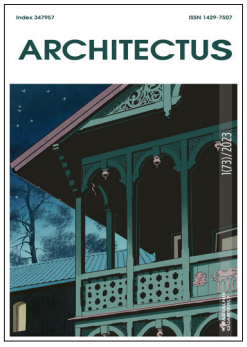

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Łódź Fabryczna Railway Station – a progress or regress in railway architecture?

Research problem and method of analysis

The turn of the 21st century was marked in the architecture of railway stations by a large number of magnificent buildings that became "icons" of the clearly visible revival of railway as a means of modern transport. Some of them are innovative architectural concepts, as well as a valuable complement to the surrounding space. Łódź Fabryczna Railway Station could follow this trend as one of the largest investments of the Polish railways. The aim of the article is to try to answer the questions why it did not happen, whether it is related to the peripherality of the city on the map of Europe, the unfinished investment, or rather the defects of its architecture. An additional goal of the author is to show that the lack of consistency and voluntarism in making decisions can only lead to bad urban planning.

After a general description of the facility and discussion of the problem of authorship, the essential analysis begins with examining the genesis of the project, in the context of early urban visions for the development of the surrounding post-railway and post-industrial areas and the concept of developing the railway network of Central Poland. Both of these factors shed light on the question of the rationality of its scale and layout. Secondly, the issue of integrating the station into the local transport network is analysed. Thirdly, the issue of retrofitting the station into urban context, namely to what extent the building enriches or depreciates it. And fourthly, details of the architecture of the building itself are discussed. The assessment was primarily based on functional criteria (how efficiently functional requirements are met), ecological criteria (to what extent the solutions meet the requirements of times of climate change), and, where possible, aesthetic criteria (whether the form evokes associations that can be considered positive).

Professional literature on the architecture of the building seems to be relatively modest. The most extensive material is a presentation of the new station, illustrated with photographs and plans, in a leading Polish architectural journal [1]. It was enriched with original statements by architects and structural engineers [2], [3] and two texts of architectural critique [4], [5]. In addition, we have two technical and scientific articles [6], [7] and two other critical texts of a more journalistic nature [8], [9].

The main criticisms heretofore focuses on the overscaling of the facility, the lack of integrated and well-designed greenery, numerous shortcomings in the area of circulation patterns and the unjustified use of historical forms. Not all important aspects, according to the author, have been noticed so far, whereas others require polemics. In addition, most of them were written just after the opening of the station, which means that they could not refer to the experience of several years of its operation.

For the purposes of the article, it is of great importance to rely on unpublished designs illustrating metamorphoses of the concept in planning phase. References to general professional literature in the field of railway architecture, supported by the conclusions of the analyses described above, finally allow an attempt to answer the question contained in the title.

Station's layout and the authorship of the design problem

The station is large (440,000 m^2), although it is far from the scale of main stations operating in Europe. Its dimensions result from the underground location of the four island platforms and from the site context, defined by

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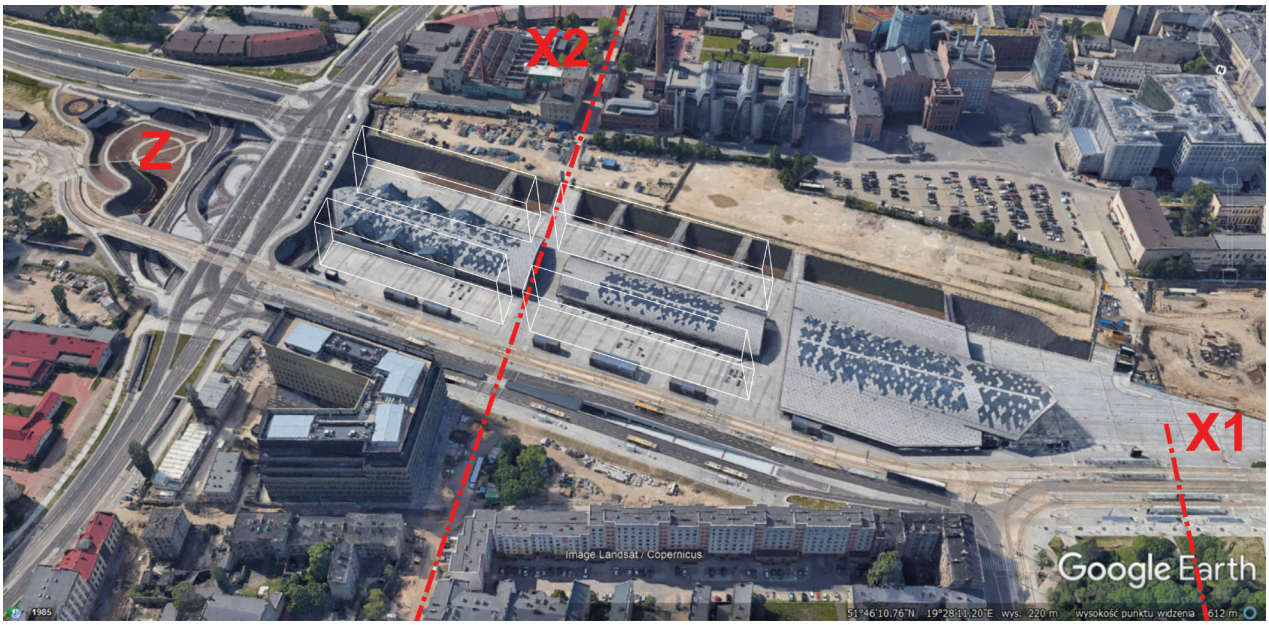

Fig. 1. General view of the station from north-west.
Marks: X1 – Moniuszki Park axis, essential in R. Krier's concept, X2 – Grand Theatre's axis (Targowa Street), Z – green square
(source: Google Earth, circa 2018)

Il. 1. Widok ogólny dworca od północnego zachodu.
Oznaczenia: X1 – oś Parku Moniuszki istotna w projekcie R. Kriera, X2 – oś Teatru Wielkiego (ul. Targowa), Z – zieleniec
(źródło: Google Earth, ok. 2018)

