Annals of Warsaw University of Life Sciences - SGGW Forestry and Wood Technology № 107, 2019: 84-103 (Ann. WULS - SGGW, For. and Wood Technol. 107, 2019)

# Traditional ornaments of Świdermajers' style windows in the town of Otwock

# MARTA DWORNIK, ANNA ROZANSKA<sup>1</sup>, PIOTR BEER<sup>1</sup>

<sup>1</sup> Department of Technology and Entrepreneurship in Wood Industry, Institute of Wood Sciences and Furniture, Warsaw University of Life Sciences WULS-SGGW, Poland

**Abstract:** The paper provides an analysis of windows in antique Świdermajers' style wooden buildings, located in Otwock. It has been discovered that many of them have been already replaced with new ones. Attention was paid to the traditional Polish casement window structure with transom and the main part below, additionally divided into smaller areas by wooden horizontal or vertical muntins. Analysis of traditional window carpentry elements such as shutters, window sills, cornices and batten frames was made together with their classification based on different kinds of decorative motifs.

Keywords: wooden architecture, window, Świdermajer, Otwock, ornaments

#### **INTRODUCTION**

Świdermajer is a style popular along the Świder River. The term was first used as a joke in a poem by Konstanty Ildefons Gałczyński. It refers to the wooden architecture of summer cottages that started to appear in late 19th century along the railway line built along the Vistula River, South-East from Warsaw [Lewandowski, 2012]. Currently, most of the buildings that have been preserved - some quite well, others poorly - are in the town of Otwock. In spite of the fact that modern buildings made of brick tend to respect the details and ornaments characteristic for that style, the number of original buildings keeps falling.

The Świdermajer buildings do not follow just one single architectural cannon. The author of this style, Andriolli, drew inspiration from both Russian style and alpine architecture, as well as the medieval tradition of timber frame construction. The buildings had different functions: from private houses to hotels or health resorts. All differed in dimensions, level of splendour and interior equipment. The layout was rectangular, with the so called "light construction" of the walls, usually timber frame, used in smaller buildings. For larger buildings composed of several storeys, other types of construction were also applied: log walls, and post and beam structure. However, the common feature of this type of architecture consists in the unique verandas typical for health resorts, as well as rich fretwork, wood-carving decorations. They appear as openwork filling of roofs, supports, friezes, ballustrades, ornamental bands below and above the windows; and they make use of floral, zoomorphic, and geometrical motifs, combined with decorative monograms or stucco medallions hanging on building façades [Radomska, 2001]. Buildings are covered with decorative boarding (boards covering the external walls) and have little towers finished with ornamental pinnacles and covered with tent-like roofs [Radomska, 2001].

The main material used to build a Świdermajers' houses was wood. It was used not only for the construction itself such as roof trusses, structural bars and posts, but also for external wall boarding or ornaments of roofs, windows and verandas. In the second half of the 19th century, sawn timber was becoming more and more popular in construction, together with fretwork ornaments. The name comes from the fretsaw: a type of saw used to make intricate cutting work in wood.

		Year of
No.	Address	construction
1	Andriollego 35	ca. 1890
2	Andriollego 66	ca. 1930
3	Bagatela 27	before 1939
4	Chopina 16	1890s
5	Chopina 17	early 20th c.
6	Czarnieckiego 6	before 1939
7	Dębowa 3	before 1939
8	Emilii Plater 41	before 1939
9	Fredry 9	1908
10	Fredry 18	no data
11	Glinicka 11	1930s
12	Górna 104	ca. 1900
13	Jana Pawła 13	1920s
14	Jaremy 5	ca. 1935
15	Jaremy 7	ca. 1935
16	Kołłątaja 29	1928
17	Konopnicka 4	before 1939
18	Konopnickiej 7	ca. 1910
19	Konopnickiej 7a	1926-27
20	Kościelna 18	1910/1935
21	Kościelna 22	1st quarter of 20th c.
22	Kościelna 23	1st quarter of 20th c.
23	Kościuszki 5	1924
24	Kościuszki 7	ca. 1925
25	Kościuszki 15	1899
26	Kościuszki 19	1890
27	Kościuszki 21a	ca. 1905
28	Kościuszki 29	1st quarter of 20th c.
29	Kościuszki 32	1937
30	Kościuszki 39	1st quarter of 20th c.
31	Kraszewskiego 101	1920
32	Krótka 10	before 1939
33	Lelewela 7	before 1939
34	Literacka 6	1930s
35	Majowa 8	1930
36	Majowa 24	1920s
37	Mała 5	1920s
38	Mała 3	1930s
39	Marusarzówny 27	1st quarter of 20th c.
40	Mickiewicza 23	1905

