Architect Hans Poelzig: a project for Ukraine

Svitlana Smolenska ¹, Hans-Dieter Nägelke ²

¹ Department of Architecture and Urbanism; Kharkiv School of Architecture; Ukraine
smollana@gmail.com; ORCID: 0000-0002-4953-9563

² Director of the Museum of Architecture; Technische Universität Berlin; Germany
hans-dieter.naegelke@tu-berlin.de

Abstract: The paper examines one of the fragments of the creative heritage of the famous German architect Hans Poelzig: his competition project of the State Ukrainian Theatre of Mass Musical Action for 4000 seats for Kharkiv. The project is viewed through the prism of little-known competitive events of 1930, which makes it possible to decipher its architectural, compositional, urbanistic and functional ideas, to reveal its symbolism. The study is based on the architect’s original drawings preserved in the archive, primary sources of the early 1930s, biographical and critical works of other authors dedicated to the nominees of the Kharkiv competition, as well as on a comparative and meaningful analysis of architectural graphics and textual documentation.

Keywords: Hans Poelzig’s project, international architectural competitions, modernism of the 1920s-1930s, Ukraine, theatre buildings.

1. Introduction

The TU Berlin Museum stores the project of the State Ukrainian Theatre of Mass Musical Stage in Kharkiv by the German architect Hans Poelzig. These preliminary drawings, made on tracing paper in pencil, served as the basis for the final design materials submitted by him to an international competition announced by the Ukrainian government in 1930. Since the originals of the competition designs have not survived, this graphic documentation is of particular value. Some of the archival drawings have already been published in books and articles by various authors dedicated to the work of the architect [1]–[3]. However, this project has not been subjected to proper analysis in the literature, it has also not been considered earlier through the prism of the Kharkiv competition. Moreover, the competition itself, despite its international status and solid representation, has not yet been described in detail, it remains a blank spot in architectural history.

The very fact that German architects, including such well-known ones as Walter Gropius, Sergius Ruegenberg, Hans Poelzig and others, carried out projects for Ukraine, is in itself of great interest. What was this competition? Why did it attract such a large number of participants from different countries and continents? There are also conjectures about Poelzig’s project of the Kharkiv theatre. Despite the fact that the Ukrainian competition was
not sufficiently covered in the historical literature about modernism, it is mentioned by most researchers of the architect’s work. Does this not mean that the work on the project was significant for him? What important message did he incorporate into it?

The purpose of the paper is to identify the specifics and significance of Poelzig’s project of the Kharkiv theatre, analysing it in the context of competitive events.

The study was based on archival materials (original drawings), primary sources from the early 1930s (text documents and photocopies of projects), as well as the work of other researchers dedicated to the work of architects – participants in the Kharkiv competition (Hans Poelzig, Zdenko Strižić, etc.).

The methodology includes a semantic and comparative analysis of the collected documents, as well as promotion and confirmation of the author’s hypothesis.

2. Research

2.1. Brief description of the main competitive events

In order to immerse the readers in the plot of the international Ukrainian competition of 1930, one should provide (as far as the scope of the article allows) a brief description of the main competitive events that have already been restored in the process of research.

In the 1920s, Kharkiv was a capital of the newly formed Ukrainian Socialist Soviet Republic, which became part of the USSR. The city developed so rapidly that in less than a decade it turned into a major industrial, cultural and social centre. It became the third most important city in the Soviet Union in those years after Moscow and Leningrad, and in terms of population growth, it even outstripped Moscow.

Construction in the Ukrainian capital developed on a large scale starting from the second half of the 1920s. Industrial giants, large residential complexes, parks, stadiums, administrative and public buildings completely changed the face of Kharkiv. Its new high-rise administrative centre was being built at that time in the northern part of the city on a previously undeveloped territory. It impressed both domestic and foreign contemporaries with its size and cutting-edge modernist architecture. Derzhprom became the first and the key building in the future ensemble of Dzerzhinsky Square (now Svoboda Square) [4]. Erected in just 2.5 years in 1925-1928, it became widely known due to its uniqueness and publications in the professional press of many countries. Therefore, it is no coincidence that the Kharkiv competition inspired many architects, who had hopes for the implementation of their modernist ideas in the conditions of active construction in Ukraine [5] and especially in its capital, where modernism had become the leading trend in architecture since the late 1920s.