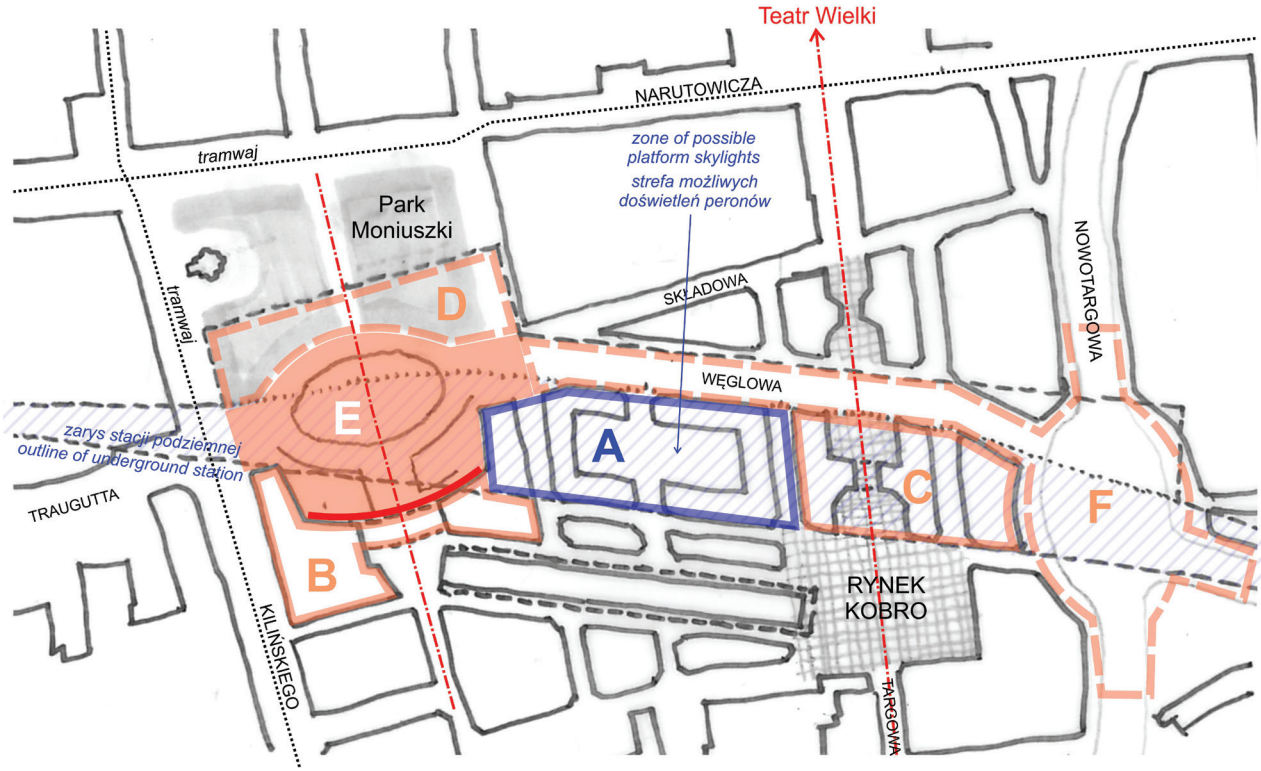

Fig. 2. Station's plan at street level, concept of Kolprojekt-SENER-BPK consortium, 2008. Markings: A – railway station with offices, B – "City Gate", offices and leisure, C – car park above platform hall, offices, D – sub-surface coach/bus station, E – station piazza, F – underground roads with car park. A fairly faithful adaptation to the forms of R. Krier's design is visible, including the reinforcement of the Grand Theatre's transverse axis (drawing: J. Wesołowski, 2023, based on [10])

Il. 2. Plan dworca w poziomie ulic, koncepcja konsorcjum Kolprojekt-SENER-BPK, 2008 r. Oznaczenia: A – dworzec kolejowy, B – „Brama Miasta", biurowce i rozrywka, C – parking nad halą peronową, biurowce, D – podziemny dworzec autobusowy, E – plac dworcowy, F – drogi podziemne z parkingiem. Widać dość wierne dopasowanie się do form projektu R. Kriera, w tym wzmocnienie osi poprzecznej na Teatr Wielki (rys. J. Wesołowski, 2023, na podstawie [10])

the significant distance of the pedestrian entrance, which is related to the emerging downtown traffic calmed zone, from the vehicular approach area, associated with the external road system. The length of the facility measured by the extremities of the roofs is approximately 380 m, and the width of the underground complex is approximately 85 m. Spatial layout is determined by the depression of the pedestrian circulation on level –1 under the street, which surrounds the void above the central part of the platforms. These are situated at a depth of about 16.5 m [6], with the foundation slab reaching 18.2 m [3]. Four island platforms were built. Above their extreme sectors, ceilings were constructed with two circulation halls: one from the city centre, accessible mostly by foot and from tram stops, and the other from the outside, accessible by car and taxi. In the above-ground part, the building is cut by two transverse passages. All parts are covered with flat barrel roofs; pointed contours at apex of the projections of extreme ends are a characteristic architectural accent of the station (Fig. 1). As a result of the recess, parts of the station building visible from the street are relatively low and long, with the eaves at a height of about 4 m. From the very beginning, it was planned the new Łódź Fabryczna would be a through station on the underground cross-city line, and its current form, still a terminus, is only an interim phase.

