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# Łukasz Wojciechowski\*, Andreas Wolf\*\*

# Unbuilt proposals for post-war Wrocław: sample digital models

#### Introduction

Wrocław suffered severe damage in the final months of the World War II. After 1945, it was not only rebuilt, but also considerably remodelled. For the next several decades, architects gathered at the state-owned Miastoprojekt design bureau prepared designs intended to fill the voids left in the tissue of the damaged city. This process continues to this day, and large areas of Wrocław's city centre still remain undeveloped or unused, such as Plac Społeczny, Centrum Południowe and Port Miejski. Many proposals of the city's development prepared for numerous competitions or direct commissions were not realised. They are now a treasure trove of material that displays tendencies in design during the various periods of the 20th century and provide insight into the urban and architectural potential of several sites. A large portion of areas for which plans were developed in the 20<sup>th</sup> century is now developed differently than in the old proposals, and a thorough exploration of the rejected designs can provide interesting comparative material.

The designs discussed in this paper came from the drawing boards of recognised designers such as Jadwiga Grabowska-Hawrylak, Stefan Müller, Zenon Prętczyński, or Andrzej Frydecki – who were the main representatives of post-war Modernism in Wrocław. Their works are some of the most essential cases to be built in the capital of Lower Silesia, and which include, among others: Plac Grunwaldzki (Grabowska-Hawrylak), the Galeriowiec in Grabiszyńska Street (Müller), the primary school in Górnickiego Street (Prętczyński), the Faculty of Mechanical Engineering building in Łukasiewicza Street (Frydecki). The unbuilt designs of these architects allow us to look at their careers in a broader context.

We selected design proposals for this paper based on their spatial qualities, creative flair and potential impact on the image of Wrocław. They primarily include public and commercial buildings to be sited at important points throughout the city: on Plac Grunwaldzki, Plac Społeczny, along Wybrzeże Wyspiańskiego, on Plac Dominikański. Had they been built, they would have defined the character of these places in urban (circulatory and spatial linkages) and architectural terms (saturation with functions, distinctive massings).

It should be noted that these designs were produced in a specific socio-economic context – in different phases of the People's Republic of Poland – and because of this many had obvious design defects or spatial solutions that are no longer in use. They include elements like the separation of vehicular and pedestrian traffic – a trend that predominated in urban and architectural design in the 1960s and 70s and became a source of the dehumanisation of urban space<sup>1</sup>. Some of the designs also feature column-supported, stacked pedestrian platforms and terrace systems. Today such solutions are much rarer due to economic and social reasons<sup>2</sup>. In the People's Republic of Poland, public space around a building was of much greater significance in design than it is today, as it was associated with a public

<sup>\*</sup> ORCID: 0000-0001-8695-2325. Faculty of Architecture, Wrocław University of Science and Technology, e-mail: lukasz.wojciechowski@ pwr.edu.pl

<sup>\*\*</sup> ORCID: 0000-0003-1261-2525. HTWK-Leipzig University of Applied Sciences.

<sup>&</sup>lt;sup>1</sup> The predominance of road infrastructure, building underground passages and footbridges led to the emergence of areas without a street programme, that were unpleasant and prone to high crime rates, e.g., the remodelling of the centre of Newcastle Upon Tyne in the United Kingdom.

<sup>&</sup>lt;sup>2</sup> Plots in city centres are developed to the maximum possible extent allowed by development plans and existing open terraces are often closed for safety reasons or a lack of programme (e.g., the Radio Station in Bratislava, designed by Štefan Svetko, Štefan Ďurkovič, Barnabáš Kissling, built in 1983).

functional programme<sup>3</sup>. Private funding, cost rationalisation and matters of private property security led to the widespread disappearance of such solutions.