The State Ukrainian Theatre of Mass Musical Stage was intended to become a new type of theatre, the cultural and political centre of the modern capital Kharkiv. The goal of its construction was to involve “the wide masses to active creativity”. It was interpreted by the initiators of its erection as “one of the strongest instruments to act on the masses”, mobilizing them with its activities to solve the problems of accelerating the pace of the socialist transformation of the national economy, culture and life. The building itself (as was stated in the competition program) “should, according to its style and technique, reflect in its architectural forms these same general ideas of the growth of the Ukrainian Proletarian Culture, the Industrialisation of the country, socialist reconstruction of all Public Economy and in all domains of culture in our existence” [6]. It was conceived as a grandiose building with a hall for 4000 seats, claimed to become one of the largest opera houses
in Europe at that time (which was quite in the spirit of the industrial era), to serve
as a demonstration of advanced architectural, construction and technical capabilities of the
country.

The competition was initiated by the Ukrainian government back in 1929. However,
the preparation for it was so serious that it took a whole year. It was announced in June 1930
as an international competition. A multi-page, colourfully designed program in 5 languages:
Ukrainian, Russian, German, English and French was published and sent around the world
through the Ukrainian Society of Cultural and Scientific Relations with Foreign Countries
and thanks to foreign contacts. This well-designed program recruited many future
participants with its profound elaboration and, at the same time, provided a certain freedom
of creativity: “Owing to the large size of the theatre and the necessity to satisfy a series
of demands, which have not had place in former theatres, the authors are allowed to divert
from the existing norms and rules as long as there are sufficient bases so as to secure
the safety of the public and the conditions of perfect visibility and audibility” [6].

The competition was mixed. Everyone could participate in the open competition.
At the same time, 15 projects had been ordered from the leading architectural associations,
organizations and universities of the Soviet Union to involve them in the work on the theatre.
These projects participated in the competition, but they would not have received any bonuses
in case of victory, since they had already been paid in advance.

Nominees had to submit their proposals before the end of December 1930. Apparently,
no one had expected such a number of submitted projects – 144. Therefore, the jury had to
work in two stages. Initially, all projects were divided into three categories. The first (highest)
category included works of the highest quality, meeting the requirements of the program and
offering the most interesting solutions from the point of view of the jury. In fact, all of them
were either awarded or recommended for purchase at the second stage of judging.

Many more projects (about 100) came from abroad than from the Soviet republics.
Germany stood out among all the countries for its activity – it represented the largest number
of participants, as it gathered the best modernist forces in Europe at that time. Many young
architects who had submitted their projects to the Kharkiv competition from Germany
subsequently made their brilliant careers in other parts of the world. But they had received
their education and had taken their first steps in the profession in Germany.

The younger generation of modernists predominated among the contestants. Their age
was about or slightly over 30. But there were quite a few well-established and recognized
professionals, whose names had been already widely known. Hans Poelzig (1869-1936)
belonged to that group.

Since the works were submitted anonymously under a motto, neither the authority or
fame of their authors, nor the personal likes or dislikes of the jury members could influence
the final results. Poelzig’s project was not awarded or recommended for purchase. As it
turned out during the study, Poelzig’s project called “1917” was awarded the high 2nd
category.

12 projects were awarded from those that had been submitted to the open competition.
Another 12 did not receive a monetary reward, but were recommended for purchase as
deserving special attention and recommendation for sale. 6 pre-ordered projects were equated
to the first category.

A commissioned project with the emblem "Two rings crossing each other" by the
leaders of the Soviet constructivism Brothers Alexander, Viktor and Leonid Vesnin (RSFSR,
Moscow) was recognized as the best at the Grand Prix level.