The station emerged in three design approaches. The first was a study carried out by a consortium of the Spanish company SENER with Kolprojekt and Biuro Projektów Kolejowych, completed around 2008 [10] (Fig. 2). It proposed an almost completely underground platform hall (there was an option of the full commercial building over), and the above-ground part, with a commercial superstructure, adapted quite accurately to the layout set in the first concept of the "Nowe Centrum Łodzi" (NCŁ) ["New Centre of Łódź"], i.e. a new development of the surrounding areas abandoned by railway and industry designed by Rob Krier (cf. the section *Railway station and urban determinants of context*). The second approach was a more urban planning study carried out by a consortium of the French company SYSTRA (transport systems) with the participation of the AREP architectural studio (dealing, among others, with projects for French railways); it was completed in around 2010 [11] (Figs. 3, 4). The most significant architectural change introduced by the second study was the admittance of daylight to the recessed platforms, so that to avoid a dark and overwhelming platform cavern, in accordance with the latest trends (e.g. at Zaragoza Delicias, 2003 – shallow tunnel; Berlin Hbf., 2006 and Antwerpen Centraal, 2006 – both in a deep tunnel). Light was to be provided through a glazed roof between office blocks, as well as from the side trench located along the southern wall of the building (probably not without inspiration from the Lille Europe Station, 1993). During the design process, it was believed that this would allow an insight into the very futuristic building of the new art museum in the form of a multi-storey horizontal cylinder.

The third and final development of the architecture was part of the contract signed by the Torpol-Astaldi-PBDiM-Intercor consortium, which also comprised the four-track tunnel leading from the east. The entire contract was valued at PLN 1.76 billion [12]. The Warsaw FBT studio [13] was responsible for the architectural part (project 2013/14). A long list of cooperating companies is provided by "Architektura-Murator" and three leading designers are distinguished: Anna Tomaszewska, Magdalena Boule

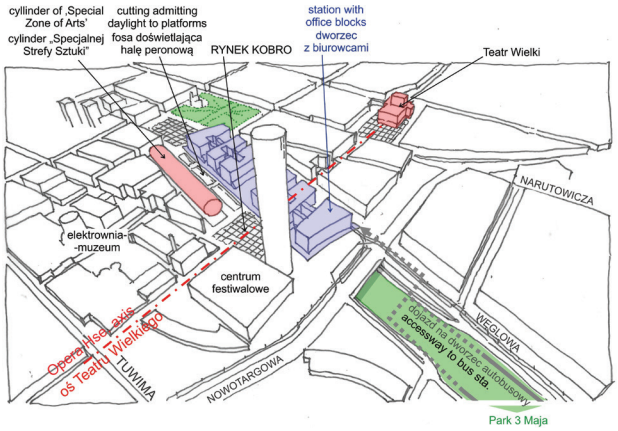

Fig. 3. Station seen from the east, first concept of SYSTRA-AREP, April 2009. Visible is the idea of a green strip approaching the station, flanked by carriageways of a planned artery. The strip was to go down to the level of the vehicular approach area hidden under the concrete slab of what is now Rodziny Poznańskich Street and the adjacent pedestrian area. From the west side, the architects proposed, for the first time, a modification of the R. Krier's "City Gate" axis (drawing: J. Wesołowski, 2023, based on [11])

Il. 3. Widok dworca od strony wschodniej, pierwsza koncepcja konsorcjum SYSTRA-AREP, kwiecień 2009 r. Widoczny pomysł na doprowadzenie do dworca zielonego klina, jako szeroki pas rozgraniczający nowej arterii. Klin schodzić miał na poziom placu podjazdowego ukrytego pod wiaduktem ul. Nowotargowej i płytą. Od strony zachodniej projektanci proponowali po raz pierwszy modyfikację osi krierowskiej „Bramy Miasta" (rys. J. Wesołowski, 2023, na podstawie [11])

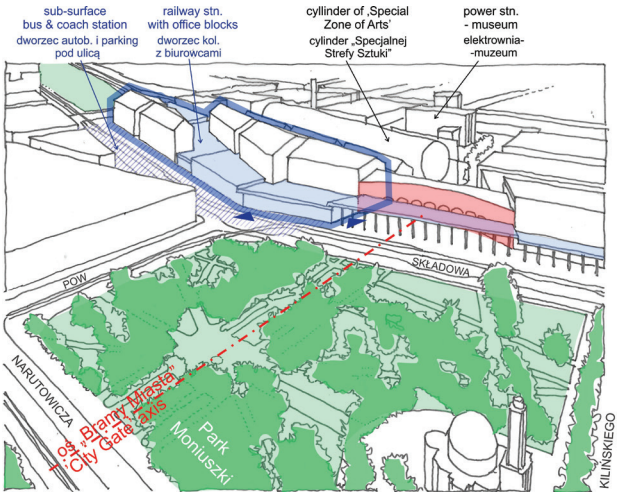

Fig. 4. Station and "NCŁ" seen from the north-west, second concept of SYSTRA-AREP consortium, November 2009. Return to the "City Gate" form as proposed by R. Krier (drawing: J. Wesołowski, 2023, based on [11])

Il. 4. Widok dworca i NCŁ od strony północno-zachodniej, druga koncepcja konsorcjum SYSTRA-AREP, listopad 2009 r. Powrót do „Bramy Miasta" w układzie R. Kriera. (rys. J. Wesołowski, 2023, na podstawie [11])

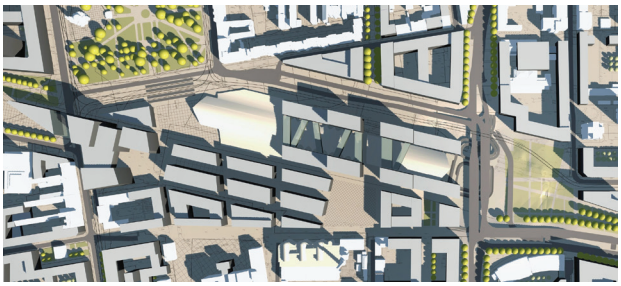

Fig. 5. Fabryczna Station and its surroundings, part of the Nowe Centrum Łodzi plan of 2014. The commercial superstructure flanking the two parts of the above-ground roofing of the platform hall is shown. Note the important differences in planned and built physical layout of the station's east and west foregrounds (source: Miejska Pracownia Urbanistyczna, Łódź)

Il. 5. Dworzec Fabryczny i otoczenie, fragment planu Nowego Centrum Łodzi z 2014. Widoczna nadbudowa biurowa po dwóch bokach części nadziemnej hali dworca. Ponadto widoczne istotne różnice w zagospodarowaniu jego przedpola wschodniego i zachodniego w stosunku do realizacji (źródło: Miejska Pracownia Urbanistyczna, Łódź)

and Tomasz Tomaszewski [1]. It is a pity that professional publications [6], [9] do not mention this authorship, while the contractor's website only states 300 architects worked on it [14]. Structural design was in the hands of the Cracow company GSBK Biuro Konstrukcyjne [15]. However, it can be assumed that the station was a task so complex and requiring design flexibility that there were many more authors of individual structural elements [7].

