.05.2011. Presentation of this exhibition, showing the clinker architecture of Altona (today a district of Hamburg in Germany) designed by G. Oelsner in the context of white, plastered Gdynia, provides an interesting background for comparison of two different ways of new ideas and tendencies building the complexity of the époque, called in general “Modernism”.

At first sight, these two examples are clearly distinguishable by the use of materials as unlike as plaster and clinker; the white, smooth architecture of Gdynia and the multicoloured, clinker architecture of Altona and Hamburg – the contrast coming from two different traditions, each loaded with great symbolism [Macikowski 2016]. The tradition of brick building, so strongly present in the German architecture, gives the opportunity for comparison with the symbolism of the International style. The International style, interesting to say, was chosen by Gdynia to qualify the political identity of the newly arising Polish city.

Gdynia was originally built to compete with the city of Gdańsk as a Polish harbour. In the 1920s and 1930s, the city with its harbour was a sort of political manifest of economic independence and modernity. Obviously, the architecture of this city should represent it accordingly, thus the International style and its “white” aesthetics seemed to be the most proper declaration of Gdynia’s identity.

Both examples represent two different contexts and two different symbolisms, though both come from the same time period. Both show the dynamism of raising a new architecture in the 20th century.

1. Who was Gustav Oelsner?

His short biography and description of personality is important to understand the colourful clinker architecture of Altona. His name is difficult to find among the most known architects of the time. Only historians of architecture know his name and the importance of his work for the city of Altona and Hamburg, yet not only for these cities.

Gustav Oelsner was born in 1879 in Poznań to a German-Jewish family. He completed the Berliner School of Architecture and representatively joined the circle of reformers called “Neues Bauen”, and also finding inspiration in the Dutch artistic and architectural movement “De Stijl”. In the years 1904-1923 he practiced in Wrocław (Breslau) and Katowice (Kattowitz). After 1923, he moved to Altona. After 1933 when Nazi party came to political power, Oelsner was forced to emigrate to Istanbul, Turkey where he became a professor at the technical university, while at the same time working as an expert for the Turkish government on the matter of housing policy and urban planning. After the Second World War, Oelsner came back to Altona to work on the rebuilding of Altona and Hamburg.

Oelsner was a versatile and complete architect. He worked as an urban planner and an architect designing housing estates and buildings of many scales and functions, designing green spaces, recreational and sports arrangements, technical buildings, architectural details, and also furniture.

His *opus magnum* is the architecture of the city of Altona where Oelsner was a city architect in the years 1924-33. Altona was an independent city besides Hamburg until 1937, when in 1938, according to the „Greater Hamburg Act“ became a district of



Hamburg, among six others. His cooperation and friendship with Fritz Schumacher (a very influential architect, and also city architect of Hamburg in 1909-33) allowed him to create a common urban plan of spatial development for both Altona and Hamburg. His main professional aim was to improve the quality of life in the industrial city of Altona, which is located in the neighbourhood of Hamburg harbour. He supported communal housing and worked on a new architectural program for social housing and good quality green spaces in the city. In the time of the Great Crisis after 1923 and regardless of deep economic difficulties, Oelsner achieved the creation of the first communal building company SAGA, which until now administrates 130,000 dwellings in Hamburg [Michelis 2008]. At the same time Oelsner and Max Brauer, mayor of Altona (*Oberbürgermeister*) realized the idea of green belts in the city. They bought the property of 7 originally private parks and designated it communal property. Until now, these parks form public green spaces opening to Hamburg harbour and the Elbe River and were connected by a public promenade on the north bank of the river. Both these enterprises are fundamental for the development and contemporary city image of Hamburg.

2. Ideological background of Gustav Oelsner's architecture

His *curriculum vitae* and professional experience was formed by the dramatic political and social changes at the beginning of the 20th century. He believed architects should carry the special mission that is social responsibility, and that architects should act in the way of improving living conditions in the city. The industrial city crisis of the 19th century and the beginning of the 20th century needed architects to act as healers of the city environment and architecture itself, which were also facing an ideological crisis.