The first prize went to three nominees at once. It was a project called “Machine” by an
American Alfred Kastner from New York. The project with the emblem “Black sector in the
red circle” by the Croatian architect Zdenko Strižić, who worked in Germany at that time, and a group of Kharkiv authors from “Ukrbudob’ednannya”, for the project called “1931 p.” (Ukraine). The project ordered in advance under the symbol “ACI” was also included in the first prize. Its authors were students of the Moscow Institute of Architecture and Civil Engineering, headed by the architect Alexander Vlasov. Walter Gropius, who was one of the founders of European modernism, with his “Mass Centre” got the eighth prize.

It should not be forgotten that many young contestants had studied with these masters and knew their work in the field of theatre design well. Therefore, the influence of the older generation of architects on the creativity of the youth and on the results of the Ukrainian competition goes far beyond the scope of their projects for Kharkiv.

Zdenko Strižić, one of the first prize winners, was Poelzig’s student from 1925 at the Berlin Academy of Arts (Preußische Akademie der Künste), and then his collaborator until 1930 [7].

Strižić took part in the design of some of Poelzig’s projects, such as the Berlin cinemas Capitol (1925) and Babylon (1928), Berlin residential complexes Spandau (1927) and Bulowplatz (1929). Drawings confirming this were found by Galović in the archive [7]. Collaboration with Poelzig ended before the Ukrainian competition in 1930. Probably, the Kharkiv Theatre became one of the first major independent works of the young architect.

The perspective of the theatre presented by Strižić (Fig. 1) suggests that it was to some extent influenced by Poelzig’s graphic style. The building does not look transparent and bright, despite the almost completely glazed facades. Some gloominess and drama inherent in the “hand” of the teacher emanates through the graphics of his student.

The jury rated the project as one of the most carefully developed and interesting: „The project provides a successful connection between the stage and the auditorium and an original way of equipping the stage, which allows you to change the scenery quickly and repeatedly. A stage with a radial arrangement of service rooms significantly reduces the communication path and improves evacuation. The shape of the auditorium provides good visibility and a relatively limited distance of the audience. The appearance of the building is simple and characteristic of the total masses, consistent with the local conditions of the location of the building on the site” [9].
2.2. Poelzig’s project for Kharkiv

By the end of the 1920s – by the time the Ukrainian competition was announced – Poelzig had already gained worldwide fame. His projects and buildings had been published in magazines of different countries, he had been invited to participate in international competitions. An interesting remark is made by Theodor Heuss on this subject:

“Poelzig was perfectly aware of the problems connected to these competitions: if certain questions of a technical, rational type imply autonomous answers that go beyond national borders (think of bridges, industrial warehouses, airplanes), this is not true as regards the symbolic nature of the building. In any case, his commitments abroad focused precisely on the questions that most of all fascinated him, and to which he had not been able to give an answer until now: space and volume” [1].

The architect participates in three, apparently the most interesting and significant for him, international competitions: the Palace of the League of Nations in Geneva (1927), The State Opera Theatre of Mass Musical Stage in Kharkiv (1930) and the Palace of Soviets in Moscow (1931).

The journal “Baugilde”, describing the projects of the Kharkiv competition, wrote about the Poelzig’s theatre in 1931:

“The entrance to the theatre is framed by two wing buildings. It leads to the ground floor ticket hall, from which all levels can be reached. Vehicle traffic should not disrupt the flow of people reaching the theatre, so there is a passageway under the theatre and entry for those arriving by car from the other side of the hall. [...] The audience area rises in an optical curve. The sight lines are flat up to the top row. The stage is a gigantic central space with a circular floor plan (68 m in diameter) into which the audience area is inserted. The stage can be brought to various sizes with accordion walls, resulting in possibilities “from individual performances to chariot races, from smaller concerts to mass choirs, from mimicry to props.” Large groups – humans, animals or wagons – can move across the stage. A wide ramp leads in from the outside. Despite this exceptional variability, the stage is very uncomplicated. “By separating the exit stairs, the traffic problem, which was one of the most difficult problems in this mass theatre, has been solved in a very fortunate way” [10].