Final design in its ultimate form can be seen in the NCŁ context in Figure 5. The previously planned longitudinal, axial gallery leading traffic to the platforms (typical for French high-speed railway stations) was substituted by a pair of side galleries, as a result of which both extreme platforms were placed under a low ceiling (Fig. 6). This made it difficult to illuminate the platform hall from the longitudinal lateral trench mentioned before. However, the cutting was retained, despite plans for the cylindrical museum were given up in the meantime; now it partially illuminates level –1 of the building (Fig. 7). Ultimately, these galleries are to house a small set of shops, without which a large station can hardly function [16]. The circulation halls at both ends of the station, located at street level in the previous design, have been moved to level –1. From the city centre side, a monumental approach to one of them was built in the form of an inclined square on a triangular plan, approximately 130 m long.

It should be emphasized that the architecture of the station was consulted on an ongoing basis by committees in which interested parties were represented: i.e. the railway, as well as city and provincial councils (the author had the opportunity to participate in meetings of such a body in 2009–2010, i.e. when the second concept of the station was debated [11]). Thus, it can be concluded that the final form of the station is not only an expression of the creative will of the architects, but it is a compromise, sometimes quite distant from the original proposals (cf. April 2009 and November 2009 versions of the SYSTRA-AREP consortium; Figs. 3, 4). Certainly, the authorship cannot be reduced solely to the architects cooperating with this design company, as "Gazeta Wyborcza" claimed [8].

Origin of the project

The decision to thoroughly rebuild the Fabryczna Station is related to the project of building a railway line connecting Wrocław and Warsaw, which, for obvious reasons, was to pass through the Łódź metropolitan area. This

Fig. 6. Middle part of the platforms (level –2) with skylighted overall roofing. Visible is the circulation gallery above one of the extreme platforms (on level –1) (photo by J. Wesołowski, 2021)

Il. 6. Środkowa część peronów (poziom –2) z bezpośrednim doświetleniem górnym. Widoczna galeria komunikacyjna na piętrze (poziom –1) ponad jednym ze skrajnych peronów (fot. J. Wesołowski, 2021)

idea was then developed by combining the Wrocław and Poznań directions in the form of a project of a high-speed rail line (HSR) branching out in the Kalisz area (the so-called "Igrek" or "Y-shaped Line"). The 2005 preliminary feasibility study showed [17], as one of the two options, the option of carrying it out directly under the city centre, with an underground station on the site of the Fabryczna Terminus, traditionally of the greatest importance for the city. In this way, the railway would use one of its main advantages: a direct link to the very centres of big cities. Łódź Fabryczna location was also favoured by the possibility of using the station as one of the tools for regeneration of the inner city, which suffered particularly as a result of many years of neglect, and then functional marginalization related to the emergence of centrifugal tendencies in trade and services, characteristic of the "urban change" of the 20th century. The city government supported this idea and, in the study it commissioned, confirmed the desire to have a centrally located HSR station [18].

The project was quickly combined with a thorough reconstruction of the entire railway junction in Łódź, leading to the consolidation of most of the traffic of various ranges at the main station, which the new Łódź Fabryczna was about to become, with underground platforms on the four-track cross-city line [19]. Its role as the main transfer hub from the long-distance railway (including the HSR) to the regional and urban system led to the expectation of a serious increase in the daily number of people served, especially since the regional system was not only to be "resuscitated" after years of collapse (which is currently happening), but also supplemented with key missing links serving the region and its main city, as well as accelerating long-distance traffic (this has not been effectively undertaken). Łódź and the region were to become an area where, for the first time in history, railways, as an environment-friendly means of transport, play a fundamental role in mobility.

There are also additional circumstances that should have been considered when dimensioning the station. HSR, almost always where it was established, caused a large increase in the number of passengers due to the increase in competitiveness triggered by the reduction of journey duration to significantly less than by car, and even less or the same as by plane (including access to airports, control and waiting time). Added to the passenger volume should be the number of visitors to the station, if only to take advantage of the accompanying retail service offer. If one of the premises were to accept the comparison with cities where the railway works well, then there is a parallel with the station in Nuremberg (over 200,000 passengers and visitors daily in a slightly smaller city and agglomeration), or in Mannheim (over 100,000) [20]. However, the number of 200,000 daily station users [21], fourteen times more than the old terminus at the beginning of this century, seems highly unrealistic. A simple calculation assuming a medium-intensive service of all lines to converge in Łódź showed that approximately 30 trains per hour (of which approximately 10 high-speed trains) should be expected. Assuming that each of them means approximately 100 people getting on and off, it would give the range

Fig. 7. A cutting along the south wall of the station, originally supposed to admit light to platforms, currently illuminating unused commercial boxes. In the background: "City Gate" office blocks redirected to the axis of Traugutta Street (photo by J. Wesołowski, 2021)

Il. 7. Wykop wzdłuż ściany południowej dworca, mający pierwotnie doświetlać perony, a obecnie doświetlający nieczynne boksy usługowe. W głębi biurowa „Brama Miasta" nakierowana na oś ul. Traugutta (fot. J. Wesołowski, 2021)

of 20 h × 3000 passengers – 60,000 passengers per day. This number could be increased by visitors. For comparison: today there are usually about ten trains per hour, but sometimes only 2–3 (most directions are served by another station in Łódź – the peripheral Widzew), and service facilities are practically non-existent.

