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## *Wooden four-family houses of the interwar period in Hajnówka and Czarna Białostocka*

### *Abstract*

Wooden architecture, including residential architecture, is an important element of the landscape of Podlasie. Interesting examples of it can be found in Hajnówka and Czarna Białostocka. Both towns owe their dynamic development in the interwar period to the wood industry. For the rapidly growing number of residents, new houses needed to be built.

The subject of the study were two housing estates in Hajnówka and one in Czarna Białostocka. The main goal of the author of the article was to expand knowledge in the field of wooden buildings of the interwar period in the Podlaskie Voivodeship. The basic task was to describe the architectural attributes of four-family houses, as well as the urban planning of housing estates. The study uses research methods applied in the field of architectural history – collecting information available in the literature on the subject and archival sources, as well as field research. The obtained research material was subjected to analysis and inference.

The article discusses architectural, functional and structural attributes of quads. All residential buildings, apart from minor differences, have the same attributes. In urban planning, very similar layouts were also used in each of the housing estates. They are the result of the conditions of the epoch. The current condition of the housing estates was also analyzed in terms of preserving their historical character. On the basis of the recent field work, it can be concluded that most of the buildings have been transformed, often to an extent that it is impossible to identify their historical form. The housing estates as a whole have lost their important value, which was the architectural homogeneity of the buildings.

**Key words:** wooden architecture, quads, architecture of the interwar period

### *Introduction*

Wooden architecture is represented in large numbers in the Podlaskie Voivodeship. Above all, sacral architecture is visible in the landscape – wooden Catholic and Orthodox churches (Pokropek, Pokropek 1996). Houses are also an important part of the wooden construction stock. They form an important element not only of rural development, but also of many cities of Podlasie. They were built during various periods, including the interwar years, when houses of both traditional and modern character were being erected. Many residential buildings of the interwar period are located in Białystok, the current capital of the Podlaskie Voivodeship, and then the capital of the Białystok Voivodeship (Górska et al. 2020). These include single-family houses and multi-family buildings. Interesting examples

of residential buildings of the interwar period can also be found in smaller towns. Hajnówka and Czarna Białostocka should be mentioned here (Fig. 1). Characteristic among the buildings found in both of the aforementioned towns are four-family residential buildings, which are the subject of this work. These buildings are located in two housing estates in Hajnówka and one housing estate in Czarna Białostocka. The selection of the studied architectural objects was determined by formal similarities in terms of architectural and urban planning solutions, as well as the fact that they were constructed during the same time period.

The general objective of the study was to expand knowledge in the field of wooden buildings of the interwar period in the Podlaskie Voivodeship. The basic task was to describe the architectural attributes of four-family houses, as well as the urban layout of housing estates. Due to their similarities, it turned out to be important to study the genesis of the adopted solutions. The thesis put forward at the beginning of the study was that the architectural choices and urban

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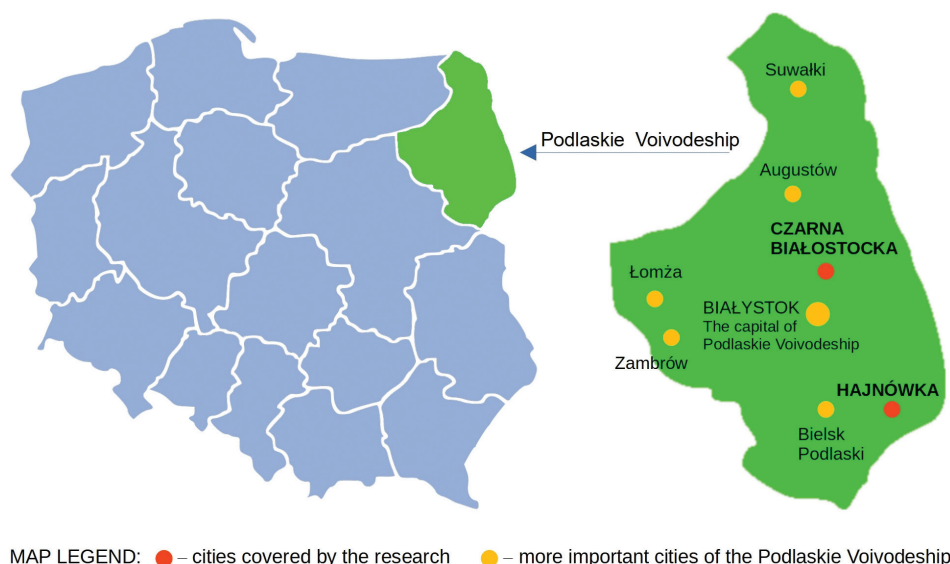


Fig. 1. Research area (prepared by A. Owerczuk, based on the Location map of Poland 2021)

Il. 1. Obszar badań (oprac. A. Owerczuk, na podstawie Location map of Poland 2021)

planning solutions used were a result of the general conditions of the era and the specificity of the locations chosen.

### *State of research*

Until now, four-family houses in the aforementioned towns have not been the subject of direct research work. Although there are no scientific studies on the architecture and urban planning of the quads specifically, the general issue of wooden buildings in Hajnówka have been presented in some local historical studies (Pater 2013; 2016; 2021). The knowledge contained in these publications is valuable, but mostly focused on the history of the town and the lives of its inhabitants. Apart from passing mentions of the construction of the housing estate, there are no dedicated studies concerning the housing estate in Czarna Białostocka. Valuable information on the development of housing in the interwar period can be found in the book by Małgorzata Rozbicka (2007). Wooden quads are also mentioned there.