Julius Posener who studied with Poelzig and whom he respectfully calls “the Master” emphasizes that the essence of Kharkiv project is to demonstrate the ideal solution, the circuit diagram. That was a parabola intersecting a circle:

“Poelzig [...] submitted a scheme that he had intended as a statement of principle. The main auditorium is parabolic and with it a large amphitheatre rises up in steps. The tip of the parabola was left empty for the stage; it penetrates into the large circle of the stage in which shallow parabolic scenery be inserted. The main auditorium is parabolic and with it a large amphitheatre rises up in steps. The tip of the parabola was left empty for the stage; it penetrates into the large circle of the stage in which shallow parabolic scenery be inserted” [2].

It seems that the motif of a sector/parabola intersecting an ellipse/circle had been on Poelzig’s mind for a long time. He approached it from different angles. In the project Salzburg Festival Theatre 1920-1922 (Fig. 2), he inscribes the hall in an ellipse, and places the rooms serving the stage in a parabola. The stage is located at their intersection. The parabola is not perceived as a solid volume due to the different heights of the service premises, but it is guessed in the building plan. In the Kharkiv theatre, the architect moved the hall into a parabola, and the stage into a circle, cleared both forms of any layers, and developed his favourite theme of a stepped tower above the circle.
Poelzig was looking for the best form of the theatre hall plan. The combination of a sector and a circle became one of the most successful solutions for this. The sector is a part of the round amphitheatre, cut off but taking into account the best viewing angle for spectators, providing them with “equally good conditions, from which complete visibility and audibility of the performance could be attained,” as well as “successful evacuation of the hall” (as the competition program required) [6]. The round mechanized stage made it possible to quickly change the scenery as it rotated, and to locate working premises so as to “wholly guarantee the necessary convenience which are demanded for rapidly fulfilling the performance” [6].

It is interesting that Strižić’s project was called “The Black Sector in the Red Circle”. The author used the same principle as Poelzig, only brought his parabola deeper into the very centre of the circle. When comparing the drawings of the plans of the two theatres (especially when they are superimposed on each other), it is easy to see that they are very similar: the choice of the angle of the sector, the ratio of the sizes of the sector and the circle. There is no doubt that a common idea-scheme was used in both projects (Fig. 3a, 3b). In both projects workshops, dressing rooms and other premises serving the stage are located along the perimeter of the circle, the centre of which is occupied by the stage. But Strižić creates an additional wing along the axis of the building.

Fig. 3. a - Hans Poelzig. The competition project “1917”, 1930. Plan of the 3rd floor [12]; b - Zdenko Strižić with the participation of engineer Karl Ebbeke. The competition project “The Black Sector in the Red Circle”, 1930. Plan [10].
Access for cars to the main entrance to the theatre under the auditorium is provided in both projects as well. But Poelzig leaves it at a ground level, and Strižić lifts it up the ramp. Evacuation stairs are placed on the facade in both projects. Poelzig overemphasized the stair motif. He flanks the parabola with stairs, energetically pushing them forward, so that each subsequent space of stairs grows in size in relation to the previous one and looks somewhat hypertrophied in the final positions. Strižić carefully removes the stairs along the facade, integrating them into its curvilinear form, which, at first glance, seems to be more justified and economical in terms of composition. His pragmatism seemed very convincing to the jury.

Posener, reflecting on Poelzig’s project, expressed doubt that a parabola intersecting a circle was the ideal solution that the master had found [2]. However, one cannot agree with him. After all, this scheme successfully “worked” for Strižić, even brought him the highest award.

Poelzig was also an excellent theatre artist, creating scenery for various performances in his own original manner. Upon careful analysis of his Kharkiv project, one gets the impression that he creates a gigantic scenery on a city scale, boldly using theatrical techniques of exaggeration, illusion, dramatic play.