Dimensioning the main station in a shrinking but still large city is not a simple task. In the case of Łódź it was performed bearing in mind that the investment is to last for a century, and that the policy of railway expansion in Poland and in its central region will be consistently implemented. Unfortunately, this did not happen as during the design work, the government de facto withdrew from the construction of the HSR (2012), and serious filling of the gaps in the railway network in the region and in the agglomeration was not addressed at all, leaving large areas of the province beyond rational rail service. Only the present "Centralny Port Komunikacyjny" (a new air-rail hub planned near Warsaw) design team refreshed the matter of building the HSR line, but according to the new design assumptions, so it will not happen soon. The upgrading of the railway system of the Łódź region is thus, for the time being, expressed in work on improving the functioning of what is already there and on the construction of a double-track cross-city line. However, this will not meet the expectations that, given the strong motorway competition, the railway will be able to take over the transport tasks that were at the heart of the design of Fabryczna Station.

Dimensions of the station are also determined by the environmental context: in the SYSTRA's study, it was rightly assumed that all car service should be performed from the east, i.e. from the planned inner ring road, whereas the west side is to be for pedestrians and integration

with trams. In SENER's study, all this traffic was to be located at the "City Gate", which forced a two-tier design, and still did not provide comfortable pedestrian access on its axis. The expected increase in traffic seemed to justify the resulting dimensions.

Accessibility and transport integration

The issue of the scale of the object does not exhaust the usability aspect. The functionality of the station should also be analysed in terms of accessibility and ease of intermodal transfers, as well as the simplicity and intuitiveness of internal circulation routes (including the information system).

Internal orientation inside the building should not be difficult due to its simple structure. As an advantage, it is worth noting the prominent location of ticket offices, which is not so common nowadays, in the era of locating them in a row of shops adjacent to circulation areas. However, there are problems with some exits. The disadvantage is that the stairs leading to the street level on the northern edge of the building are hidden. While the entrance from the city is clearly emphasized by the characteristic protrusion of the roof (Fig. 8), the eastern entrance from the street level is unintuitive. For unknown reasons, there is no clear connection between the bridge of Aleja Rodziny Scheiblerów and the level of the vehicular approaches below it, where there is not only the entrance to the station, but also a taxi rank. An eastbound pedestrian connection to this square exists, but is indirect and thus illegible. This should be considered a significant error in the layout of the pedestrian infrastructure, which suggests that one of the city centre streets is the domain of the car and should not actually be used by pedestrians (Fig. 9).

In addition, in the case of such an extensive building, it is astonishing that the information system that would explain the urban surroundings simply does not exist. The person getting off the train will not know how to get to the neighbouring streets or public transport stops. But this error is the easiest to fix, and simply requires good will.

Fabryczna Station was conceived as a large intermodal hub, which is why the project had the ambition to strengthen connections between the railway and other means of transport. The station for regional buses and coaches has been designed below street level on level –1, along the northern gallery of the station. Easy transfers from the train would be particularly desirable, given the low density of the railway network in the region, which qualifies bus transport to regain the key importance. Unfortunately, more than twenty underground bus stands are used to a small extent, and regional and long-distance traffic service is divided into several points in the city. The largest of them, at the Kaliska Station, is located outside the city centre, but it is faster to reach by main roads. Added to this is the atrophy of the regional bus network, which renders the real integration of railways with the regional bus network unlikely in the near future. However, the designers cannot be blamed for this, but rather the *laissez-faire* transport policy of the local and national governments.

While integration with buses and coaches may improve in future, connection with the city network is a problem that is difficult to fix. The station is located in the vicinity of the intersection of two tram routes: latitudinal along Narutowicza Street and the meridional along Kilińskiego Street. In the *status quo ante*, the walkway from the platforms to the stops on the former line was approximately 300–400 m long (depending on the direction), and to stops on the latter – less than 200 m (if train tickets had to be purchased, it was extended by approx. 1/3). As part of the project, it was decided to redirect the latitudinal line to the station itself, but, as a result of placing the platforms underground, the length of the walkway (assisted by escalators) was reduced to only about 220 m. Yet, not much was

Fig. 8. West gable of the overall roof, entrance from the city centre. Characteristic motif of the station's architecture (photo by J. Wesołowski, 2017)
Il. 8. Szczyt zachodni dachu, wejście od strony centrum miasta. Charakterystyczny motyw architektoniczny dworca (fot. J. Wesołowski, 2017)

done with the tram in Kilińskiego Street, except placing it on the station side of the carriageway. As a result, the distance increased to approximately 420 m. This is in obvious contradiction to the commonly seen trend to shorten transfer routes, even at the expense of a new, extended tram line (e.g. Grenoble 1987, Potsdam 1998, Halle 2005, Tours 2013), for which an integration tunnel was sometimes built (Linz 2009, Graz 2012).

The railway station and urban context determinants

The basic reason for the incomplete integration with the tram system was the original vision of the "New Centre of Łódź". Strengthening this investment by the impact of a busy station should have been a rational choice, but problems arose when it came to details. The contradiction between the large scale of the main railway station and the assumed small scale of the NCŁ blocks required meticulous design and proper staging of the investment in order to avoid unfavourable "interim states". In any case, the large station as a secondary element of a complex dominated by different determinants of composition was a significant problem, not only in planning doctrine, but also at its execution and construction stage.

In 2007, an urban plan was adopted based on Rob Krier's spatial concept [22]. The architect's original idea was to orientate the entire complex to the north, towards Park Moniuszki, to which a monumentally conceived exedra, called the "City Gate", was to open. Somewhere underground a small railway station on the line to Warsaw was supposed to be built, but this was not dealt with in detail at all. The emergence of the main station project changed the situation completely: it was to be retrofitted into the Krier's concept. This is how the problem was solved by the concept of Kolprojekt-SENER, as well as the final proposal of AREP (Figs. 2, 4). The consequence of the Krier vision, however, was to move the volume of the station far enough so that it did not collide with the planned axis. This meant extending the walkway from the Kilińskiego Street tram by at least 170 m.