### *Methods*

The study uses research methods employed in the field of architectural history – collection of information available in the literature on the subject and archival sources, as well as field research. The obtained research material was subjected to analysis and inference.

Bibliographic queries (Biblioteka Narodowa [National Library] in Warsaw, Książnica Podlaska [Podlasie Library] in Białystok, publications in libraries available online) included both published and unpublished works. Among publicly available sources, historical publications concerning individual towns and regions were of great importance due to the lack of studies directly related to the subject being analyzed. Archival queries were carried out in the Archiwum Akt Nowych [Archives of Modern Records] in Warsaw (AAN), Archiwum Państwowe [State Archives] in Białystok (AP) and the photographic collections of the Miejska Biblioteka Publiczna [Municipal Public Library] in Hajnówka (MBP).

An important element of the study was field research, which helped to determine the current condition of the facilities and compare it with information obtained elsewhere. Photographic documentation was made. During the in situ research, an inventory of one segment of the quads in Czarna Białostocka was carried out. Materials obtained as part of a field study internship carried out by master students of architecture in 2022 from the Faculty of Architecture at the Białystok University of Technology were also used. Their study was primarily aimed at documenting the current state of the buildings (Dokumentacja praktyki 2022). The obtained material was used mainly for comparative analyses of historical records and the current state of preservation of the quads. Preliminary research on the topic was carried out in 2021, the main part of the work was carried out in 2022–2023, and supplementary research in 2024.

### *Results*

#### *The wood industry as the basis for the development of Hajnówka and Czarna Białostocka*

The dynamic development of Hajnówka and Czarna Białostocka in the interwar period had solid economic foundations. Large forest complexes and historical events created favourable conditions for the development of the wood industry in the region. In 1915, during World War I, these areas were occupied by the Germans. The surrounding forests attracted the attention of the occupier and almost immediately the Germans began to obtain raw wood material on a large scale. For this purpose, sawmills and other wood processing plants were built. A network of narrow-gauge railways was created to transport the raw material. After Poland regained independence, the wood industry continued to develop. In the entire Białystok Voivodeship, this branch of industry became one of the most important areas of the economy and employed the most workers (Kosiński 1962, 79). At that time, Hajnówka and Czarna Białostocka transformed from rural towns into urban centers.

Before World War I, Hajnówka had about 600 inhabitants (Pater 2016, 130), and after the events of the war, fewer than two hundred. Over time, the town gained economic importance and became [...] *the largest center of the wood industry in north-eastern Poland. Development is going at such a fast pace that Hajnówka has already surpassed Bielsk in terms of the number of inhabitants* (Karpiński, Orłowicz 1937, 54). At the end of the 1930s, Hajnówka was inhabited by several thousand people, with some sources claiming that in 1939 there were up to 17,000 inhabitants in the town (Pater 2013, 95).

Czarna Białostocka also owes its intensive development to the wood industry. In 1915, the Germans built six sawmills, a woodchip production plant, workshops, a power plant and narrow-gauge railway lines for transporting wood in the village near the Czarna Wieś station (Dobroński 2014, 89). The industrial base left after the German occupation was expanded after the war and became the main driving force behind the development of the town. In 1962, the town was transformed into the city that today is called Czarna Białostocka.

In the interwar period, as a result of the economic development of both towns, there was a large increase in the population and, consequently, a rapid increase in demand for housing. In order to satisfy the demand, numerous houses were erected. The construction of new buildings was often done in a chaotic manner. At that time, Hajnówka was described as follows: *Nevertheless, it has the character of a semi-rural industrial settlement and is built up quite unsystematically* (Karpiński, Orłowicz 1937, 54). Over time, housing estates appeared, which were given a uniform architectural character. Because of their orderly composition, they tended to stand out in the urban structure of the town.

### *The State Forests Company and the quads*

An important role in the management of forest resources was played by the State Forests company [Lasy Państwowe]. It was established in 1924 (Lasy Państwowe, 2024). The final organization of the company was completed in 1930. The management of the company was provided by the General Directorate of the State Forests, established in 1930 (Broda 2006, 103). It was responsible for the Technical Office of the Construction Department, and in the years 1937–1938 many designs of typical buildings were developed by this office. A common feature of these structures was, of course, the use of wood as the basic building material. The functions of the buildings corresponded to the needs of the State Forests. Designs for a typical forestry office, forest inspector's lodge, forester's lodge, gamekeeper's lodge, farm buildings and many others were prepared<sup>1</sup>. Among them were residential buildings. These included designs of houses for 20 and 40 seasonal workers, barracks and 2-, 4- and 6-apartment workers' buildings. The four-family houses erected in Hajnówka and Czarna

Białostocka have the same attributes as a typical design of a 4-apartment workers' building, marked with the symbol r2 (Fig. 2).

The typical design r2, developed in February 1938, was the documentation of a "4-family workers' building" with a built-up area of 206.5 m<sup>2</sup> and a cubic capacity of 654.2 m<sup>3</sup>. The designed area of the segment was 43.76 m<sup>2</sup>. The two-room apartments consisted of a kitchen (14.51 m<sup>2</sup>), a room (22.13 m<sup>2</sup>), a hall (2.86 m<sup>2</sup>) and a pantry (4.26 m<sup>2</sup>). The entrance to the apartment led through a hallway. From the hall you could go to the kitchen and pantry. The family room was accessible only through the kitchen. A ladder through a hatch in the ceiling made it possible to enter the attic. In addition, there was a cellar under the pantry, accessible through a hatch in the floor, and a chute led to it from the outside. The designed building had a log structure, external walls which were 12.5 cm thick, internal structural walls which were 10 cm thick, and partition walls consisting of two layers of boards. The roof truss had a purlin-tie structure. The purlins were supported by posts. The proposed roof covering was shingles. The project also provided for the possibility of different roofing, which was "dependent on local conditions" (Fig. 2)<sup>2</sup>. A simple, compact body on a rectangular plan was covered with a hip roof. The roof slope was broken at the eaves. There were small dormers in the roof to illuminate the attic. The entrance was accentuated by an open porch.