The objective of the digital reconstruction of each design was to produce three-dimensional models of the buildings, whose visualisations were placed in photographs of the city in appropriate settings. This process was based on an analysis and documentation of archival materials - surviving architectural drawings and photographs of models<sup>4</sup>. Due to gaps in documentation and the inability to collect information from the authors themselves<sup>5</sup>, work on producing digital recreations of some of the buildings was based on circumstantial evidence and required familiarity with other works of their authors as well as potential inspirations and design tendencies present at the time. Accounts given by co-workers of the architects, such as those of Wojciech Święcicki or Krzysztof Sąsiadek - who worked together with Grabowska-Hawrylak - were also used<sup>6</sup>. In some cases, the scale and precision of original documentation did not allow for detailed recreations of architectural elements, which is why certain model fragments are merely interpretations, which has been reported on in detail in every case. Following the precepts of the London Charter [1], the materials presented should be interpreted as a supposed reconstruction - a recreation of buildings based on source materials.

The models presented below are the start of a larger project intended to digitally recreate unrealised designs for Wrocław<sup>7</sup>. Our paper presents ongoing research along with partial findings and problems. The goal of our study was to gain insight into original design ideas presented in a new light that allows a realistic presentation of unrealised buildings in the context they had been intended for. This brings detailed information as to the proportions of the buildings relative to their surroundings and allows better understanding of the architectural assumptions their authors had had. To our knowledge, no visualisations of the buildings described in this paper have been previously made.

# Wrocław University of Science and Technology building at Wybrzeże Wyspiańskiego, design by Andrzej Frydecki (1949–1950)

The building acts as a culminating element of Aleja Profesorów at the Wrocław University of Science and Technology campus and is sited along Wybrzeże Wyspiańskiego, partially clashing with the site of building



Fig. 1. Visualisation of the building design of the Wrocław University of Science and Technology at Wybrzeże Wyspiańskiego, designed by A. Frydecki (1949-1950) - view from the opposite bank (model and visualisation by Ł. Wojciechowski)

Il. 1. Wizualizacja projektu budynku Politechniki Wrocławskiej przy Wybrzeżu Wyspiańskiego, proj. A. Frydecki (1949-1950) - widok z przeciwległego brzegu (model i wizualizacja: Ł. Wojciechowski)

H-14<sup>8</sup>. The building, which has a C-shaped plan, opens up towards the river and the tower located in its eastern side closes off Norwida Street from the south. This element is topped with a vertical section that resembles a lantern and a mast. The building's strong relationship with the river, stemming from the development of the bank and the centrally placed gateway that connects the bank with the campus, is the building's distinctive feature. The terraced descent to the water is framed by terraces on the roofs of ancillary spaces, probably intended to act as infrastructure for a marina. The building's digital recreation (Fig. 1) was made on the basis of its only surviving sketch, made using chalk on transparency paper<sup>9</sup>, which depicts the building from the opposite bank of the River Oder, while to the right of the drawing there is the main building of the Wrocław University of Science and Technology and the western tip of Szczytnicka Island. The sketch does not provide clear information about the window and architectural detail layout such as the glazing frames of the superstructure of the building's main body. There are two main alternative designs of the façade - one that follows a Socialist Realist character, and one that follows prewar Modernism. We opted for the second solution as it is closer to the building of the Faculty of Mechanical Engineering in Łukasiewicza Street [3], designed by Frydecki at about the same time - in 1949 - and is also closer to the architect's previous work, i.e., the House of the Polish Soldier in Lviv at Plac Dreszera-Orlicza<sup>10</sup>. The windows were modelled following horizontal divisions and the glazing of the tallest storey – in a simple layout based on a rhythmical structural system. It proved problematic to place windows on the gable walls from the south – the sketch does not inform whether the area was to feature any – which is why we made no perforations in this area

<sup>&</sup>lt;sup>3</sup> Milk bars, restaurants, services, and stores were associated with pedestrian zones (terraces and platforms) separated from vehicular traffic.

<sup>&</sup>lt;sup>4</sup> A significant part of original documentation was lost along with the shutting down of Miastoprojekt, while copies stored in state archives and the Museum of Architecture in Wrocław are often incomplete. It should also be stated that private archives of architects often have significant elements missing. For instance, the designs of Grabowska-Hawrylak were destroyed during a flood in 1997.