During the work on the second study [11], this problem was constantly underestimated and finally left open, it is only the latitudinal line trams that was properly brought to the station. Any possibility of moving the meridional line closer by means of tram deeper entering the NCŁ structure, was finally ruled out by a fundamental change in the urban layout that took place in 2012, i.e. after the completion of the SYSTRA study, which still referred to the original Krier's layout. At that time, for unclear reasons, the "City Gate" was relocated and oriented towards Kilińskiego Street which made its structure completely separated. In this way, the original reason for moving the station away from it vanished, but significant changes in its location were probably not even thought of. The new "Gate" itself, originally planned as an eccentric form by Daniel Libeskind (with a rather unclear function), has recently taken the form of two quite simple office buildings of a conspicuous scale.

The Krier's axis, which was the original "discovery" of the Luxembourg architect, which could give the NCŁ and the station their proper rank, is visible only in the historical arrangement of the park, and then is completely obliterated by the arrangement of tram stop shelters and the side stairs of the inclined square in front of the station. This huge ramp, about 70 m wide at the station itself, narrows to several meters at the corner of Kilińskiego Street. It can be said that it is fortunate, because in this way the lack of a proper continuity of a walkway towards the city is masked. Instead of a monumental entrance from the park side, something was created that is a kind of mixture of baroque pomp and a mannerist surprise, accented with a historicizing traction pole frivolously placed by tram line engineers. At the same time, the "City Gate" standing next to it is not the entrance to the station, but to the emptiness of non-existent (yet?) streets.

Fig. 9. East gable of the station, vehicular approach area and the bridge of Rodziny Scheiblerów Street (photo by J. Wesołowski, 2021)

Il. 9. Szczyt wschodni dworca, plac podjazdowy i wiadukt ul. Rodziny Scheiblerów (fot. J. Wesołowski, 2021)

This is not the only case of difficulties with honouring the urban axes in the NCŁ complex. One of the two transverse streets-passages separating the above-ground station complex is the axis of the Grand Theatre (Opera House), which is also the perspective of Targowa Street. The building housing the eastern hall of the station protrudes into it by about 10 m, and the entire axis of the passage is staggered. As a result, the view from the street to the theatre building was seriously disturbed and without clear reason. It is worth noting that the official NCŁ model does not reveal this disorder (Fig. 5). The exposure of the lifeless one-story superstructure of the central part of overall roof over platforms also causes an intrusive impression of randomness. NCŁ, in the future, after the square planned as the representative centre of the district is built, is to be one of the most visited.

The north side of the station looks probably the worst. The three-hundred-meter-long complex faces the street with long, inactive walls, each part of the building having a different form. The impression of chaos is enhanced by a cacophony of kiosks of yet another form, struggling to stay in a row, which contain exits from the underground level. One of them narrows the pavement , which, due to the lack of a rational alternative, also serves as a cycle lane; could not it really be integrated with the building?

Fig. 10. One of the kiosks at the exitway from level –1 on the background of the eaves of the front segment of the station building. Final form of the street frontage closing the axis of POW Street (photo by J. Wesołowski, 2021)

Il. 10. Jeden z kiosków kryjących ewakuację z podziemia na tle okapu dachu pierwszej części dworca. Docelowa pierzeja zamykająca oś ulicy POW (fot. J. Wesołowski, 2021)

Fig. 11. A vacuum on the north side of the station, awaiting building over. A view towards the middle and rear part of the roofing. To the left: kiosks at the exits from the sub-surface coach station (photo by J. Wesołowski, 2021)

Il. 11. Pustka po północnej stronie dworca, czekająca na nadbudowę. Widok na drugą i trzecią część zadaszenia. Po lewej – kioski na wyjściami z podziemi dworca autobusowego (fot. J. Wesołowski, 2021)

(Fig. 10). Along most of its length, the station side wall has a deep setback due to the expected office development, for which the station structure is designed [3]. Sometime in the unknown future, perhaps the whimsical juxtaposing the form of low roofing of the platform hall, which is the middle section, with a higher, bizarre plaster wall with outlines of ornamental gables, will disappear with erection of office buildings. Yet today, gables are difficult to comprehend until one enters the eastern circulation hall (which will be discussed later in this article). Did the task of skylighting the platforms really have to entail such awkwardness? (Fig. 11).

Here one may refer to Lille Europe Station (1993), which was built at the same time as a railway and office complex, with towers built above the station. Otherwise, it would probably be not so easy to erect them. In Łódź though, what is temporary is likely to become permanent. Since there will be no masking buildings soon, then why is there not a lawn, but a sea of pavement that demonstrates the flaws of the architectural form? Counting lightly, about 0.7 ha of greenery could be developed on the underground part of the station, and only in the area of the planned superstructure.

The overall roof

In the 19th century, the barrel roof seen from the side was criticized as aesthetically unsatisfying [23]. The negative effect of the Łódź roof is slightly weakened by the fact that in the western hall it has a complicated geometry, with the apex line raised parabolically towards the gable. Worse, however, that its side wings flow down the opposite curvature to the height of one storey, creating a low and lifeless frontage wall over a length of 90 m. It will no longer be masked by anything, and it constitutes an axial closure of the perspective of the perpendicular POW Street, which once ended with the neo-mannerist façade of the demolished railway station with distinctive peaks in silhouette. *Primum – non nocere…*

The shortest route from the tram stop complex leads to this low wall. From a small mezzanine, which is accessed, the large roof presents technical details in a not necessarily attractive way. Going from the side of the platforms, it is hard to guess that it is not the main axis with a monumental ramp, but the side stairs to the mezzanine that are the shortest way to the tram. All this seems to have been introduced *ad hoc*, as if by way of a late design amendment. Why, given monumental *entrée* from the west, users of public transport, which was supposed to constitute the majority of commuting in the modal structure, were treated in such a random way? (Figs. 12, 13).