The search for morality and truth in architecture was present in the writings of John Ruskin, and especially in the works of William Morris. It is important to refer to William Morris and to Ebenezer Howard in the context of the architectural and urban achievements of Gustav Oelsner, specifically for substantiation of the ideas that found creative development in Oelsner's work. The industrial revolution was the reason for a decrease in the level of high quality art and craftsmanship, as well as the position of artists. The role and position of artists and architects which they had in former ages (especially in Renaissance) went continually to the past. They were no longer an exponents of a noble mission. Ruskin was the first who realized himself that the role model of medieval craftsmen fits better to the role that art and architecture should fulfill in the time of the industrial revolution. William Morris, in his Arts and Crafts Movement, was the first to build up new art and the position of the artist who could release new artistic energy and demands based on the unique work of craftsmen. His furniture, textiles and especially the so-called Red House, which he built for himself and his wife, became symbols of a new direction for art and architecture. The red brick walls of the Red House, together with its form de-



pendent on functionality, embodied a strong ideological value, which contradicted plastered architecture. This was a symbolic return to the truthfulness of architecture. Historical façades of the 19th century buildings made the architecture slightly absurd, using the language of forms that didn't suit the interiors and new functions of the buildings. Morris showed a new way and formulated a new mission for the architects of the 19th and 20th centuries. He discarded the role of the artist (architect) as separate from normal life and the roots of art. He postulated egalitarian art "for many" instead of elitist, common education and freedom. This way of thinking influenced architects at the beginning of the 20th century and became the basis for the revolution of Modernism. A house or flat for the common man became a challenge worthy of the interest of architect and artist. Architects devoted their work to create a new and better life; the social sense of that work playing a vital role in the task of building a new modern civilization. The intellectual background of Modernism had its source in the specific "romantic socialism" of William Morris [Pevsner 1978].

Challenging the machine and industrial progress was obviously doomed to failure. It was while working in America, where prefabricated building was applied much earlier than in Europe, Luis Sullivan postulated restraint in using ornamentation in architecture for the sake of better aesthetics. The radical ideas of Adolf Loos supported this tendency on European soil. European Modernists freed themselves from historical academism and industrially multiplied historic detail that overloaded architecture. Modernism and modernists started to communicate using new ideas, straight and functional forms, and objectivity towards the process of creation in architectural works. This was the source of a new international aesthetics, similar to other great historical styles and regardless of the variations of Modern architecture found in many circles of the Modern movement around the whole of Europe. The architecture of Gustav Oelsner seems to be one of the variants of Modern proposals for sanity within architecture and the whole environment of the industrial city.

3. Brick in modern German architecture in the 1920s and 1930s of the 20th century

Modern architecture, considering exterior appearances, may be associated with white, horizontally plastered articulated elevations and skimpy decoration. However, in Germany Modernism was represented also by brick architecture that was created in many different styles. These styles reflected either regional or even local specificity, or the individual expression of the author. Brick architecture in northern Europe (according to the Hanseatic tradition of the countries connected to the Baltic and North Sea areas) has been present for many ages. Generally speaking, the most famous achievements in that area are represented by the Amsterdam School [Casciato 2003] and



Hamburg School. In almost all cities in Germany, one can find examples of modern, brick architecture built during the decades between the World Wars. Often brick was only an element of articulation, showing a sort of continuity in tradition and respect for the old masters of architecture. Architects applied brick because of its durability, reliability, proven advantage, and almost unlimited possibility in terms of architectural expression [Pehnt 1973]. Among them were both traditional and avant-garde architects in their orientation, all motivated for different reasons. Sometimes the motivation was to show respect for tradition, sometimes to express purely artistic and aesthetic ambitions, and sometimes to embody ideological and political symbolism. Brick was present in the architecture of leftist architects, such as the project of skyscraper for Magdeburg of Bruno Taut (1922), and often concerned with historical and traditional forms built of brick. The same is true for the projects of architects of nationalist or fascist orientations. Even architects from Bauhaus, among other anti-traditionalists, sometimes used this traditional material: Walter Gropius in the Employment Office building in Dessau (1927-28), Henry van de Velde in the Jewish retirement house in Hanover – Bemerode (1929-31), and Thilo Schroeder in the housing estate in Hermsdorf (1925) [Tołoczek, Tołoczek 2000]. Many critics viewed white plastered architecture as opposing the culture of Aryan people [*ibidem*], which seems to be a paradox considering that the use of brick can be treated on the one hand as opposition to avant-garde functionalism, and on the other as a characteristic of Modernism.