<sup>&</sup>lt;sup>5</sup> Deceased or very old authors: A. Frydecki 1903–1989, J. Grabowska-Hawrylak 1920-2018, S. Müller 1934-2018, Z. Prętczyński born in 1926. <sup>6</sup> Personal correspondence and oral accounts.

<sup>&</sup>lt;sup>7</sup> A similar project was dedicated to presenting renovated buildings designed by Grabowska-Hawrylak [2].

<sup>&</sup>lt;sup>8</sup> Building, which originally housed a student dormitory, was built in 1930. It was destroyed during the war and later rebuilt in the 1950s.

<sup>&</sup>lt;sup>9</sup> Museum of Architecture MAt IIIc-54/4/P.

<sup>&</sup>lt;sup>10</sup> Museum of Architecture MAt IIIb-324/8/P.

and instead highlighted the shape of the massing. The top of the tower was modelled as partially glazed – following the idea of a lantern – yet it must be stressed that the sketch was also not clear on this subject. Despite possible inconsistencies between the digital model and Frydecki's concept, the building's main body and the connection between the campus and the river are undisputed. In the context of the present-day culmination of Aleja Profesorów by building C-13 and the bank's space being blocked by buildings H-3 and H-6, the proposal from 1949 appears to be much more cohesive with the surroundings in terms of urban layout, and – most importantly – it opens this part of the city towards the River Oder.

### Student dormitory on Grunwaldzki Square, designed by Jadwiga Grabowska-Hawrylak, in cooperation with: Krzysztof Sąsiadek (1972)

This building, designed on Plac Grunwaldzki, consists of a student hotel located inside an eighteen-storey tower building with a superstructure and a two-storey pavilion with a coffee shop and club spaces. Both masses are linked with a single-storey corridor that houses the entrance to both sections and whose roof has a usable terrace. The building was located in the eastern section of the square, between Curie-Skłodowskiej and Norwida streets, in place of the present-day Grunwaldzki Center office building. The Modernist free-standing block build-



Fig. 2. Visualisation of the student dormitory on Plac Grunwaldzki, designed by J. Grabowska-Hawrylak, in cooperation with: K. Sąsiadek (1972)
view from the side of Pasaż Grunwaldzki (model and visualisation by Ł. Wojciechowski)

 II. 2. Wizualizacja domu studenckiego przy placu Grunwaldzkim, proj. J. Grabowska-Hawrylak, współpraca: K. Sąsiadek (1972)

 – widok od strony Pasażu Grunwaldzkiego (model i wizualizacja: Ł. Wojciechowski)

ing does not continue the building lines defined by prewar development. The tower building is a visual landmark that dominates the Grunwaldzka axis and is clearly visible from the side of the Grunwaldzki Bridge. The design was prepared at the start of the 1970s during the construction of the Plac Grunwaldzki housing and services complex, which was also designed by Grabowska-Hawrylak's team at Miastoprojekt. The student hotel is higher than the



Fig. 3. Visualisation of the student dormitory on Grunwaldzki Square, designed by J. Grabowska-Hawrylak, in cooperation with: K. Sąsiadek (1972) – view from the side of the Grunwaldzki Bridge along with the Plac Grunwaldzki housing complex (model and visualisation by Ł. Wojciechowski)

II. 3. Wizualizacja domu studenckiego przy placu Grunwaldzkim, proj. J. Grabowska-Hawrylak, współpraca: K. Sąsiadek (1972) – widok od strony mostu Grunwaldzkiego wraz z osiedlem Plac Grunwaldzki (model i wizualizacja: Ł. Wojciechowski)



Fig. 4. Visualisation of the development at Plac Społeczny, designed by W. Jackiewicz, Z. Prętczyński, R. Tunikowski (1964) – birds-eye view from the side of the River Oława (model and visualisation by Ł. Wojciechowski, background image source: Google Maps)

II. 4. Wizualizacja zabudowy placu Społecznego, proj. W. Jackiewicz, Z. Prętczyński, R. Tunikowski (1964)

- widok z lotu ptaka od strony Oławy (model i wizualizacja: Ł. Wojciechowski, źródło tła: Mapy Google)

actually built complex, but is also its continuation, as both designs feature the same architectural detail – oval-shaped reinforced-concrete prefabricated elements that give their façade a distinctive texture and spatiality. The designers assumed that the prefabricated elements to be featured on existing and planned buildings were to be white so as to clearly contrast with a dark background (glass and external walls that had originally been intended to have a wooden finish). The digital model of the building (Figs. 2, 3) was prepared based on an incomplete design documentation<sup>11</sup> – a floor plan with dimensions, a perspective projection drawn by Wacław Hryniewicz and a photograph of its mock-up. The details on the model and the drawing have slight differences<sup>12</sup>, but there are no major doubts as to the general character of the complex.