A typical project can be compared to the completed quad in Czarna Białostocka (Fig. 3). The materials were provided by field research and a measurement inventory of one segment of the quad. The area of the apartment is about 43 m<sup>2</sup>. The apartment consists of the following rooms: hall (3.2 m<sup>2</sup>), pantry (3.8 m<sup>2</sup>), kitchen (14.2 m<sup>2</sup>) and room (21.8 m<sup>2</sup>). The height of the rooms was about 270 cm. From the hall it was possible to go to the kitchen and to the pantry. A ladder led to the attic. In addition, there was a small cellar under the pantry. A hatch in the floor granted access to the cellar from the pantry, and from outside the building through a chute. The kitchen had a tiled kitchen range. The room was accessible through the kitchen and was heated by a tiled stove. The architectural form does not differ from the one proposed in the r2 project<sup>3</sup>. The same or almost the same solutions were used in the quads in Hajnówka (Fig. 4).

The utility program of the quads was complemented by farm buildings. They consisted of two large rooms. One was intended for storing lumber to be used for fuel, the other for backyard breeding, mainly pigs and chickens (Dużyński 2024). In addition, there were toilets in the outbuilding. In the case of Czarna Białostocka, they were placed in the body of the farm building (Fig. 5), while in Hajnówka they were placed separately from the farm

<sup>1</sup> Based on a query at the AAN in Warsaw, Ministry of Internal Affairs, file no. 2/9/0/5.5/1 3953-3967.

<sup>2</sup> From the descriptive part of the design of a typical 4-apartment worker's building, marked with the symbol r2 (source: Typowy projekt..., AAN in Warsaw, file no. 2/9/0/5.5/1 3955).

<sup>3</sup> In some buildings, there were slight differences, e.g., the form of the window to the vestibule and pantry. Due to the reconstruction of most buildings, it is difficult to determine in which buildings which solutions were adopted.