The Hamburg School is an example of architecture characterized by expressive and complex brick texture and rich articulation. Its main representatives were Fritz Hoeger [Tołoczek 1999], who strongly influenced brick architecture of that time, and Fritz Schumacher. Schumacher, a friend of Oelsner's, was a City Architect for Hamburg in the years 1909-1933 who promoted modern architecture in trying to keep alive the German tradition of building in brick and using ceramic decoration [Turtenwald 2003]. This direction was characteristic in Hamburg during the years of Oelsner's architectural activity in Altona. Due to brick's obvious advantages as the most popular (because of the lack of natural stone in Northern Germany) and durable material, especially in the climate of northern Europe, and also due to its ideological meaning (his writings supported evidence that brick was used as building material from the beginning of German civilization, so there is no reason to change it), Schumacher insisted on using this material. The Hamburg school has proven that brick façades and clinker lining of walls are neither boring nor monotonous. Hamburger housing estates of the 1920s and 1930s have unique and various characters, just because of the expression of brick and clinker [Pehnt 2005].

The protagonists of white-plastered Modernism accused the architecture of Hamburg School of being mostly gloomy because of the dark colours of clinker, which as a matter of fact can be treated as true. Nevertheless, from within the Hamburg School Gustav Oelsner created his own recognizable, colourful architecture proving that clinker architecture is not gloomy and monotonous.





Photo 1. Clinker façade
 – Helmholtzstrasse multifamily house
 Source: B. Macikowski (photos. 1-11).

He remains an architect who forms his artistic approach on a broad basis. One of the fundamental aspects is the foundation of Werkbund and its pursuit of quality (*Qualität*); meaning to reach an organic completeness and concreteness (*Sachlichkeit*). This was the way to achieve nobility of architecture in a new sense. The activity of Hermann Muthesius resulted in the quick assimilation of new ideas in German education. Contrary activity was that of Henry van de Velde, who was an advocate of prefabrication, typicalization and standardization of building products, which he considered the only possible way to reach a high level of civilization and quality of art. It is worth underlining the duality of individualist and collectivist attitudes in art when considering Oelsner's search for his artistic and architectural identity. His attempts to join both of these contradictions are visible in his

architecture on many levels. Oelsner was inspired by Howard's idea of Garden City, which complemented his sensitivity to social values and the reason that Altona is until now the green district of Hamburg. Social ideas in urbanism were supported by the ideas of Bruno Taut and "colourful building", which was in opposition to the white "industrialized" aesthetic of the International style [Macikowski 2016]. "Light, air and colour" were postulates of a new model of a city after the crisis of the industrial era. Oelsner comprehended architecture as complex reality that ranges from urban scale to thoroughly thought architecture, function and architectural detail. Clinker façades became his label. Colourful façades do not have any counterpart in Europe. The main idea of Oelsner's work is to find the individual expression of a building, its uniqueness by colourful, clinker elevations made by the hands of high quality craftsmen. They were able to create compositions of multicoloured clinker brick buildings and combine in variable ways so that in spite of the buildings straight and repeatable form, they had their own individual character (Photo 1).

Gustav Oelsner became an outstanding architect using clinker brick. His buildings have neither this free and fabulous expression of the Amsterdam School nor the gothic seriousness and tradition visible in the architecture of colleagues from the Hamburg School. In opposition to Fritz Hoeger, who was probably the most influential architect of the Hamburger circle, Oelsner seeks his expression in round and cubic forms with horizontal divisions and articulation in a way that is difficult to find in the International style. His architecture embodies not only his pursuit of quality (*Quali-*



tät) and concreteness (*Sachlichkeit*), but also allows for individualism – that which the architecture of the International style did not have.