### Plac Społeczny, designed by Wiktor Jackiewicz, Zenon Prętczyński, Roman Tunikowski (1964)

A team consisting of Jackiewicz, Prętczyński and Tunikowski submitted two entries for the competition for the design of the development at Plac Społeczny, organised in 1964 [4]. The distinctive element of both proposals was a pedestrian platform that extends along a length of around 500 m, elevated above the terrain and the River Oława, which flows into the River Oder at the site. Threeand four-storey services and public buildings were placed along the platform and on its ends, while at the height of Plac Wróblewskiego, a twenty-five-storey office building was placed. Near the Oławski Bridge, to the southern side of the platform, the designers sited a concert hall, while the area between the hall and the Church of St Lazarus (which was not marked on the competition model) served as a site for tower buildings, probably intended as housing. At ground-level, the designers planned the complex's circulatory layout, parking lots and streets, separating pedestrian and vehicular traffic. The primary circulation layout on the site was designed as combined Traugutta, Krasińskiego, Słowackiego and Mazowiecka streets (Mazowiecka Street was designed to cross under the platform). The urban design proposal did not show explicit architectural solutions, which is why the design's digital recreation (Fig. 4) is an interpretation of a small-scale plan. It is notable that the enormous platform, which was intended to create a quality of its own in this part of the city, is severed from the wider historical context. Its axis was not the product of the pre-existing street grid and is a fully artificial creation. The complex forms a sort of island separated from the remaining part of the city by undeveloped areas that would surround it, which is particularly visible in the northern part of the plan. Despite controversial solutions, this design is a highly interesting testament to the period and design imagination of the 1960s.

# Main Post Office extension, designed by Jadwiga Grabowska-Hawrylak, in cooperation with: Janusz Kaśnicki, Krzysztof Sąsiadek (1971)

The next case is located on the opposite side of the Main Post Office (designed by Lothar Neuman, built in 1929) and is a supplementation of its development. Today, the site is occupied by the OVO building (designed by Gottesman Szmelcman Architecture, built in 2016).

<sup>&</sup>lt;sup>11</sup> Unarchived collection of the Museum of Architecture (no item signatures), Museum of Architecture.

<sup>&</sup>lt;sup>12</sup> This applies to the filleting of window openings at the height of the tower building's uppermost storey, as well as fragments of the student club's façade.



Fig. 5. Visualisation of the extension of the Main Post Office building,
designed by J. Grabowska-Hawrylak, in cooperation with: J. Kaśnicki, K. Sąsiadek (1971)
view from the side of the Museum of Architecture (model and visualisation by Ł. Wojciechowski)

II. 5. Wizualizacja rozbudowy Poczty Głównej,
proj. J. Grabowska-Hawrylak, współpraca: J. Kaśnicki, K. Sąsiadek (1971)
– widok od strony Muzeum Architektury (model i wizualizacja: Ł. Wojciechowski)

The proposal from 1971 that was selected via a competition, was prepared by Grabowska-Hawrylak's team (in cooperation with: J. Kaśnicki, K. Sąsiadek) [5]. Key drawings have survived in archives<sup>13</sup>: a site plan, a perspective projection, a façade, working versions of floor plans and cross-sections and the plans of the tower building at the intersection of Traugutta and Podwale streets. This twelve-storey office building was similar in height to the dominant element of the post office building, whilst the remaining part of the complex was designed in a cascade-like layout. The storeys would gradually increase in number along with proximity to the northern wing of the existing brick building. The horizontal divisions of the massing were clearly highlighted by recessed glazed surfaces and formed terraces and circulation galleries from the western side - along the City Moat. The levels were connected by external stairs whose outline was visible on the façade<sup>14</sup>. These design solutions cause the building to produce an impression of a light and openwork structure that contrasts with the monumental air of the expressionist post office building (Fig. 5). This building is instead a background for the brick façade and a plinth for a new, glass tower structure (Figs. 6, 7). The highlighting of galleries and terraces and the cascading storey layouts are distinctive of many cases of the architecture of the turn of the 1970s [6]<sup>15</sup>.