Table 1.	Buildings	included in	the research

No.	Address	Year of construction
41	Mickiewicza 25	1905
42	Mickiewicza 31	1st quarter 20th c.
43	Mickiewicza 33	1st quarter of 20th c.
44	Mickiewicza 35	1st quarter of 20th c.
45	Mickiewicza 43/47	1930s
46	Mickiewicza 44/50a	before 1939
47	Mickiewicza 44/50b	before 1939
48	Moniuszki 13	before 1939
49	Moniuszki 19	1920
50	Moniuszki 20	1925
51	Moniuszki 23	1929
52	Moniuszki 27	1920s
53	Moniuszki 25	1920s
54	Moniuszki 29	before 1939
55	Narutowicza 51	before 1939
56	Narutowicza 53	1924
57	Piaskowa	no data
58	Piłsudskiego 22	1933
59	Poetycka 5	before 1939
60	Poetycka 21	1910
61	Pogodna 6	early 20th c.
62	Pogodna 7	before 1939
63	Poniatowskiego 11	before 1935
64	Prusa 13	1912
65	Reymonta 29	1906
66	Samorządowa 8	1927
67	Samorządowa 22a	1929
68	Samorządowa 16/20	1920
69	Słoneczna 8	before 1939
70	Słoneczna 15	before 1939
71	Sowińskiego 6a	before 1939
72	Sucha 7	before 1939
73	Świerkowa 16	ca. 1925
74	Turystyczna 18	before 1939
75	Wiązowska 29	1920
76	Wierchowa 15	before 1939
77	Willowa 6	before 1939
78	Zaciszna 26	1920
79	Żeromskiego 10	ca. 1900
80	Żeromskiego 60/62a	1930

Such wood-carvings were the main decorative element in Świdermajer buildings, and the handbook of decoration patterns published in 1880 by a German architect, Bernard

Liebold, became the basic reference for craftsmen from the Świder area. The handbook included very detailed drawings of wood-carving, as well as façades, verandas, ornaments, profiled beams and many other elements [Lewandowski, 2012]. Thanks to Bernard Liebold, the characteristic wooden architecture of European health resorts was formed at the turn of the 20th century [Ruszczyk, 2007].

A huge demand for wooden buildings in Otwock was a cause for sawmills and carpenters higher demand. One of them was Marcin Sierpiński, a carpenter specialising in doors, windows with shutters, and window sills. He took part, just like later his grandson Mieczysław Sierpiński, in the construction of many summer cottages in Świder and Józefów [localities near Otwock, along the Świder River]. Another carpenter, Leon Turski, moved to Otwock in 1895, started his professional career there and in 1905 built a house in Michalin with details inspired by Liebold's pattern handbook [Lewandowski, 2012].

Otwock was the workplace of eminent architects, such as Władysław Marconi, son of the famous Warsaw architect, Henryk Marconi, as well as Władysław Noakowski, Wacław Kupsta or Zdzisław Przygoda [Radomska, 2001].

Apart from the fretsaw and patterns by Liebold, carpenters and woodworkers also used traditional tools such as mallet and chisel. Cuts of these are visible in the engraved window sills and cornices. Hatchets (to debark logs and then give them a rectangular shape), axes (for wedge cuts and carpentry joints, as well as sharpening post ends), two man crosscut saws and saws for longitudinal cuts were also popular tools.

In the interwar period, the forms of Świdermajer buildings changed, as larger, severalstorey buildings were being erected. Their decorations tended to be less elaborate, less precise and done carelessly. The decorative motifs became more geometric, the ornaments were based on similar patterns, with dubious quality and no sophisticated details, which left much to be desired. What remained unchanged were the verandas, always present in Świdermajer buildings, independently of the construction time [Radomska, 2001], as well as the characteristic decorative wall panels made of boarding with ornamental friezes between storeys [Cichy, 2007].





Figure 1. Ruined building at Kościuszki 29 Street: A- veranda, current state, B- collapsed ceiling inside.

## RESEARCH AIM AND METHODOLOGY

Currently in Poland, wooden buildings are becoming archaic, and antique wooden buildings often lack proper care and restoration, becoming scarcer and scarcer every year (Fig.1). Hence the importance of protection, documentation and research of the buildings that still do exist, which sometimes entails protecting them against over-conservation by zealous owners. Such conservation undertakings often include restoration of façades, with unnecessary removal of antique stucco work, door and window carpentry, stairs and floors.