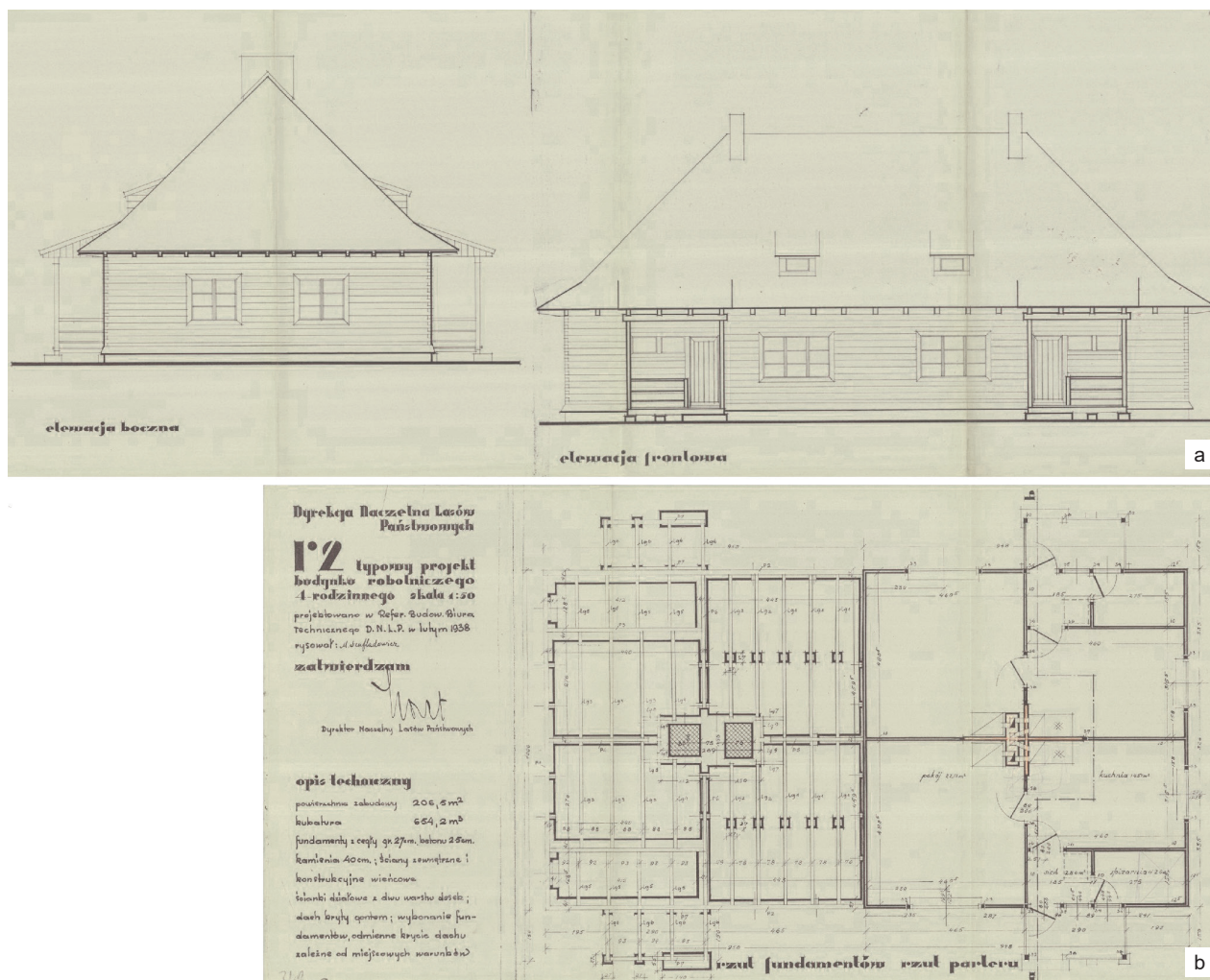


Fig. 2. A typical design of a 4-apartment workers' building, marked with the symbol r2:

a) view of the façade, b) plan of the ground floor and foundations

(source: Typowy projekt..., AAN in Warsaw, file no. 2/9/0/5.5/1 3955)

II. 2. Typowy projekt budynku robotniczego 4-mieszkaniowego, oznaczonego symbolem r2:

a) widok elewacji, b) rzut parteru i fundamentów

(źródło: Typowy projekt..., AAN w Warszawie, sygn. 2/9/0/5.5/1 3955)

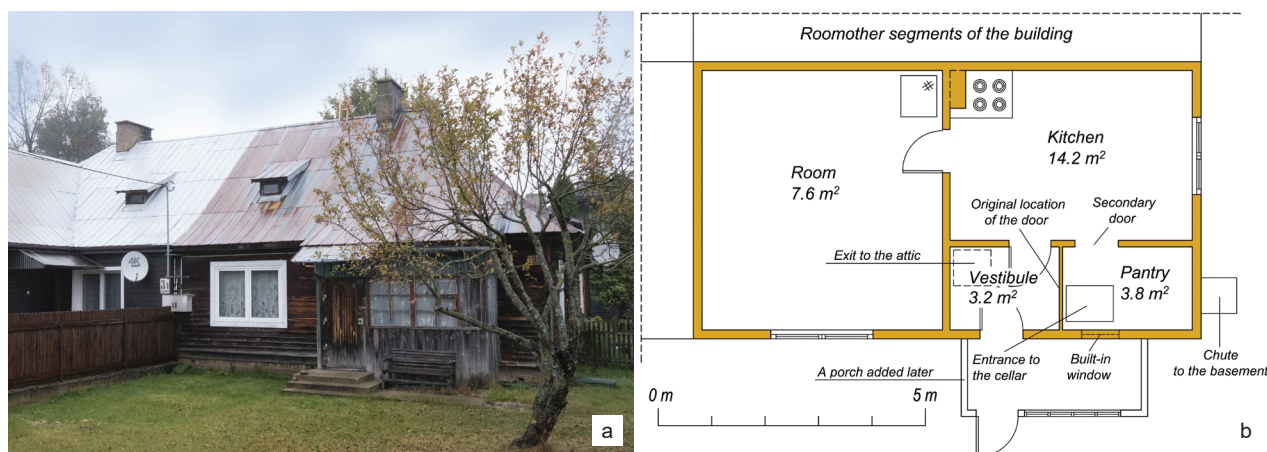


Fig. 3. Czarna Białostocka, residential building:

a) general view, 2023 (photo by A. Owerczuk), b) plan (drawing by A. Owerczuk)

II. 3. Czarna Białostocka, budynek mieszkalny:

a) widok ogólny, 2023 (fot. A. Owerczuk), b) rzut (rys. A. Owerczuk)



Fig. 4. Hajnówka, Czworaki housing estate, residential buildings:  
a) general view of one of the buildings, 2019 (photo by A. Owerczuk),  
b) fragment of a building finished with plaster, 2022 (source: Dokumentacja praktyki 2022, photo by A. Łaska)

#### II. 4. Hajnówka, Osiedle Czworaki, budynki mieszkalne:

- a) widok ogólny jednego z budynków, 2019 (fot. A. Owerczuk),  
b) fragment budynku wykończonego tynkiem, 2022 (źródło: Dokumentacja praktyki 2022, fot. A. Łaska)

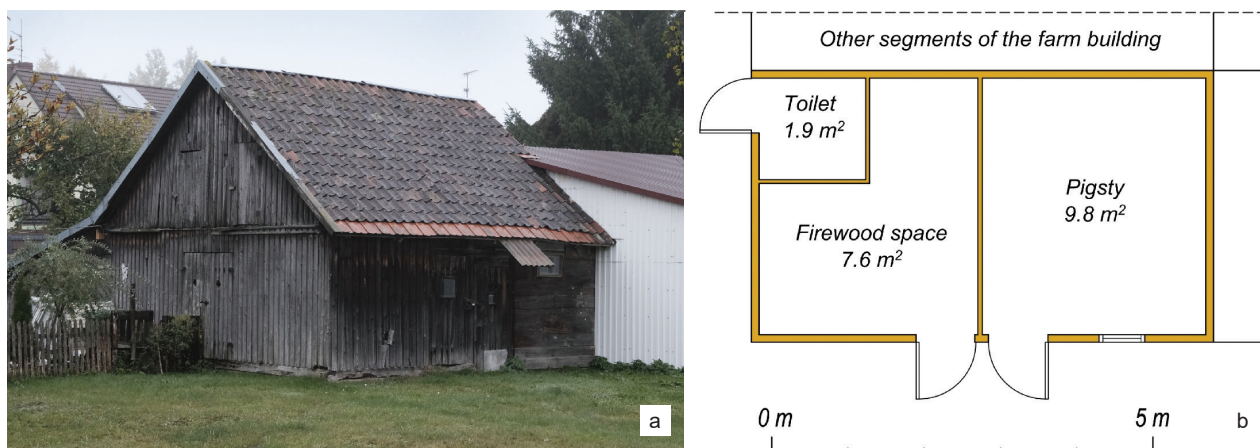


Fig. 5. Czarna Białostocka, outbuilding:  
a) general view, 2023 (photo by A. Owerczuk), b) plan (drawing by A. Owerczuk)

