

International style interior in the historical steam power plant in Žilina

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Abstract. The article deals with one of the examples of good interior design in Slovak functionalist architecture uncovered during recent restorational research (2016). It points out that even provincial, small but growing town, which Žilina in the northern Slovakia region was at that time, can be a place of high-quality implementation of aesthetically valuable and structurally developed architectural design. The high level of composition, choice of color scheme, quality of materials and attention to detail prove the fact, that the architect František Bednárík mastered to apply international style ideas also to a small extent reconstruction of the original steam power plant in Žilina.

1 International style in the world of interior design

Classically cited feature of international style buildings is primarily their declared absence of ornament. The ornament was declared a crime by Loos - it causes decorated work to become obsolete mentally, outdated and therefore rejected, buildings rebuilt a far before they reach the limit of their physical life. This memento is valid especially the ecological nowadays, when the emphasis is on quality product with the longest possible both physical and mental longevity.

All theoretic ideas find their reflection in a precise logic, composition, quality of the materials and above all high-quality, aesthetics and functionality of each seemingly insignificant detail. Composition and materials (color, gloss, texture, quality) all that bears a strong second plan of the purely aesthetic forms. The concept of the built-in furniture into the volume of interior partitions, walls, bulkheads as compositional elements as well as functional elements, necessary equipment is the main characteristic feature in the large repertoire of the international style's interior design.

2 Purism and functionalism in Žilina

The last years of the 19th century are closely connected with a search for new forms also in the architecture of Slovakia. The architects of the new century were often the students of

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Budapest or Vienna technical and art schools, where eclecticism or historicism still persisted. Žilina, a small town in the northern Slovakia, has a rich collection of these styles buildings and considerable amount of the ornamental Art Nouveau buildings. War, the collapse of the monarchy and the establishment of the new Czechoslovak Republic of changed the social structure. A large part of the German and Hungarian bourgeoisie left the new republic and the new Slovak middle class is susceptible to change. This is also reflected in the architecture - a new one, purist based. Architects and investors of Jewish origin were very close to its economic efficiency and pragmatism [4]. With the establishment of an independent state comes the logical refusal of the eclectic forms, particularly of the Hungarian provenance. Architects are more oriented towards the German environment ideas or the Czech schools. The first functionalist ideas came at that time from Vienna. Adolf Loos and others were the inspiration.

Žilina was in this period an important place – even a capitol of the new republic for the first two months in December 1918 and January 1919. The first major international architectural competition is held for building of the Neologic synagogue. Among the participants the famous names could be found (Hoffmann, Scheer).



Fig. 1. Peter Behrens, Neologic synagogue in Žilina, built 1928-1931.

Proposal of the Berlin architect Peter Behrens won and synagogue was built shortly afterwards in 1928-31. (fig.1.) At the end of the 20's the scene of the Žilina's progressive architecture was rich with a large number of authors, like a celebrity architect Fridrich Weinwurm, Ignác Vécsei, Julius Stein and famous architect Michal Maximilián Scheer. [3]

2.1 Architect František Bednárík and his works in Žilina

František Bednárík comes from a family of Moravian builders. After studies he returns to work in his father's company and to work on the design of the residential cooperative houses of the Czechoslovak Legionaries in Žilina. A row of the houses (then on the outskirts of town) bears traces so called rondo-cubism with a powerful tectonic facades. Bednárík was settled in Žilina afterwards. In 1925 he founded his own construction company [4]. Bednárík's wife sister was a wife of his colleague a young architect Ferdinand Čapka, thus a long-term cooperation was born. Academic architect Ferdinand Čapka was a native of Vienna, Scheer got him to work in Žilina - in 1933-1935 Bednárík's company, then he became independent. Bednárík-Čapka joint work include Žilina's Railway Station (1939), Representative House - now the Municipal Theatre (Reichner, Čapka, Bednárík, 1940). Bednárík's sister was the wife of the power plants company director Ing. František Reich. Family ties logically led Bednárík to work on several

contracts for the power plants company. In 1941, Bednárík and Čapka in collaboration with architect Paulík designed dynamically expressive functionalist conception for the new administration building of the power plants company, with rounded curves of the facade and entrance accented by distinctive awning [2].

3 Žilina in early 20th century and the industrial boom

Žilina experienced a period of rapid expansion in the late 19th century. From the provincial town it became the new, agile center of the region. The after-fire recovery meant extensive building activities in the city, along with demolition of fortification walls. Further, more important impetus was the construction of the Košice-Bohumín railway from 1870 to 1872. Population was growing as well as Žilina has devolved into a transport hub and commercial center to more than 5000 inhabitants. The late 19th century brought the construction of new industrial plants, using natural resources and water. Cellulose, tar, matches, cloth and chemicals were the main production.