Window carpentry was quite uniform in entire Poland, making use of similar technical solutions. However only very few original windows have survived until today, due to imperfections in production technic (which forced owners to replace them with newer ones), fashion fluctuations, but also fires, wars and the detrimental effects of the passing time. Therefore, the oldest windows preserved in Poland date back to the 18th and 19th century [Tajchman, 1990].

The aim of the research was a stocktaking of windows and corresponding decorations in antique wooden buildings from the Świdermajer style in the town of Otwock. Analysis of their style, structure, technology and material, as well as an attempt on systematic categorization of ornamental elements and motifs.



Figure 2. New windows made in traditional style in buildings at: A- Kraszewskiego 101 (No.31), B- Lelewela 7 (No.33), C- Poetycka 5a (No.59) and D- Kościuszki 7 (No.24)

Buildings chosen for the research were taken from the list of historical heritage buildings in Otwock. They have been entered in the Regional Register of Historical Buildings quite recently: on September 13, 2017. On the basis of field visits, only 80 out of the 176 entries from the list were qualified for research (Table 1). Bricked buildings and wooden houses that could not be approached were discarded also those, whose owners did not give permission for taking photos.

The buildings under research were analysed to the degree of preservation of original windows. Due to numerous replacements, a total of 97 original windows have been included in the research. We described their construction and the divisions into window lites. Additionally, we photographed and classified decorations, and prepared qualitative and quantitative collations of such elements as: shutters, window sills, cornices and batten frames.

#### **TEST RESULTS**

Out of the 80 buildings under research, 74 were still inhabited, 5 were in good technical condition but empty, and only 1 building was ruined (Fig.1). Total 36 of them had all their original windows, and 23 buildings had both old and new windows. Because the buildings were inhabited by many families, there would be different sets of windows within the same building: original windows in one area, new wooden windows in another, and also plastic windows. Unfortunately, the high number of 20 houses had only modern windows, and in some cases the owners preserved the original window field divisions (Fig.2).

Therefore, a total of only 97 original windows, preserved in historical wooden Świdermajer buildings in Otwock were analysed in our research.

Most of them were wooden, double casement windows with lateral hinges. Such windows were very popular in Poland between 1770 and 1870 [Tajchman, 1990]. The remaining windows also had shutters, but were single rather than double, with their summer or winter wings dismantled.

Considering that the houses built between 1870 and 1930 in this area had higher storeys, the height of the window usually fell between 1200 and 1400 mm [Tajchman, 1990]. Therefore, it became problematic to mount glass panes that would cover the entire casement, and windows started to be divided into two parts, with a horizontal transom moved slightly upwards [Tajchman, 1990].



Figure 3. Windows with muntins above the transom A- Kołłątaja 29 (No.16), Kościuszki 7 (No.24), Słoneczna 8 (No.69)

In the preserved antique windows of wooden Świdermajers' buildings, the transoms were also shifted upwards. Additionally, usually only in the external casements, in the transom part (Fig.3) or both above and below the transom (Fig.4) cross or vertical muntins were applied, quite densely close to each other. It was an attempt to optically reduce the size of the big glass pane, by adding a grid of mullions.



Figure 4. Windows with mullions above and below the transom A- Willowa 6 (No.77), B- Świerkowa 16 (No.73), C- Mała 5 (No.37)

Out of the 97 windows that have been examined, 56 of them had an awning upper part with hinges mounted on the upper edge of the window. It's an important characteristic of Świdermajers' architecture, because traditionally, at the turn of the 20th century, in Poland, the upper part of the window was almost always a hopper [Tajchman, 1990] (Fig.5).



Figure 5. Opens with pivoting upper part: A- Samorządowa 8 (No.66), B- Bagatela 27 (No.3), C- Mickiewicza 25 (No.41)

There were very few windows with a central stile between casements, replaced in many cases by a lipping batten that covered the space where the two wings meet, which was also characteristic for this period [Tajchman, 1990]. Stiles appeared in wide windows composed of multiple parts. They could be seen in windows divided into two levels: with

three lites in the transom and four lites in the main part below the transom, summing up to a total of up to seven lites in a window (Fig.6A).

In many buildings we documented windows divided into 5 parts, where the upper part, the transom, was made of 2 hopper windows, and the lower part, below the transom, was made of 3 casement windows, with a stile dividing the double-casement window from the single-casement one (Fig.6B).