4. Clinker in the architecture of Gustav Oelsner

What distinguishes Oelsner from other architects using clinker bricks for their work? The primary feature, which testifies to the unusualness of Oelsner's architecture, is the use of multicoloured bricks and their arrangement in unconventional, heterochromatic compositions, unseen anywhere else.

The second characteristic of Oelsner's architecture that is different is his unique method of bricklaying. The clinker façades of Oelsner's buildings are separated from the bearing wall and its construction, and are self-supporting. This allowed their creation in an unconstrained and open way, as opposed to the practice of "classic" bricklaying. Often, there are bricks arranged in these façades with their bases outside, but also vertically and horizontally, parallel and perpendicular, so the bricks are visible from all of their sides (bases, headers and stretchers).

The wide spectrum of clinker colours is made possible thanks to a burning process that is different for "normal" bricks. The colours, texture and structure of clinker bricks are conditioned not only by the length of time and temperature of the fire, but also by the differentiated amounts of iron oxygen content and other compounds influencing the brick colours. At different temperatures, different contents of pigment melt, while the others keep their structure. Owing to this process many shades of red, brown, violet, blue, and even yellow and green colours are possible to obtain. Besides, the surface of clinker bricks is glazed, so it incidentally reflects light and this intensifies the play of colours. Oelsner had a direct influence on the production process of "his" bricks, as Altona had its own, town brickfield (Photo 2).



Photo 2. Detail of the clinker façade – Helmoltzstrasse multifamily house

5. Realizations

Below, there are brief descriptions of Oelsner's most important realizations from the years 1924-29, which testify to his beautiful architecture, directed most of all to-



wards the enhancement of the quality of life in the city. The enhancement was possible through ensuring comfort to all of the inhabitants and creating a friendly environment. Oelsner's buildings also show his unique approach to creating clinker façades.

Schützenstrasse multifamily housing estate. Built in 1925-26 in the Bahrenfeld district, this four-storey housing estate is characterised by a very interesting mass and extraordinary gorgeousness of colours. The building corner, by the crossroads of a sharp angle, is shaped in the form of a heptagonal round off. To moderate the monumental character of the building, the long part of the building situated along the street, was put several meters back. This allowed the creation of additional space for a green square separating the building from the street. In every staircase there are two flats on each floor, and every flat has a loggia. In the attic, there are laundries and accompanying drying-rooms.

For the façade material Oelsner chose yellow, brown, red and violet bricks of porous surfaces, which created the unusual, many-coloured mosaic. On this background, the almost black, over-burned slag bricks appear, incidentally placed and protruding out of the wall face. In addition to that effect, through the special brick bond, the horizontal

structure of the building has been underlined: belts under the windows are visually separated by the bricks laid with their bases outside, while the inter-window surfaces are filled with traditionally laid bricks with their stretchers outside. The windows have horizontal divisions, very specific for this époque. Thanks to these effects, Oelsner was able to achieve a very vivid façade picture with differentiated texture and interesting play of colours (Photo 3).



Photo 3. Articulation of the façade – Schützenstrasse multifamily house

Bunsenstrasse multifamily housing complex. In this complex, built in the years 1927-28, for the first time in a big city in Germany, the street (Bunsenstrasse) has been built according to modern rules and spirit, in contrast to the tradition of closed quarter-buildings with inner-yards. Situated in parallel, cubical buildings along the street, Oelsner moves façades forward and back in very spectacular way. By these displacements, the buildings are

divided and open spaces are obtained, in which green squares, playgrounds and recreational zones had been designed. From the side of Bunsenstrasse street, Oelsner designed extraordinarily effective, commercial and service buildings, in the form of pavilions with filigree, strongly protruding roofs made of reinforced concrete, and big shop-windows, optically breaking the massive structure of the whole complex.



Glazed rows of staircases are the only vertical accent in these buildings of strongly horizontal structure emphasised by the brick lines. Typical for the buildings of the 1920s, corner windows and a flat roof hidden behind the attic, underline the cubistic form of the building. The façade is composed of warm tones of ochre colour, interspersed with single bricks of red, green and black bricks. Occasionally the over-burned clinker had been used. The attic, made of red bricks, is clearly seen in the façade. This effect has been accentuated by horizontally protruding layers of brick, which enrich the structure of the attic-wall formed as a framing (Photo 4).