# Mixed-use centre at Plac Dominikański, designed by Jadwiga Grabowska-Hawrylak, in cooperation with Krzysztof Sąsiadek (1972–1976)

This complex fills the plot delimited by Oławska and Krawiecka streets, Słowackiego Avenue and the no-longer-existing Panorama Hotel<sup>16</sup> (the hotel that was located near the City Moat had been built following a design by Jerzy Liśniewicz and Henryk Jarosz, it was opened in 1970s and demolished in 1999 to make room for the construction of Galeria Dominikańska). The complex comprises nine buildings with a modular plan, a varied programme and height. Seven of them are located on the eastern side of Błogosławionego Czesława Street, with the entirety linked by pedestrian platforms and footbridges above roads - the design features a clear separation of pedestrian and vehicular traffic<sup>17</sup>. The pedestrian platforms are raised at the level of one-and-a-half storey above grade and are linked via external stairs and platforms. Along Oławska Street, the development shapes the street's building line as a continuation of the historical layout, whilst from the north it forms a city square opposite the Gothic Church of St Adalbert that was rebuilt after the war. The lowest storeys were designed as glazed and to feature commercial uses and services. At the upper level, these sections are additionally lit via elongated, narrow windows that cross horizontal massings with edges

<sup>&</sup>lt;sup>13</sup> Unarchived collection of the Museum of Architecture (no item signatures).

<sup>&</sup>lt;sup>14</sup> In personal correspondence, K. Sąsiadek stressed that the architects wanted to achieve a different spatial effect here and create a building from mutually suspended glass masses, but we can hardly see this intention in the surviving version of the design.

<sup>&</sup>lt;sup>15</sup> For instance the Southbank Centre in London (designed by Ron Herron, Dennis Crompton, Warren Chalk, John Attenborough, built in 1967).

<sup>&</sup>lt;sup>16</sup> The hotel located at the City Moat was built according to a design by Jerzy Liśniewicz and Henryk Jarosz. It was opened in 1970 and demolished in 1999 to clear the site for the construction of Galeria Dominikańska.

<sup>&</sup>lt;sup>17</sup> This also applies to the surrounding underground passages that also exist today: Winogronowy, Słodowy and Oławska Gateway.



Fig. 6. Visualisation of the mixed-use centre at Dominikański Square, designed by J. Grabowska-Hawrylak, in cooperation with: K. Sąsiadek (1972–1976)
view from Traugutta Street, with the tower building that is part of the Main Post Office extension in the foreground, designed by J. Grabowska-Hawrylak, in cooperation with: J. Kaśnicki, K. Sąsiadek (1971) (model and visualisation by Ł. Wojciechowski)

II. 6. Wizualizacja centrum wielofunkcyjnego przy placu Dominikańskim, proj. J. Grabowska-Hawrylak, współpraca: K. Sąsiadek (1972–1976)
– widok od strony ul. Traugutta, na pierwszym planie wieżowiec stanowiący rozbudowę Urzędu Pocztowego, proj. J. Grabowska-Hawrylak, współpraca: J. Kaśnicki, K. Sąsiadek (1971) (model i wizualizacja: Ł. Wojciechowski)



Fig. 7. Visualisation of the mixed-use centre at Dominikański Square, designed by J. Grabowska-Hawrylak, in cooperation with: K. Sąsiadek (1972–1976) – view from the side of Dominikański Square, with the tower building that is part of the Main Post Office extension in the background, designed by J. Grabowska-Hawrylak, in cooperation with: J. Kaśnicki, K. Sąsiadek (1971) (model and visualisation by Ł. Wojciechowski)