Figure 6. Windows with 7 and 5

In some cases, the 6-lite windows had three casements above the transom, which opened on hinges located on the sides, just like the casements in the part below the transom (Fig.7). The height of the part below the transom was sometimes divided into two parts with horizontal muntins, one in each casement (Fig.7B).



Figure 7. Windows with 6 parts/lites: A- Mickiewicza 31 (No.42), B- Poetycka 21 (No.60)

Windows from that period often included small parts ("vents") that could be opened independently to let in fresh air [Tajchman, 1990]. In the buildings under analysis, it is difficult to tell today whether they were authentic or replaced. We know for sure that in 12 double windows, one of the lites of a casement (divided with mullions into usually 3 or 4 lites) was operable (could be opened independently), allowing for room ventilation without the necessity to open the entire casement (Fig.8A and 8B). Such small ventilation openings ("vents") were also included in windows with multiple lites (Fit.7B). In one of the buildings we discovered a window made of two casements, each of them had three levels and each of the separate lites could be opened independently (Table 1, building No. 52, ul.Moniuszki 27).

Apart from typical windows, whose transom bar was shifted upwards, we also documented 3 windows, whose casements were divided by horizontal mullions in an assymetrical way, where the bottom lite was smaller (Fig. 8C).



Figure 8. Windows with "vents" (small casement parts opening independently): A- Jana Pawła 13 (No.13), B-Samorządowa 8 (No.66) and a window with mullions placed in its lower part: C- Czarnieckiego 6 (No.6)

In 8 Świdermajer buildings in Otwock, there were single-unit windows with various different division patterns of the glass pane. Most of them (a half) had two levels (the main part and the upper transom), and both parts could open by swinging on lateral hinges (Fig.9A, 9B and 9C). Two buildings had single-unit windows divided into three fields with mullions (Fig.9D).



Figure 9. Single-unit windows with transom: A- Mała 3 (No.38), B- Piaskowa (No.57), C- Poniatowskiego 11 (No.63) and a single-unit window: D- Jeremy 5 (No.14).

In many cases, single-unit windows were placed next to one another, forming a row - a wide window composed of three units (Fig.10A) or single-level windows were combined with double-level windows (Fig.10B).



Figure 10. A triple-unit window: single-casement window combined with a double-casement window: A-Poetycka 5 (No.59), and single-unit windows with transom with a more complex central unit: B- Andriollego 66 (No.2)

In 54 out of the 80 buildings under research, there were no **decorative cornices** above the windows. This were found only in 26 buildings. In most of them (9 of the buildings under research) they had the form of a small roof that was usually made of wood, but we have also found one made of metal. In some cases, below the little roof there was a frieze that could have simple ornaments (Fig.11A and 11B). In 5 cases, the cornice was made of a batten with a decorative motif of teeth, resembling antique patterns (Fig.11D) or a shape of dovetail (Fig.11C).



Figure 11. Window cornices: A- Moniuszki 27 (No.52), B- Słoneczna 15 (No.52), C- Samorządowa 16/20 (No.68), D- Lelewela 7 (No.33)

Equally popular (found also in 5 cases) were window cornices with floral fretwork motifs used in entire Poland and Europe, inspired by the Liebold's pattern handbook, either approached with botanical precision, or simplified, as it was the case in 3 buildings (Fig.12).

In 3 buildings we found more abstract patterns combining floral and geometrical designs. In 2 cases, the window cornice was made of simple battens fixed to the façade, which can be linked to the folk tradition of Eastern Republic of Poland, where windows on the shorter walls had frames imitating the frames of icons [Mikuła, 2015] (Tab.1, building No.1 ul. Andriollego 35, Fig.12E). One building had cornices with patriotic animal motifs, depicting an eagle with spread wings (Tab.1 building No. 42, Mickiewicza 31- Fig.12F). Similarly, also in one building, we found a wave-like motif, where line alternated between

convex and concave sections on the upper side of the batten (Tab.1, building No. 47, ul. Mickiewicza 44/50b).



Figure 12. Window cornices with floral motifs: A- Kościelna 18 (No.20), B- Kościuszki 7 (No.24), C-Mickiewicza 35 (No.44), D- Kościuszki 39 (No.30), E- Andriollego 35 (No.1), F- Mickiewicza 31 (No.42)

In rare cases, Świdermajers' buildings in Otwock had also a **decorative band below the window**. Out of the 80 buildings included in the research, only 19 had such decorative strips under the windows, and 61 did not. Most of those decorations (in 11 buildings) had the form of a simple, profiled batten placed below the window. In 3 buildings, the battens had a concave-convex line on the lower part of the batten (Fig.13C). In 3 buildings, we could see richly decorated fretwork ornaments, typical of Liebold's handbook: abstract and ornamental, symmetrical patterns (Fig.13A and Fig.13B). In one building there was a typical floral motif with climbing vines (Tab.1, building 20, ul. Kościelna 18). Similarly, in one case we observed a band in the form of a reversed tympanum (Fig.13D).