The eastern hall, on the other hand, hides the most peculiar element of the station: two neo-mannerist elevations of the former building reproduced in natural scale (it is their simplified outline that intrigues from the outside – Fig. 14). Such a procedure, known rather from Disneyland-style museum scenography, is something completely new for station architecture, although with its help the only quite classic interior was created, a very strong accent of the station. However, by using it in the eastern hall, the authors of Fabryczna made the whole look very incoherent. They seem to suggest that the external side, accessible mainly by car, is more important than the city centre side. It is doubtful whether this is an intended effect or a reaction to the protests that accompanied the demolition of the old station building. That this could be the case is evidenced by the striking contradiction between the details of the dummy old façades and the heavy form of the roof structure, with ribs unexpectedly springing from behind the cornices, additionally requiring lunettes to accommodate steep gables. Why was it decided to overwhelm the exhibited historical form in such a way, instead of striving for the impression of weightlessness of the structure? Is the association with the roof of Bálna Budapest, published in the professional press [1, p. 54], really justified, since there Bálna buildings end horizontally without gables, and the shape of

the barrel is much more uniform and calm? To make matters worse, a formula was adopted that some cover modules will be glazed and others dark, but the logic of their arrangement remains unclear (Fig. 14). What's more, such a "mottled" roof, as well as the triangulation of its surface, makes it difficult to use photovoltaic coating (unlike, for example, at the Berlin Hauptbahnhof's trainshed, 2006).

The unexpected triumph of modernism

The multi-level road junction on the east side of the station must, however, be perceived as a product of modernist perception of a city. In the first version of the concept of the SYSTRA-AREP consortium (of April 2009), the east end of the station was to face a kind of linear park leading towards the eastern suburbs. At street level, a pedestrian area, pierced with openings illuminating the recessed vehicular access area, was to extend to Nowotargowa Street (now Rodziny Scheiblerów). The access way was partly to be concealed in a transverse tunnel (Fig. 4).

However, in the course of further design work and consultations with the city, the access road system became more extensive and visible. In addition, it was decided not to have the exit from the station at street level, but to leave it on the vehicular access level, which was left uncovered. In this way, the circulation level of the station overlooks the mass of a street bridge, with obtrusive ramps running between the pillars. Contact, even optical, with the distant greenery has been broken. Somewhere in the back, there has been some landscaping, lost behind a piled-up mass of concrete and accessible through a small tunnel under the road. Due to the isolation from any functional activity, it is a classic abandoned space that no one needs.

At this point, one can ask how it is that the Zurich station, one of the busiest in the world, manages without extensive road infrastructure, and it is not alone in doing so. There is a large and expensive road junction in Łódź, but those commuting by taxi or to the kiss + ride lane cannot even count on getting off under a roof in the event of rain. The projecting roof there is purely decorative, it is shallow, too high, and it does not protect against anything. It looks as if there is no space under the roof after mock old façades were forcefully retrofitted into the project. Could this paradox of car service be a memento for the future effectiveness of road design at the Fabryczna Station? (Fig. 8).

In addition to the overscaling of roads, which causes fragmentation of the urban structure, what indicates the modernist paradigm of the design concept is the above-described inability to create proper frontages and honour urban axes. The possible erection of office buildings will solve this problem only partially. Despite the sensitive context, it seems that the building was shaped primarily "from the inside out", disregarding most of the relations with the surroundings – especially those human-scale ones that determine the form of the public space. This is what a modernist city was notorious for. Against this background, the "faded joke of the false façades of the former station" does not yet allow for the qualification of the object as a "postmodern anachronism", as one of the critics sees it [9]. Postmodernism in the urban planning of the NCŁ would, however, be the implementation of Krier's vision, and here we have a combination of Disneyland and "Futurama": both are attributes of the apogee of the era of modernism in urban planning…

Fig. 12. Main entrance from the tram stop complex
(photo by J. Wesołowski, 2021)

Il. 12. Wejście główne od zespołu przystanków tramwajowych
(fot. J. Wesołowski, 2021)

Fig. 13. North gallery.
Main exit to tram stops to far right, unintuitive and unmarked
(photo by J. Wesołowski, 2021)

Il. 13. Galeria północna.
Wyjście główne na przystanki tramwajowe daleko po prawej, nieintuicyjne i nieoznakowane
(fot. J. Wesołowski, 2021)

Summary

The new Fabryczna Railway Station was built overscaled, according to the concept of railway operation, which was to take material form within a decade, but, as it can be seen today, will rather take decades, if it happens at all. This undermines the legitimacy of the mode of proceeding the largest infrastructural projects in Poland and raises questions about whether there are strategic development plans for the country and how serious they are. Apart from the central and local government, it is municipal authorities who had a significant impact on the final formal shape of the project discussed here. To what extent their

Fig. 14. East circulation hall seen from the gallery on the axis of Targowa Street (photo by J. Wesołowski, 2021)

Il. 14. Hall wschodni widziany spod galerii na osi ul. Targowej (fot. J. Wesołowski, 2021)

tendency to succumb to pressure groups present in public life leads to making decisions in the sphere of urban planning and architecture, which give projects an illogical and inefficient form? Certainly, however, the faulty mode of proceedings does not fully explain the fact that Fabryczna Station as a place of passenger service does not function properly. However, the purpose of this text is not to investigate the organisational causes of this state of affairs, but rather to evaluate the architecture of the building itself.

The rational concept of the underground station with the superstructure of the main station has been given an architectural form, the shortcomings of which seem to overshadow its advantages. Its western entrance has already become one of the icons of modern Łódź architecture, and is also an original motif in the world of railway architecture in general. It is a pity that its form hides a certain falsehood: it "narrowly misses" to serve the main traffic from the tram stops, and the external expression does not go hand in hand with an equally notable internal shape as on the eastern side. The style of both circulation halls of the station is completely different, and their combination seems accidental. If the quality of architecture is measured by the unity of form, capable of giving various elements one clear expression from the inside and outside, then the Łódź new railway station seems to be the embodiment of something quite the opposite. The "mottled" barrel roof itself gives the impression of randomness, the more so that each of its parts has different tectonics. The impression of chaos is intensified by the inability to cope with hiding or unifying the small elements accompanying the object, contrary to the general formal concept. This may reveal deficiencies in the coordination of the design process.

A feature of good architecture, especially in the case of a structure whose primary *raison d'être* is utility, must be to match the vision to functional requirements and the realities of the context. A vision that does not meet these requirements should be modified or rejected in its entirety. Here, the desire to link directly circulation areas of the station with the street level clearly contradicts the need for good integration in the transport system (front), or partially is not even achieved at all and turns into a caricature (back). On the side of the layout, "venustas" clearly loses to "utilitas", which is not forgotten by the row of kiosks and low, dead walls. If the "utility" of the resulting form fostered activation of the adjacent street space, it would only be an aesthetic defect – but it does not.