II. 7. Wizualizacja centrum wielofunkcyjnego przy placu Dominikańskim, proj. J. Grabowska-Hawrylak, współpraca: K. Sąsiadek (1972–1976)
 – widok od strony placu Dominikańskiego, w tle wieżowiec stanowiący rozbudowę Urzędu Pocztowego, proj. J. Grabowska-Hawrylak, współpraca: J. Kaśnicki, K. Sąsiadek (1971) (model i wizualizacja: Ł. Wojciechowski)

bevelled at 45° - this solution is similar to contemporaneously popular Brutalist architecture of the West, e.g., that of the Brunswick Centre in London (designed by Patrick Hodgkinson, built in 1972). The façades of the hotel section were designed from reinforced concrete prefabricated elements with round windows, which can bring to mind the Japanese architecture of the period, e.g. the Nakagin tower (designed by Kisho Kurokawa, built in 1972). Circulation shafts cut at an angle of around 30° that extend above the mass of each module are a distinctive element of the complex. The entire layout has a varied scale and gradually extends upward from the side of the square near the church - reaching a height close to the office building designed by the same team near the Main Post Office building. The digital model (Figs. 6, 7) was made on the basis of a conceptual design<sup>18</sup> that had missing cross-sections and floor plan fragments. However, the available source material is highly legible and leaves little room for interpretation concerning the external appearance of the buildings. Rich in formal terms and spatially and functionally diverse, this complex would have radically altered the face of Plac Dominikański. It would have been a nationally distinctive structure, probably highly controversial, and if it had stood the test of time<sup>19</sup>, it could have become a world-class monument of late Modernism, akin to the aforementioned cases from the United Kingdom and Japan.

# Mixed-use centre at Plac Dominikański, designed by Stefan Müller, Mieczysław Rychlicki (1970)

The urban design by Müller and Rychlicki is much less detailed than the previous design for the same area prepared by Grabowska-Hawrylak and associates. Furthermore, the only available record of this design is a photograph of a general mock-up that had probably been made to a scale of 1:500 [7]. The building is designed in the form of a cascade and gradually increases in height from the Church of St Adalbert towards Oławska Street. The resulting terraces are irregular and form a diverse array of spaces within the building. A ten-storey office building, located near Oławska Gate and parallel to the Panorama Hotel, towers above the complex. The main pedestrian platform is located at the height of the second storey and runs above Błogosławionego Czesława Street in the form of a double pedestrian bridge and leads along Oławska Street further in the complex. Some of the design assumptions (cascade-like layout, lower development near the Gothic church and the pedestrian platform) are similar to those featured in the design by Grabowska-Hawrylak, which is evidence of certain design tendencies that were prevalent during this period. The digital recreation (Fig. 8) is an interpretation of the urban design and is entirely circumstantial. As the mock-up resembled the designs of British architect Denys Lasdun, who had been known for the Royal National Theatre in London (designed in 1965) and the Institute of Education of the University of London (1965) at the time of design [8], similar formal solutions were adopted - namely the underscoring of the structure's horizontal elements and a recession of glazing relative to the cascades' outlines, thus forming canopies above entrances. This is a measure that is also similar to the design of the Main Post Office extension by Grabowska-Hawrylak and many other designs and projects from the turn of the 1970s<sup>20</sup>, such as the Oakland Museum designed by Dinkeloo Roche (1961–1968) [9]. This convention was also followed by a later design by Müller – the Granit recreation centre in Szklarska Poręba (in cooperation with Maria Müller, Małgorzata Bochyńska and Zygfryd Zaporowski) - here the cascade layout was the outcome of pre-existing topography and the horizontal divisions were highlighted by balcony railings that were partially filled in with greenery. The detail-less digital model of the mixeduse centre at Plac Dominikański depicts a probable design alternative. The austere reinforced concrete railings highlight the geometry of the terraces that would have served services and commercial uses, and - most importantly - gastronomic establishments. The recessed glazing and metal windows and doors were shown in a dark colour to highlight the spatiality of the design and the layered topography of architecture - that is especially visible in Lasdun's designs. It is possible that the Brutalist character of the building would have been eased by greenery on the terraces, as well as sophisticated railing and attic wall details during later design phases. It is notable that this proposal assumes the demolition of the former Military Commissariat building and the survival of the Panorama Hotel, which was demolished in 1999, which makes it difficult to place the complex on contemporary photographs.