Growing industry needed more and more abundant energy sources. The first choice logical was hydropower. In 1893 was built a small hydroelectric power plant Helios at Rajčianka stream. But it soon ceased to be enough to cover growing demands. In Žilina there was already at that time progressive gas lighting. The face of the town was transformed into a modern urban structure, for which was intended to build an electric lighting. Already in 1903 the city began negotiations with the company Ganz és Tárša on building a new power plant. The newly founded Žilina electric plant company (Zsolnai Villamos Muevek részvénytársaság) concluded in 1906 an agreement on free use of public spaces for the distribution of electricity mainly for lighting and industrial purposes. In 1908 the company builds steam power plant, Ganz owned and operated technology up to 1923. [1]

Steam power plant was built at the outskirts of the town, near the slaughterhouse. Historicist industrial architecture, arch lined frieze and tall windows with rounded wedges was applied to modern two-hall plant with the center saddled skylights. Chimney was detached and a small, single-storey residential building was built in the street line. In the halls of power plant was the boiler room with steam boiler, coal shed and room for pullets. It was located next to the engine room with two steam engines, DC dynamos and reserve for another machine and dynamo. [1]



Fig. 2. Steam Power Plant area, Žilina, around 1910.

The Northwest Slovak Joint Power Plant Company (SESzS) was established in 1922 in Žilina. Company rebuilt hydroelectric project on Rajčianka stream and delivered energy to town and surrounding villages (Bánová, Gbeľany, Nededza ...) and growing businesses in and around the town. Probably in January 1926 SESzS bought also the steam power plant - a supply of the direct current. In 20's the network was gradually reconstructed for alternating current, older solution had less and less coverage. Conversion of the technology and a steam power to a new trend would not be cost-effective, electricity production ceased around 1928. [1] The chimney was demolished in 1930 and the courtyard building of the former steam plant was converted to administrative duties and technical premises.

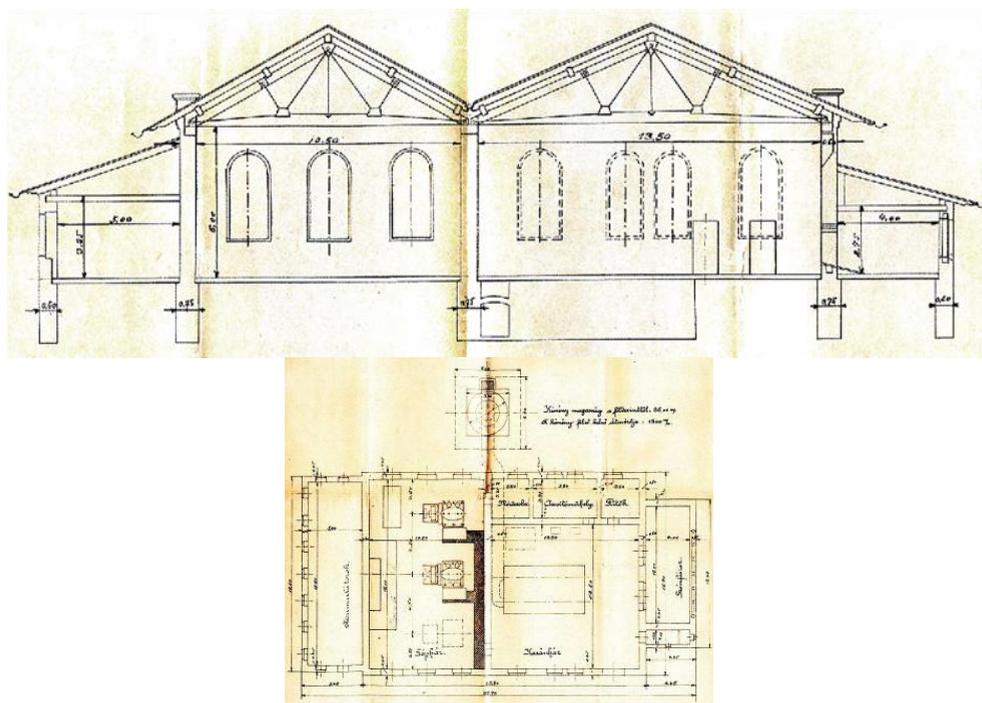


Fig. 3. Steam Power Plant drawing, section and a ground plan. Source: State Archives Žilina.