The main facade of the building is evidence of this (Fig. 4). The architect does not place the entrance in the plane of the wall – the barrier between the outer and inner space (the city and the theatre), but resorts to the method of creating perspective in the same way as he would do on the stage due to retractable theatre wings (for example, his stage scenery “ballroom” for “Don Giovanni”, 1923 [15]). Two wide (more than 6 m) open staircases leading to the main foyer further enhance the visual effect of depth, referring us to the technique of a raked stage\(^1\), known since the time of the theatre of the Middle Ages and Baroque (Fig. 5). Posener

\(^1\) “A rake or raked stage is a theatre stage that slopes upwards, away from the audience. Such a design was typical of the English theatre in the Middle Ages and early Modern era, and improves the view and sound for spectators. It also helps with the illusion of perspective: when features of the scenery are made to align with a notional vanishing point beyond the rear of the stage, the rake supports the illusion. These elements of scenery are termed raking pieces” [13].
Architect Hans Poelzig: a project for Ukraine

was critical of these stairs when he wrote about the project of the Palace of the Soviets in Moscow, the architect’s next project: “As I see it, a great advantage here over Kharkov is that the stairs that provide access to the amphitheaters have been integrated into the shape of the buildings” [2]. However, these staircases, actively directed towards visitors, penetrating the surrounding urban space, spreading the building outward, are fully justified by the author’s logic of the project with such an interpretation of Poelzig’s main idea. The giant portal in his project is a frame for a space that goes deep into the depths, it is a stage, with its own special monumental theatrical plasticity, erected right on the street.

Fig. 5. The stage at the Baroque theatre in Český Krumlov [16].

Another confirmation of the hypothesis expressed here is the version of the longitudinal section of the building, kept in TU Berlin’s Museum of Architecture (Fig. 6), which is completely identical to the final drawing submitted by the author for the competition (Fig. 7). Only the tower above the grates is missing in it. The tower, placed above the centre of the circle, is the main focus of the volume-spatial composition of the building in the final version, but it has no function. This is a decoration placed in the urban space. Poelzig probably did not immediately come to such a bold decision, he added it for urban and scenographic reasons. He had previously used this technique, which was designed to perceive a building from a distance, for example, in the project “Messe Berlin” (Fig. 8). The whole city was to become a place for mass action according to his plan. To bring the performance to the street, to create a scenery worthy of the city space – was he not clearly demonstrating this idea in the perspective of the Kharkiv theatre? (Fig. 9). He positioned the crowds of moving people with banners in the foreground, as if on a stage. The tower, crowned with a flag, served as a worthy final chord in the design of this performance.
Fig. 6. Hans Poelzig. The competition project “1917”, 1930. Section, one of the options [17].

Fig. 7. Hans Poelzig. The competition project “1917”, 1930. Section, the final version [18].
Fig. 8. Hans Poelzig. “Messe Berlin”. Project, perspective. Sketch of the entrance to the exhibition area, variant with a spiral tower [19].

Fig. 9. Hans Poelzig. The competition project “1917”, 1930. Perspective [20].

Poelzig was also active in cinematography, where he created images of the urban environment on a much larger scale than the space of the theatre stage [15]. Therefore, the “scenography of the street” was not something alien to him, not peculiar to him. On the contrary, this idea was fuelled by all his rich professional polyphonic experience.

The symbolism, the “theatricality” of Poelzig’s architecture was not understood and accepted in the 1930s for several reasons. Firstly, it turned out to be inappropriate in the economic conditions of Ukraine in those years. Secondly, it went beyond modernist
utilitarian and overtly rationalistic approach. Theatricality, drama was also inherent in the architectural graphics of Poelzig, which, perhaps, added brutality to the building when perceiving its perspective and the main facade. But at that time the jury members were prepared for other emotions. No wonder one of the critics, sincerely wanting to “justify” and “correct” the master, wrote that “if the foyers were to be glazed, the building would have had an almost constructivist effect, especially at night” [21].

But Poelzig seems to have deliberately not made the façade transparent. The architectural dramaturgy of the Kharkiv theatre has a different connotation: pathos, heroism, hyperbolization, drama.