# Tourist House at Podwale Street, designed by Tadeusz Brzoza, Wiktor Jackiewicz, Oskar Mucha, Roman Tunikowski (1960)

The building located furthest to the south from among those placed on this list is the Tourist House, designed as sited between Podwale and Krasińskiego streets, from 1960 [4]. It is located at the extension of the City Moat, which crosses between the previously mentioned Panorama Hotel and the Post Office. The building abuts a south-facing, blind wall of a townhouse from 1900 and its interior opens up towards a public garden where a small square was designed, along with an extension of Worcella Street. The two-storey glazed hall of the building is accessible from the ground floor and through an external platform that leads to a mezzanine. The hotel section was framed into a cuboid frame, while the rooms are fully glazed,

<sup>&</sup>lt;sup>18</sup> Unarchived collection of the Museum of Architecture (no item signatures) [5].

<sup>&</sup>lt;sup>19</sup> Particularly the 1990s and 2000s, when socialist heritage was being mercilessly erased. Many outstanding specimens were demolished or thoughtlessly remodelled, e.g. the Supersam in Warsaw, the Chemistry pavilion in Warsaw, the auditorium of the Institute of Mathematics of the Wrocław University.

<sup>&</sup>lt;sup>20</sup> For instance the Town Hall in Terneuzen, designed by Van den Broek, Bakema (1963–1973) [10].

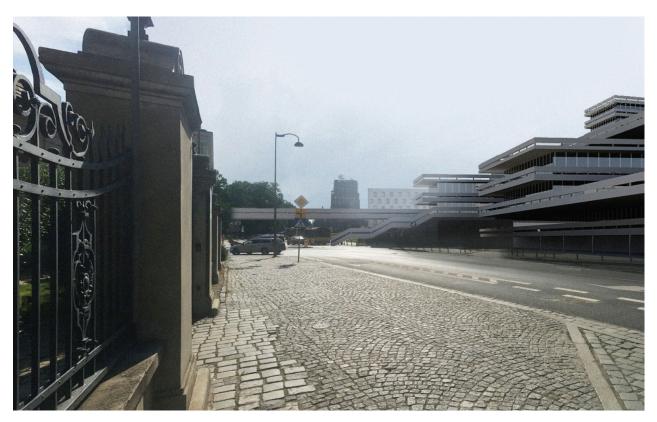


Fig. 8. Visualisation of the mixed-use centre on Dominikański Square, designed by S. Müller, M. Rychlicki (1970)
– view from the side of the Church of St Adalbert (model and visualisation by Ł. Wojciechowski)
II. 8. Wizualizacja centrum wielofunkcyjnego przy placu Dominikańskim,

 n. 8. wizualizacja centrum wielofunkcyjnego przy piacu Dominikanskim, proj. S. Müller, M. Rychlicki (1970)
 – widok od strony kościoła św. Wojciecha (model i wizualizacja: Ł. Wojciechowski)



Fig. 9. Visualisation of the Tourist House at Podwale Street,
designed by T. Brzoza, W. Jackiewicz, O. Mucha, R. Tunikowski (1960)
view from the side of Podwale Street (model and visualisation by Ł. Wojciechowski, background image source: Google Maps)

II. 9. Wizualizacja Domu Turysty przy ul. Podwale, proj. T. Brzoza, W. Jackiewicz, O. Mucha, R. Tunikowski (1960) – widok od strony ul. Podwale (model i wizualizacja: Ł. Wojciechowski, źródło tła: Mapy Google) opening up a view of the public garden. The perspective sketches [4] that were used to prepare the digital model (Fig. 9) depict the glazing as set in delicate frames and highly transparent. These solutions are distinctive of the 1950s architecture<sup>21</sup>.