The first Bednárík's project from 1930 documents the rebuilding of the left, northwest side of the building. The large space of the engine hall was divided by three floors with a new entrance, corridors and staircase built and given a new administrative function.

In 1935 Bednárík created another project for the renovation of the former steam plant, this time more complex. Again was generous indoor space divided to three floors with the preservation of industrial truss roof structure. The space for installers and warehouse, the technical areas for machine shop and forge was proposed in the other steam plant hall. The second floor is accessible from the staircase already implemented the first reconstruction of 1930. The interior is a coherent compositional and artistic solution in the spirit of functionalist architecture - an elegant office space with entrance hall, offices, divided glazed partitions and large openings with wooden (probably glazed) doors. There is a generous meeting room, followed by less luxuriously designed archives, store and sanitation facilities shared by the whole floor. [1]

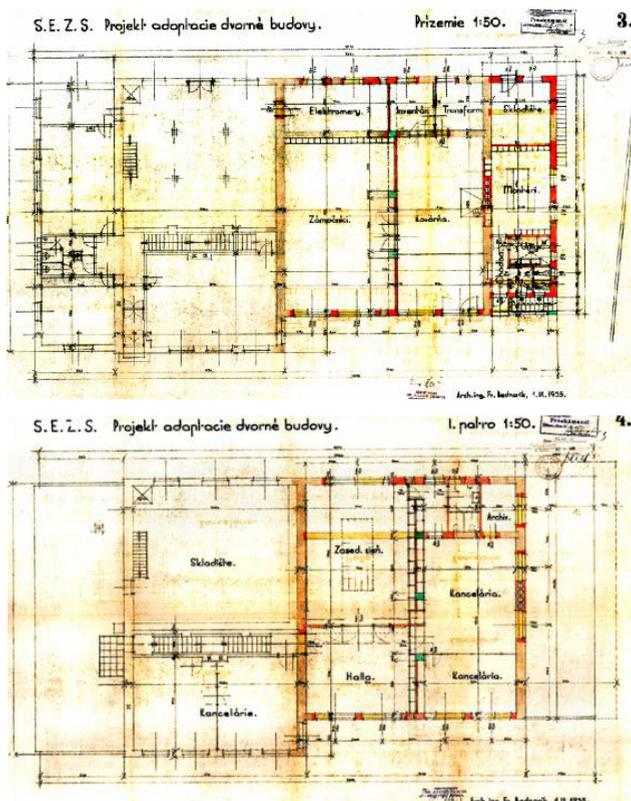


Fig. 4. Adaptation plans. Left ground floor, right newly proposed 1st floor plan. Bednarik, 1935.
Source: State Archives Žilina.

The walls were covered with quality terracotta colored wallpaper (lately painted in the same color tone) that was glued also to parts of the ceiling. Area has the very carefully handled seams of the each wallpaper strip. From the each corner of the office seam goes diagonally at precise 45 degree angle. The gap was almost invisible - only a soft texture and color variation of the wallpaper shows direction of gluing.



Fig. 5. Restorational research. Left: soundings – veneer applied to window frames. Right: Entrance and stairs with skylight. Photo: Grúňová, 2016.



Fig. 6. Restorational research. Office with built-in storage and recessed ceiling. Soundings with wallpaper fragments. Photo: Grůňová, 2016.

Lighting was designed in recessed ceiling as indirect illumination area. The niche for a tubular bulbs was decorated with light olive wallpaper that also as the narrow strip lined niche around. Lightning niche has gently rounded, soft molded edge. Walls between office spaces absorbed load-bearing concrete columns, the volume is used to create a storage space. Veneered doors of the cabinets are dark brown, complemented by fine acting technical detail - thin chrome strips. The floor is wooden parquet.



Fig. 7. Visuals of the meeting room based upon restorational research findings. Grůňová, 2016.

High quality of the details is shown also in the construction lining offices windows. The design is the embedded system with wooden blinds, covered by dark brown veneer in combination with striped exotic wood veneer, the same as in the case of the doors. One of the original glass partitions is now lined on both sides, only fragments of fixing profiles are preserved.



Fig. 8. Visuals of the office based upon restorational research findings and ground plan, partly analogical reconstruction. Grůňová, 2016.



Fig. 9. Visuals of the lobby hall, based upon restorational research findings. Grůňová, 2016.

CaD visuals of the spaces (preserved and partly based on the Bednárík's ground plan) show a real elegance, clear, pure beauty of high quality design. Bednárík created interior space, which is fully comparable to the level of the mainstream international style architecture in Europe.

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