Today, it is appropriate to set short-term goals for the "white elephant" of Łódź. The first is the launch of a basic service offer (the five-year non-profit performance period allegedly related to EU funds has already passed). The sec-

ond is the introduction of clear visual information, preceded by an analysis driven by empathy. And the third one is masking the deficiencies with greenery. Something can be gained in this way: for example, a good hectare of lawn and greenery in the place of a dead and unused cobblestone surface. This would be a much more civilised way to expect the future completion of the entire station complex, which, anyway, will only heal some of the awkwardness.

Against the background of other comparable railway stations in Poland, and notwithstanding the design flaws, Fabryczna is not completely bad anyway: enough to mention Poznań Główny, where the entire station layout was disorganized as a result of a misconceived new investment. Kraków Główny, in turn, is a fairly efficient "station machine" derived straight from the aesthetics of modernism, completely devoid of ambition to create its own legible landmark in the city, like the infamous Pennsylvania Station in Manhattan after the 1960s reconstruction. In this sense, Fabryczna is trying to fit in with the trend of returning the world of meanings to railway architecture, which has been around for about three decades.

Progress or regress then? To sum up, the measure suggested in the epilogue of the Edwards' treatise on railway stations at the end of the 20th century could be used [24]. As an "urban element", the Łódź station, despite its central location and ambitions in the sphere of semantics, does not fit well into the surroundings and the uses of the city, constituting an oversized, mono-functional "island". The "expression of the structure", readable from the east, is disturbed by the dotted chaos of skylights, and moreover, it is associated with overwhelmingness rather than with the finesse of engineering art. The "harmony of architecture and engineering" is burdened with the randomness of a number of elements and details, starting from the roof finish, and ending with the clash of the street space with formal brutality of a large roofing. "Fusion of design skills", despite the inclusion of platform space and trains themselves within the architectural work, clearly suffers from a lack of formal unification (historicising hall) and finishing (closed service premises). Finally, the role of "a bridge across the millennia" is burdened with an anti-ecological aura and is still only an unspecified promise of a transport hub for the railway of the future.

Translated by
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Abstract

Łódź Fabryczna Railway Station – a progress or regress in railway architecture?

The radical rebuilding of Fabryczna Railway Station in Łódź, one of the biggest railway projects of post-1989 Poland, has for years raised a lot of controversy – as much on the planning stage as after the opening, if not more. Some are rash and superficial judgements, resulting from not considering the conditions and aims of the project, while others are invariably true. Yet other aspects of the project seem entirely absent from the public debate. One thing is certain: the station is unfinished and does not function as expected. Five years have almost passed since it opened and it's a good time to attempt a calm critique, backed by the usage experience. For this purpose, reference was made to the original visions of the railway system and initial design concepts, and an in-situ analysis of the facility was performed. The conclusions were confronted with professional publications. As a result, one gets the impression that the object is halfway between modernism and postmodernism. On the one hand, it develops a spatial vision that properly relocates car traffic to the outskirts of the city centre, and on the other – it hinders the creation of an attractive urban space with poorly shaped frontages, rejection of greenery as an architectural material and overscaling of road infrastructure. On the one hand, it introduces the iconic motif of the entrance, while on the other, it violates the historical compositional axis. This is accompanied by many functional shortcomings, and above all, the unused potential of a large usable area. The roots of this lie in the changing concepts – both at the level of the vision of the railway system implemented by the state and of the urban layout, which is the domain of the city.

Key words: Łódź Fabryczna Station, railway stations, railway station architecture, railway station urban context, overall roof

Streszczenie

Dworzec Łódź Fabryczna – postęp czy regres w architekturze kolei?

Gruntowna przebudowa łódzkiego Dworca Fabrycznego, jednej z największych inwestycji kolejowych III RP, budziła i budzi wiele kontrowersji – zarówno na etapie projektowania, jak i jeszcze bardziej po otwarciu. Część z nich to sądy pochopne i pomówienia, wynikające z nieświadomości wszystkich uwarunkowań, a część jest jak najbardziej prawdziwa. Jeszcze inne ważne aspekty inwestycji wydają się w ogóle nieobecne w publicznym dyskursie. Jedno jest pewne: obiekt, tak jak cała przebudowa węzła kolejowego, jest niedokończony, nie funkcjonuje tak, jak oczekiwano. Mija jednak sześć lat od jego otwarcia i to jest dobry czas na dokonanie obiektywnej krytyki obiektu wzbogaconej już o doświadczenie użytkowania. W tym celu posłużono się odwołaniem pierwotnych wizji systemu kolejowego i wstępnych koncepcji projektowych oraz dokonano analizy obiektu *in situ*. Wnioski skonfrontowano z publikacjami specjalistycznymi. W efekcie odnosi się wrażenie, że obiekt znajduje się jakby w pół drogi między modernizmem i postmodernizmem. Z jednej strony rozwija wizję przestrzenną prawidłowo relegującą ruch samochodowy na rubieże śródmieścia, a z drugiej – przeszkadza w wytworzeniu atrakcyjnej przestrzeni miejskiej źle ukształtowanymi pierzejami, odrzuceniem zieleni jako tworzywa architektonicznego i przeskalowaniem infrastruktury drogowej. Z jednej strony wprowadza ikoniczny motyw wejścia, z drugiej gwałci historyczną oś kompozycyjną. Towarzyszy temu wiele mankamentów funkcjonalnych, a przede wszystkim niewykorzystany potencjał wielkiej powierzchni użytkowej. Korzenie tego tkwią w zmieniających się koncepcjach – zarówno na szczeblu wizji systemu kolejowego realizowanego przez państwo, jak i układu urbanistycznego, stanowiącego domenę miasta.

Słowa kluczowe: Dworzec Łódź Fabryczna, dworce kolejowe, architektura dworców, urbanistyka dworców kolejowych, hala peronowa