#### **Conclusions**

Making digital models of unbuilt buildings based on design proposals and incomplete documentation raises several doubts and can run into numerous problems. In some cases, a single line on a sketch can suggest the façade outline or window layout. In many situations, the source material is ambiguous – there are inconsistencies between drawings. This is natural in conceptual design work as the particular drawings were made by different authors and were not always precisely coordinated – for instance due to pressure caused by deadlines. There is often lack of many other pieces of information that can affect a building's expression, such as precise floor plans, functional programmes or details. In some cases, placing the building in a present-day context (in photographs) is problematic due to different urban design assumptions or changes in development.<sup>22</sup> While digitally recreating selected buildings, we wanted to express the character of their designs to the best of our knowledge about each building. Despite difficulties, the visualisations presented depict the primary design assumptions with a great deal of probability and can be used to gain insight into design ideas by their respective architects. These visualisations can be an interesting enhancement of knowledge about the history of post-war design and the future of specific fragments of the city.

> Translated by Krzysztof Barnaś

<sup>22</sup> For instance, certain buildings have been reconstructed or preserved counter to the assumptions of designers, street layouts or geometry have been changed or new development has appeared.

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#### Abstract

#### Unbuilt proposals for post-war Wrocław: sample digital models

The goal of the study was to present the process and the effects of digital reconstruction of unrealised architectural projects for Wrocław. The subject of the research were the projects by renowned architects such as Jadwiga Grabowska-Hawrylak, Stefan Müller, Zenon Prętczyński, Andrzej Frydecki. The visualisations are the first attempt of digital reconstructions based on preserved incomplete archival plans. The attempt was presented as a process aimed at presenting original design ideas in new light, allowing realistic presentation of the buildings in the surroundings, they were designed for. The authors of the article tried to reconstruct the proportions of buildings, their locations, relations with context and textures they were meant to be finished with. The article presents the most intriguing aspects of the work and the difficulties of the research. The authors based their work not only on the archival projects but also on the architectural tendencies they are clearly rooted in. The presentation of the projects in the form of visualisations allows better understanding of the original architectural goals of their designers and the opens new perspective at the post-war modern architecture.

Key words: post-war architecture, Wrocław, architects of Wrocław, brutalism, digital visualisation, architectural design

#### Streszczenie

#### Niezrealizowane koncepcje powojennego Wrocławia: przykładowe modele cyfrowe

Celem artykułu było przedstawienie procesu i efektu odtwarzania cyfrowego niezrealizowanych koncepcji architektonicznych dla Wrocławia. Przedmiotem pracy były projekty takich architektów jak Jadwiga Grabowska-Hawrylak, Stefan Müller, Zenon Prętczyński, Andrzej Frydecki.

<sup>&</sup>lt;sup>21</sup> The architecture of German architect Sep Ruf is similar in character (window outline, two ground-floor storeys glazed, mass framed), e.g. the court building in Munich (co-author: Theo Pabst, 1957).

Przygotowane wizualizacje są pierwszą próbą odtworzenia projektów na podstawie niepełnych materiałów archiwalnych. Próba ta została ukazana jako proces, którego celem jest przybliżenie oryginalnych idei projektowych w nowym ujęciu, pozwalającym na rzeczywiste przedstawienie ich kontekście, w którym miały powstać. Podczas pracy autorzy artykułu starali się zarówno odtworzyć proporcje budynków, ich lokalizację, relacje z otoczeniem, jak i materiały, jakimi miały być wykończone. W artykule omówiono też najbardziej intrygujące zagadnienia i trudności związane z badaniem. Opierano się nie tylko na koncepcjach, ale także na ówczesnych tendencjach projektowych, w których dane koncepcje są wyraźnie zakorzenione. Ukazanie projektów za pomocą wizualizacji pozwala na lepsze zrozumienie założeń architektonicznych przyjętych przez ich autorów, a także spojrzenie na krajobraz miasta z perspektywy powojennych projektantów.

Slowa kluczowe: architektura powojenna, Wrocław, architekci Wrocławia, brutalizm, wizualizacje cyfrowe, projektowanie