Helmholtzstrasse multifamily houses.

In fact, these buildings are part of the Bunsenstrasse complex. From the buildings described above, these are differentiated by the manner of façade creation – and probably the most colourful work of Oelsner. The composition of bricks laid in different ways creates a play of spots of various sizes and colours. It is worth mentioning, that the brick colours used by Oelsner in this building, nearly represent the complete array of possible clinker colours. Brick mosaic in the colours of autumn leaves, bring the impression of hand-woven fabric to mind; disorderly patterns of the building and its individual fragments give it uniqueness. To give the façade its particular texture, Oelsner used over-burned, shapeless bricks, which normally are treated as waste, but in this case they enrich the surface of the façade with a play of light and striking, erratic, black “pimples” protruding here and there from the façade (Photo 5).

Bahrenfeleder Steindamm multifamily building. This building reflects Oelsner’s joy of experimentation expressed both in creating the form of the building and in the composition of the façade itself. The building was designed (realization 1927-28) with great impetus, on the plan of an asymmetric quasi-parabola or semi-circle extended with its tangents. Clear, horizontal divisions of the façade are created by the



Photo 4. Housing complex Bunsenstrasse



Photo 5. Black “pimples” on the façade of Helmholtzstrasse multifamily house





Photo 6. Multifamily building “Schichttorte”
(Bahrenfelder Steindamm/Thomas Str.)



Photo 7. Multifamily building “Schichttorte”
– detail

under-window belts made of bricks laid with their bases outside, and by the horizontally divided windows. The colouring strengthens this effect – the under-window belts made of “big” bricks have different tones of yellow and grey colours, while the between-window spaces with traditional brick bond are red. Horizontal belts of bricks are contrasted with protruding staircases, balancing the whole composition of the façade. Because of colourful, horizontal belts on the façade and the nearly semicircular round off, the building had been given the name of “layer cake” (Schichttorte). Clarity of modernistic aesthetics connected with Oelsner’s specific use of bricks and colour, give a unique character to the building (Photos 6, 7).

Lunapark multifamily complex (Kieler Str./Weidmann Str.). In this building, Oelsner, for the first time, used a steel framework for the bearing construction, and then covered it with the clinker façade of ochre-yellow colour. These features are characteristic for this building, built in the years 1928-1929. A roof terrace and a finial in the form of a flat roof give the typical, severely linear and cubist character to this building. The building has a strongly marked horizontal structure, which was gained by the contrast of horizontal window framing with the brick façade of ochre colour. Rows of under-window belts were built with bricks laid alternately vertically and horizontally. Steel cantilever beams of the bearing construction, visible between living-room windows and loggias, and also between the rows of windows attract attention (Photos 8, 9).

Pestalozzi school (Kleine Freiheit). The building of the communal school, built in the years 1927-1928, was designed according to the newest pedagogic and hygienic requirements. Oelsner created proper spatial, aesthetic, lighting and ventilation





Photo 8. „Lunapark” multifamily complex
(Kieler Str./Weidmann Str.)



Photo 9. „Lunapark” multifamily complex
– detail

conditions both inside and outside the building, thus meeting the needs of pupils and teachers. The four-storied building with a flat roof had been moved back from the street in the way that allowed the creation of space for a sports field in front of the building. The spacious sports field ensures enough places for recreation for the children in this densely built, poor city region. The sports field is divided from the street by a semi-open colonnade, serving as protection against rain. Unfortunately, the semi-colonnade was demolished in 2015 because of new communal housing.

The atrium of this elementary school, gymnastic hall and 15 spacious classrooms are designed to serve different purposes. Big, sliding windows secure very good lighting and possibly the best ventilation. Clinker walls in various shades of dark red, rows of classroom windows and flat roofs underline the clear, horizontal structure of the building. The outside look of the façades reflects the inside and its functional sectioning.