#### II. 5. Czarna Białostocka, budynek gospodarczy:

- a) widok ogólny, 2023 (fot. A. Owerczuk), b) rzut (rys. A. Owerczuk)

building (Fig. 6). Slightly different solutions were used in the design of farm buildings developed for the State Forests (Fig. 7a), although the utility program was the same (“lumber storage”, “pigsty” and “toilet”).

The chronology presented in the literature on the subject raises some doubts. According to some studies, the first quads were erected in Hajnówka before 1938. The buildings in the Kolejki Leśne housing estate were erected in 1934 (Gryc 2007, 48). The first houses in the Czworaki housing estate, on the other hand, were built in 1933 (Pater 2021, 217) or 1934 (Gryc 2007, 276). This suggests that documentation analogous to the r2 project was used earlier, before 1938. It is difficult to determine this at present. This does not change the fact that the r2 project and the implementation of four-family buildings in Hajnówka and Czarna Białostocka, apart from minor differences, are basically identical.

#### *Urban planning solutions of the researched housing estates*

In 1937, the Chief Directorate of the State Forests developed a “typical project for the layout of plots of workers’ housing estates” (Fig. 7b). The model plot had an area of 600 m<sup>2</sup> and the shape of a rectangle with dimensions of 20 × 30 m. Located on the plot were: 1/4 of the quad and 1/4 of the outbuilding. In the case of the outermost plots, the outbuilding served two properties.

In both villages, the urban planning of the housing estates and the location of the facilities on the plots were very similar to the proposals developed by the General Directorate of the State Forests. The plots had the shape of a rectangle similar to a square. The majority had an area of about 600 m<sup>2</sup>. The outermost plots were larger. Areas that differed from this norm were a result of individual conditions,



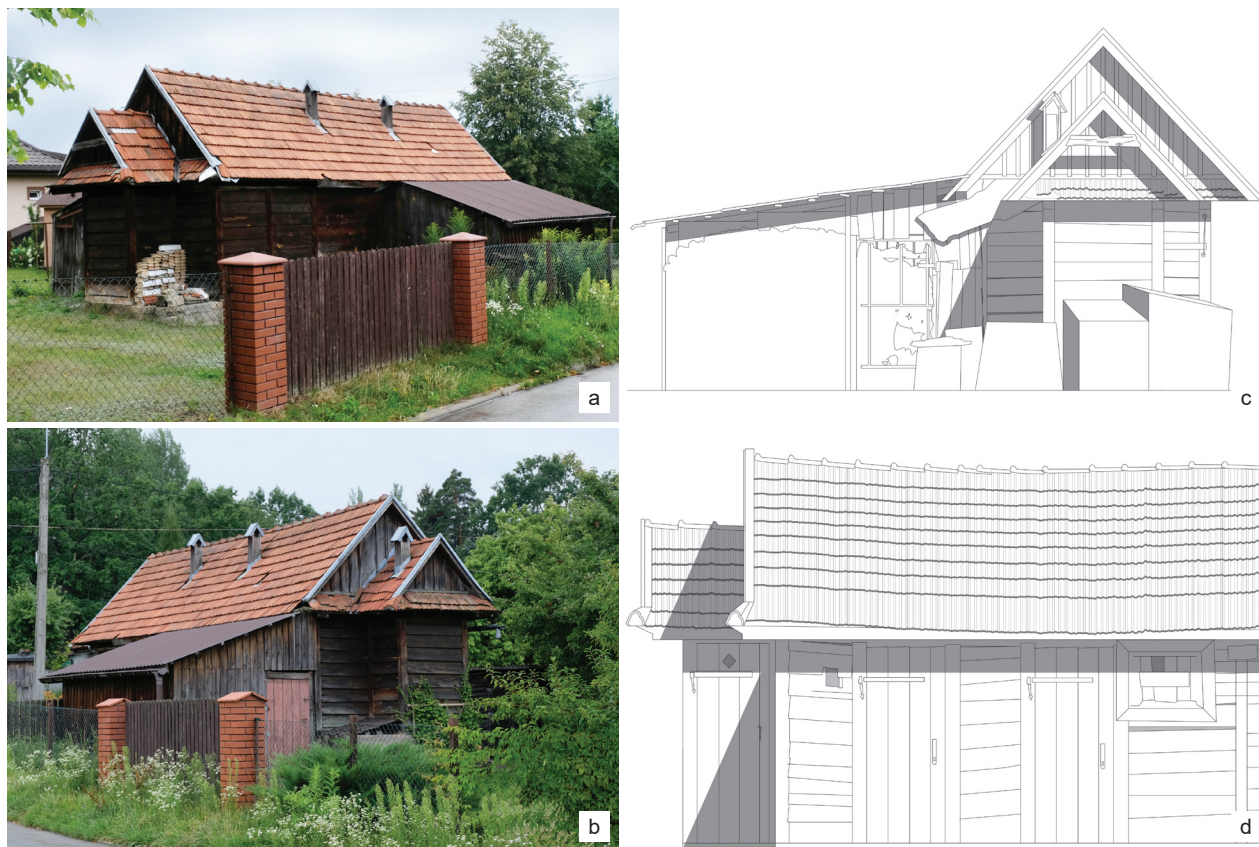


Fig. 6. Hajnówka, Kolejki Leśne housing estate, outbuildings:

- a) one of the buildings, general view, 2019 (photo by A. Owerczuk), b) one of the buildings, general view, 2019 (photo by A. Owerczuk), c) gable façade, d) side façade (source: Dokumentacja praktyki 2022, drawings by S. Goliszek, W. Markowska, P. Mieten)

Il. 6. Hajnówka, Osiedle Kolejki Leśne, budynki gospodarcze:

- a) jeden z budynków, widok ogólny, 2019 (fot. A. Owerczuk), b) jeden z budynków, widok ogólny, 2019 (fot. A. Owerczuk), c) elewacja szczytowa, d) elewacja boczna (źródło: Dokumentacja praktyki 2022, rys. S. Goliszek, W. Markowska, P. Mieten)

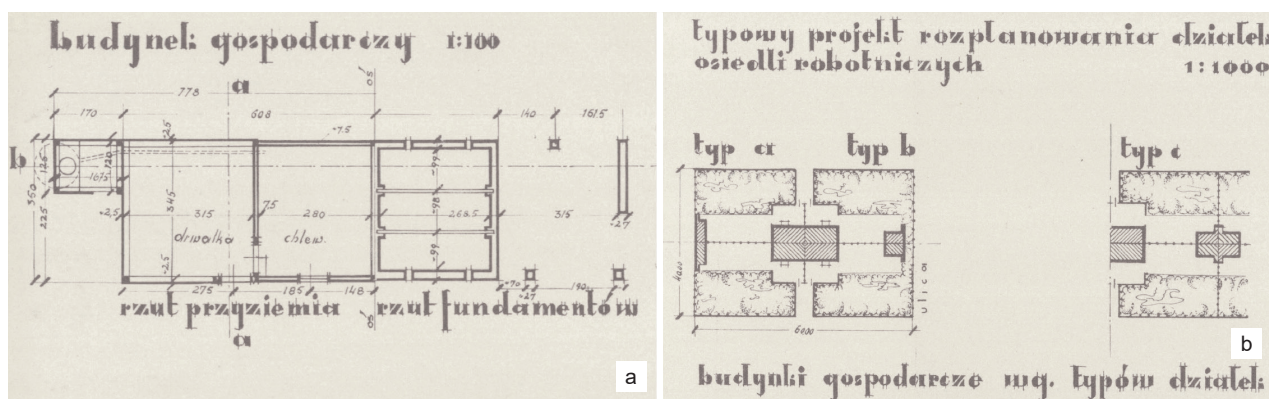


Fig. 7. A typical design of the layout of plots of workers' housing estates together with designs of farm buildings:

- a) plan of the farm building, b) layout of plots (source: Typowy projekt rozplanowania..., AAN in Warsaw, file no. 2/9/5.5/1 3960)

Il. 7. Typowy projekt rozplanowania działek osiedli robotniczych razem z projektami budynków gospodarczych:

- a) rzut budynku gospodarczego, b) rozplanowanie działek (źródło: Typowy projekt rozplanowania..., AAN w Warszawie, sygn. 2/9/5.5/1 3960)

e.g., irregular boundaries of the housing estate. The plots formed lines of buildings, and access to them was provided by streets running along the length of the buildings. They were supplemented by perpendicular streets.

Each four-family house was located at the junction of four properties and “marked” the layout of the apartments

with four perpendicular boundaries of plots coming out of the centre of the building. Entrances to the apartments were located on the side of the street. The development of the plot was complemented by farm buildings. In the case of properties within the development line, they were located on the border of four plots, while on the outermost plots,



farm buildings, common to two apartments, were located on the border of two properties and were moved away from the outer border.

### *Housing estates in Hajnówka*

The main elements of the urban layout of Hajnówka were shaped in the late 1930s. This was the result of the activities of the Construction Department of the Voivodeship Office in Białystok and the Bureau of Measurements and Buildings of the Cities of the Białystok Voivodeship, established in 1935 (Pater 2021, 20). The street layout created at that time is clear to this day. The street grids included buildings of various character. Among them, housing estates with their orderly urban composition stand out. These include: Siwa and Biała Kolonia, Urzędnicze housing estate, Judzianka (located outside the boundaries of a previous building complex), Kolejki Leśne and Czworaki housing estate. The buildings of the first three housing estates were made up of two-family houses. On the other hand, the Czworaki and Kolejki Leśne housing estates were built up with four-family houses.

The smallest of the four-family housing estates is the Kolejki Leśne housing estate. It is located on the eastern edge of the city. It consisted of six four-family houses with home gardens supplemented by farm buildings. The urban layout of the buildings was simple. The quads were located in two rows of three buildings each. The plots formed lines of buildings, and access to them was provided by streets running along them, as well as streets that ran traverse to the buildings. The plots were of various sizes. The smallest, located in the middle of the estate, were about 400 m<sup>2</sup>. The largest, outermost plots were about 1000 m<sup>2</sup> each.