Today, having more than 90 years of stylistic experiments behind the modern architectural history, we can appreciate the originality, the profound subtext of Poelzig’s idea, presented by him in the project of the Kharkiv Theatre.

3. Conclusions

Some facts confirm the assumption made at the beginning of the article about the importance of the work on the Kharkiv project for Poelzig. Despite his scepticism about international competitions, he made an exception for three of them, including the theatre in Kharkiv. The theme of theatre always engaged him. It, one way or another, recurred in all his work as a set designer and as an architect. The competition program provided ample opportunities for experimentation. Poelzig did not miss this opportunity. Although the project was not awarded by the jury, the architect published it in the German “Baugilde” in 1931, along with the awarded designs of the winning authors. Perhaps he hoped that, thanks to the wide publicity, his ideas would be appreciated among his compatriots. All the preparatory drawings were saved by him.

The project of Poelzig’s Ukrainian State Theatre is deliberately considered in the article through the prism of the Kharkiv competition, which allows us to avoid the cliches already imposed on the work of the master, but to focus on the creative tasks that the architect solves when designing a modern, progressive theatre building. The plan scheme “a sector/parabola intersecting a circle” he used to combine an auditorium amphitheatre and a stage really justified itself and met the requirements of the competition program. This is evidenced by the fact that the motif of “a sector/parabola intersecting a circle” was also played out in different versions by other participants in the Kharkiv competition: Renshichiro Kawakita (Japan, IV prize) in his project “R”, Röpe and Sassenhausen from Germany in their project „Figure in Circle”. However, comparison and analysis of the projects carried out during the study show that the dimensions of the circular stage and the spectator sector are actually identical only in the plans of Pelzig and Strižić. There are other “verbatim repetitions” in both projects: work spaces are located around the stage, and a passage is organized under the amphitheatre. Such a coincidence cannot be an accident.

Strižić, on the other hand, successfully beat the scheme both in compositional and functional aspects. He fully met the requirements of the competition program, keeping up with the times, demonstrating in the project the flourishing of modernism, for which he received one of the first prizes. He received special praise from the jury for the most successful solution to the problem of the smallest distance between the viewer and the stage, undoubtedly thanks to the idea of a “sector in a circle”.

Deeper meanings were embedded in the modernist project of the Poelzig’s Kharkiv Theatre than in many other projects submitted in the competition, including Strižić’s project. Most of the authors focused on the function, form, construction of the building, technical and other requirements of the competition program. Poelzig went further. He expanded the scope
of the auditorium, “turned it inside out”, into the urban space, and at the same time, “let” the street inside the hall. Its mass theatrical performance begins on the square in front of the theatre facade, and the facade itself resembles a giant stage portal. From here, from the square, it is easy to get inside the building: to the stage along accessible open ramps (this was well demonstrated by the author in the perspective of Fig. 9), and to the amphitheatre to the audience seats through the main entrances (through the “stage portal” in Poelzig’s interpretation), as well as through the passage under the amphitheatre. Citizens can choose who they want to be: spectators or participants in a mass theatrical performance. In this sense, the architect responded better than anyone else to the idea of a revolutionary modern public theatre of mass action that activates people.

Poelzig’s project contains philosophical depth, symbolism, urban scenography outside/over styles, demonstration of new semantic possibilities of architecture of a separate building in an urban space. This idea was not appreciated by the jury. Subsequently, the architect turned away from this: in the competition project for the Palace of Soviets in Moscow, he completely changes the dramaturgy of the building.

Undoubtedly, the proposed interpretation of the Poelzig’s project for Kharkiv is only a hypothesis (it is impossible to ask the author to confirm it!), although it has an evidence base. It is deliberately exaggerated in order to show it more prominently in the summary. However, such a technique is quite in the spirit of Poelzig and could please him.

**Funding**

This work was supported by Volkswagen Foundation.
References


[6] *Prospectus for the international competition in composing a project for the state Ukrainian theatre mass musical stage with a 4000 seat capacity*, Kharkov: Town council, Constructive aid committee, 1930.