(Max Brauer Aleje). A hospital centre for nuns and sisters of different religions, whose vocation was nursing patients, was built in the years 1926-1927. There were 50 sleeping rooms and living rooms equipped with a sanitary and kitchen base. The Sisters House is simple, but full of elegance in form. Four-storied and flat-roofed, the very rationally shaped form was something completely unusual in those times. The building filled a significant gap in the surrounding space of the city. Thanks to its L-shape plan, as a corner building it closed the line of houses from one side and was connected with a former hospital building from the other. The corner part of the upper storey is moved back, and the roof of reinforced concrete accentuates the entrance. Windows from the street side are glazed with frosted glass of aqua colour. The clinker façade is in





Photo 10. "Sisters' House" (Max Brauer Allee)

a warm-yellow palette, interspersed with spots of green, red and black. Here and there, as is characteristic of Oelsner's architecture, accents of overburned bricks appear. Oelsner resigned from using the existing equipment assigned to this building, and designed all of the furniture by himself. The new equipment was modern and suitable for Oelsner's modernist architecture, but it provoked a discussion about the costs of realization (Photo 10).

Employment Office (Kieler Str.).

In 1925, the municipal authorities of Altona approved the application for building an employment office. Two years later, a project of Gustav Oelsner's had been realized in Kielerstrasse Street. Among Oelsner's buildings, this one especially symbolized the modernist style. For that reason, in the same year of 1927, the Reich Employment Office announced the project as an obligatory pattern deserving to be imitated for similar buildings in the future all over the country, like the one of Walter Gropius in Dessau.

Oelsner designed a freestanding, cubist building with a flat roof, in the area of a former amusement park. It has a clear structure with a rectangular façade. The visible framework of reinforced concrete creates a vertical raster: rectangular, vertically

set frames keep rusty-red, rectangular clinker plates. Big windows ensure sufficient lighting in the office rooms. This one-storey building with a superstructure in the front part encloses an inner yard, securing good ventilation in the whole building. Employment offices of various trades were located behind each façade in different parts of the building and numerous entrances ensured easy access to each of the different handicraft sections.



Photo 11. Detail of the clinker façade of Employment Office (Kieler Str.)

The play of colours visible in the exterior elements of the façade, found its continuation inside: colourful walls, doors, tiles and spacious, bright office rooms strongly differ from the dark, colourless office buildings of those times (Photo 11).



Summary

The work of Gustav Oelsner is multidimensional and timeless. Until now, his clinker architecture brings us a message worth carrying on. What is cohesive in his wide range of activity is a responsibility for the shape and spatial development of the city, and a deep involvement in social matter. He sorted out the problems of Altona creating a new value of city space at the architectural and urban scale. Oelsner's work illustrates the fulfillment of duty in social commitments to city inhabitants; meeting their basic needs is necessary for the comfort of city life in the continuous and endless effort to improve the urban environment. Unfortunately, the concentration on spectacular displays of the individual talents of many contemporary architects are in evidence today, as it seems the truly professional aspect of the architect's mission has all but been forgotten.

References

- Casciato M., 2003, *The Amsterdam School*. Rotterdam.
- Macikowski B., 2016, *Contrasting Modernisms – Architecture of Harbour Cities Gdynia and Altona*. 3rd International Multidisciplinary Scientific Conference on Social Sciences and Arts SGEM 2016, Architecture and Design, Wiedeń: 205-212.
- Michelis P., 2008, *Der Architekt Gustav Oelsner. Licht, Luft und Farbe für Altona an der Elbe*. München-Hamburg.
- Pehnt W., 1973, *Die Architektur des Expressionismus*. Stuttgart.
- Pehnt W., 2005, *Deutsche Architektur seit 1900*. München.
- Pevsner N., 1978, *Pionierzy współczesności*. Warszawa.
- Tim Ch., 1984, *Gustav Oelsner und Neue Altona. Kommunale Architektur und Stadtplanung in der Weimarer Republik*. Hamburg.
- Tołoczko Z., 1999, *Architectura Perennis*. Kraków.
- Tołoczko Z., Tołoczko T., 2000, *In horto latericio*. Kraków.
- Turtenwald C., 2003, *Moderne Monumente. Fritz Hoeger (1877-1949)*. München-Hamburg.