Fig. 8. Hajnówka. The first four-family house under construction (source: MBP in Hajnówka, file no. 00074)

Il. 8. Hajnówka. Pierwszy czworak w budowie (źródło: MBP w Hajnówce, sygn. 00074)

The Czworaki housing estate was built by the Wood Works. It was located in the central part of the city, on one of the main streets (Piłsudskiego Street) running through the city. The first 17 buildings were commissioned in 1933, the next three in 1937, and the last two in 1940 (Pater 2021, 217) (Fig. 8). As in the case of the previous housing estate, the urban composition was very simple. It consisted of four rows of buildings with five quads and two additional quads on the north-east side, totalling 22 quads. The area of the plots ranged from about 600 m<sup>2</sup> to about 900 m<sup>2</sup> in the case of the outermost plots (Fig. 9a). Water intake points served several properties (Dużyński 2024).



Fig. 9. Surveyed housing estates:

- a) Hajnówka, Czworaki housing estate, urban inventory, 1951 (source: AP in Białystok, file no. 4/149/0/28/WZAB52),
- b) Hajnówka, Czworaki housing estate in its current state, visible lack of some buildings and transformed original outlines of building plans as a result of extensions (elaborated by A. Owerczuk, materials from: geoportal.gov.pl, accessed: 3.06.2024),
- c) Czarna Białostocka, urban inventory, 1969 (source: AP in Białystok, ref. no. 4/1449/0/-/2/16/2010 and 4/1449/0/-/2/25/2010)

### Il. 9. Badane osiedla:

- a) Hajnówka, Osiedle Czworaki, inwentaryzacja urbanistyczna, 1951 (źródło: AP w Białymstoku, sygn. 4/149/0/28/WZAB52),
- b) Hajnówka, Osiedle Czworaki, stan obecny, widoczny brak części budynków oraz przekształcone oryginalne zarysy rzutów budynków w wyniku rozbudów (oprac. A. Owerczuk, wykorzystano materiały z: geoportal.gov.pl, dostęp: 3.06.2024),
- c) Czarna Białostocka, inwentaryzacja urbanistyczna, 1969 (źródło: AP w Białymstoku, sygn. 4/1449/0/-/2/16/2010 i 4/1449/0/-/2/25/2010)



Fig. 10. Hajnówka, Czworaki housing estate, transformations of buildings:

- a) in the foreground a quad with added porches naturally fitting into the architecture of the building, post-war period (source: collection of the MBP in Hajnówka, file no. 00479),
- b) a building with a practically illegible historical form, 2022 (source: Dokumentacja praktyki 2022, photo by N. Kupińska)

II. 10. Hajnówka, osiedle Czworaki, przekształcenia budynków:

- a) na pierwszym planie czworak z dobudowanymi gankami wpisującymi się naturalnie w architekturę budynku, okres powojenny (źródło: zbiory MBP w Hajnówce, sygn. 00479),
- b) jeden z budynków, praktycznie nieczytelna forma historyczna, 2022 (fot. N. Kupińska, źródło: Dokumentacja praktyki 2022)

#### Four-Family Housing Estate in Czarna Białostocka

The housing estate is located in the eastern part of the city, on the edge of its urban zone. It consists of 15 quads with outbuildings (Fig. 9c). The main part of the estate is located along several parallel streets. There is a total of 12 quads in three lines of buildings with four quads each. The urban layout of the estate is complemented by a transverse street. Behind it are the other three quads. The layout of the plots is actually the same as in the housing estates discussed in Hajnówka. A standard plot has an area of 600–650 m<sup>2</sup>. The area of the largest outermost plot reaches about 800 m<sup>2</sup>.

#### *State of preservation*

The four-family housing estates are an important part of the interwar development of the researched towns. Their main advantage was spatial order. In terms of urban planning, this was achieved through a simple, somewhat schematic composition. The use of one type of housing and several variants of farm buildings with a unified form created a homogeneous architectural expression of the whole. The reasonable size of the estate, the small scale of the buildings, the simple body with diverse architectural elements and the greenery on the properties meant that despite the use of such unsophisticated means, the housing estates did not seem monotonous. That is why the housing estates, along with several other complexes built in the 1930s, stood out against the background of the somewhat chaotic placement of other buildings in the town. Today, they remain as a testimony to the history of the town's development. Unfortunately, they have not survived in their original form.

An example of the transformation that has taken place can be seen at the Czworaków Housing Estate in Hajnówka. The first significant changes appeared in the 1970s.

They were related to new investments. The residents of the quads were given two options. The first was to move into new blocks; the second was the purchase of the real estate with the right to any development (Dużyński 2024). During this time, five quads were demolished for the construction of a kindergarten and a cooperative housing estate (Pater 2021, 218). Then another building was demolished. Out of a housing estate of 22 four-family buildings, 16 remained (Fig. 9b). Currently, most residential buildings have been renovated or extended (Figs. 9b, 10). The scope and nature of the changes vary. This concerns the transformation of the body, as well as the change of roofing and façade materials and the replacement of woodwork. Changes have been made in an individual, uncoordinated way, usually without awareness of the value of the quads and the housing estate as a whole. As a result, many buildings have lost their original architectural form.

Adopting specific criteria as to the preservation of the historical form, the state of preservation of the entire housing estate was assessed (Dokumentacja praktyki 2022). The assessment took into account individual residential segments separately, as each had been renovated independently. In total, 64 apartments were studied. Three groups of segments have been distinguished: 1) those with a legible historical form, 2) those with a partially legible historical form, 3) those with an illegible historical form. A legible historical form is one that has been preserved in its original state or has undergone minor changes that do not significantly affect the historical form. There were 18 such buildings. The next group consists of structures with a partially legible historical form, i.e., those that have undergone significant transformation, but the historical form is still legible. Nine buildings were assigned to this category. The last group was assigned 37 buildings. The scope of their transformation made the historical form illegible. In other words, only 30% of the residential segments have a clear



historical form. The estate as a whole has lost one of its most important qualities – the architectural homogeneity of the buildings. And thus, it has lost its former importance in the city's landscape.

### *Quads in Hajnówka and Czarna Białostocka against the background of the epoch*

A typical r2 design of a wooden residential house for four families was also used in other towns. On the basis of this design, as part of the activities of the Directorate of State Forests in Radom, in the years 1938–1939, housing estates were built near sawmills in Kielce, Zagożdżon, Zagnańsk, Garbatka and Zawadówka (Rozbicka 2007, 382, 383). The form of the building was in accordance with the design, but in these cases corrugated asbestos-cement panels were used for roof covering<sup>4</sup>.

The architectural, functional and urban solutions used in the housing estates are typical of the interwar period. Their genesis dates back to the end of the 19<sup>th</sup> century. Proposals for a housing estate of four-family buildings supplemented with farm buildings were described and illustrated with drawings in a publication by Kazimierz Obrębowicz, describing new plans for rural construction at that time (Obrębowicz 1886). In the exemplary layout of the plots, the buildings were included in a rigid compositional system, more or less the same as was used in Hajnówka and Czarna Białostocka (Obrębowicz 1886, 67). Similar urban planning solutions were used in the railway colony in Nowy Sącz. The estate mainly consisted of two-family houses supplemented with outbuildings. Outbuildings were located in various places on the border of plots and “served” from one to four apartments (Kühnel 1918, 77). Economic factors spoke in favour of building two-family and four-family houses. In the interwar period, great attention was paid to this, regardless of the type of buildings and architectural forms used. Preference was given to solu-

tions in which attempts were made to provide maximally functional flats in a small area (Bruckalska, Bruckalski 1937, 16–21). At the beginning of the 1930s, according to one of the studies, the cheapest house was a one-storey building with four two-room flats (Chojecki 1932, 19). The cheapest material was wood. A factor in favour of the use of wood in the construction of houses was also the shorter construction time. An interesting example of a housing estate of multi-family wooden houses is the Feliks Warburg colony in Brest on the Bug River. It was built with wooden buildings consisting of eight apartments each. Their form can be described as a large house covered with a hip roof with dormers (Pszczółkowski 2016).

### *Summary*

The housing estates in Hajnówka and Czarna Białostocka are examples of developed architectural and urban planning solutions of the interwar period, resulting from the conditions of the epoch. These consisted of general views on the problem of satisfying the demand for housing, the activities of the State Forests company and enterprises related to the wood industry, as well as economic considerations. In the Podlaskie Voivodeship, they are a valuable example of interwar architecture, still in need of research. The need for more scientific research concerns the development of residential buildings, which is often underestimated as less “impressive”. Wooden four-family houses of the interwar period, especially in the case of Hajnówka, are an important testimony to the development of the town. During their existence, they have undergone significant transformations. As Danuta Kłosek-Kozłowska stated: *It should be agreed that almost every violation of the building or shape of the urban structures of the city can also change the spatial content and meaning once given to them* (2007, 112). In the examples discussed, this has already happened. We just have to hope that this process will not continue.

*Translated by  
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<sup>4</sup> Based on advertising materials showing a photo of a quad covered with corrugated asbestos-cement panels (Widok kilku budynków... 1939, 236).

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## Streszczenie

### *Drewniane czworaki okresu międzywojennego w Hajnówce i Czarnej Białostockiej*

Architektura drewniana, w tym mieszkaniowa, jest ważnym elementem krajobrazu Podlasia. Interesujące jej przykłady znajdują się w Hajnówce i Czarnej Białostockiej. Obie miejscowości swój dynamiczny rozwój w okresie międzywojennym zawdzięczają przemysłowi drzewnemu. Dla szybko zwiększającej się wówczas liczby mieszkańców powstawały nowe domy.

Przedmiotem badań były dwa osiedla czworaków w Hajnówce i jedno w Czarnej Białostockiej. Głównym celem autora artykułu było poszerzenie wiedzy w zakresie zabudowy drewnianej okresu dwudziestolecia międzywojennego na terenie województwa podlaskiego. Podstawowym zadaniem stało się więc opisanie rozwiązań architektonicznych domów czterorodzinnych, a także rozwiązań urbanistycznych osiedli. W opracowaniu wykorzystano metody stosowane w badaniach z zakresu historii architektury – gromadzenie informacji dostępnych w literaturze przedmiotu i źródłach archiwalnych oraz badania terenowe. Otrzymany materiał badawczy poddano analizom oraz wnioskowaniu.

W artykule zostały omówione rozwiązania architektoniczne, funkcjonalne i konstrukcyjne czworaków. Wszystkie budynki mieszkalne, poza mało istotnymi różnicami, mają takie same rozwiązania. W urbanistyce w każdym z osiedli także zastosowano bardzo podobne układy. Są one wynikiem uwarunkowań epoki. Poddano także analizie aktualny stan osiedli pod kątem zachowania ich historycznego charakteru. Na jej podstawie można stwierdzić, że większość budynków uległa przekształceniom, często w stopniu uniemożliwiającym identyfikację historycznej formy. Osiedla jako całość utraciły swój ważny walor, jakim była jednorodność architektoniczna zabudowy.

**Słowa kluczowe:** architektura drewniana, czworaki, architektura okresu międzywojennego