Figure 13. Bands under the windows: A- Kraszewskiego 101 (No.31), B- Kościelna 18 (PL.20), C-Żeromskiego 60/62a (No.80), D- Moniuszki 27 (No.52)

A decorative element that appeared in every building under research were **window frames made of battens**. Most frequently, they were painted the same colour as the window frame, sometimes a slightly darker than the window and the wall boarding, in order to highlight the window visually and make it stand out in a large, uniform and often monotonous wall covered with boarding. The frames were made of wooden battens connected with miter joints in the corners, resembling a painting frame (Fig.14). The battens could be profiled or

not. The profiles were simple, and combined convex and concave elements, sometimes with larger, sudden cuts, to add some diversity.



Figure 14. Batten frames around windows: A- Kościelna 23 (No.22), B- Narutowicza 51 (No.55), C- (38) Mała 3 (No.38)

Another characteristic feature of Świdermajers' architecture are **shutters**. They have been found in 49 out of the 80 analysed buildings (31 buildings did not have them), but probably originally there used to be more. In some cases, after replacing the windows and installing modern ones, the shutters simply did not come back to their place, which can be proved by the remaining shutter hinges. This might be due to the fact that the inhabitants did not require any additional thermal or acoustic insulation, or in some cases might be due to technical difficulties of placing wooden shutters on a plastic window frame and lack of aesthetical coherence of such an extreme combination of materials.

The shutters were mounted on hinges fixed to the window frame. They were very diversified, not only considering window dimensions and field divisions, but also colours.

Usually, shutters had the structure of frame and recess. Most had profiled, chamfered edges and a clearly marked central field within the recess. The shutters usually ware painted in colours corresponding to the building. Sometimes, two different colours were used to contrast the frames and recess fields. In most cases, shutters were divided into three fields (in 35 of the buildings under research), in 12 buildings there were shutters divided into two recess fields, and in only 2 buildings they had four recess fields.

Shutters composed of 3 recess fields had different kinds of divisions (different field proportions). In as much as 30 buildings, the topmost and downmost fields were oriented horizontally (in 25 cases they had the shape of a square and in the remaining 5 cases, a rectangle), and the third, central field was vertically oriented (Fig.15A and 15B).

Sometimes, as an additional decorative element, openings with various shapes were cut in the upper recess, eg. hearts, romboids, triangles or circles (Tab.1, building No.6 ul. Czarnieckiego 6, building No.11 ul. Gliniecka 11, building No.16 ul. Kołłątaja 29, building No.67 ul. Samorządowa 22a). In two cases, the upper recess was replaced with a jalousie doors (Tab.1 building No.72 ul. Sucha 7, building No.15 ul. Jeremy 7- Fig.15B).

This triple shutter division could also have other layouts, with the central recess oriented horizontally and two vertically oriented ones on both ends. Such a solution was discovered in 3 cases: in two of them the central recess was rectangular, and in one square-shaped (Fig.15C).

Moreover, shutters could be divided into three even squares (tab. 1 building No. 73 Świerkowa 16 - Fig.15D), or with field dimensions becoming smaller towards the bottom (tab. 1 building no. 77, ul. Willowa 69).



Figure 15. Triple recess shutters: A- Kołłątaja 29 (No.16), B- Sucha 7 (No.72), C- Majowa 24 (No.36), D- Świerkowa 16 (No.73).

The division of shutters into two recesses was observed in 12 buildings, as it has been mentioned above. Nine of them had even, vertical rectangles (Fig.16A). Only in 2 buildings the shutters had a square recess in the upper part and a vertically oriented, elongated rectangle below (Tab.1, building No.32, ul. Krótka 10, building No.65, ul. Reymonta 29). One of those shutters had a jalousie in the uppermost recess (Fig. 16C).

In one building we found shutters that were quite different from the rest, as their structure had frames and recesses, but the recesses (two) were filled in their entire surface with little, movable, horizontal, diagonally tilted boards (Tab.1, building No.1 ul. Andriollego 35- Fig.16D). Such shutters, according to the existing terminology, are called Persian shutters or persianas [Tajchman, 1990].



Figure 16. Double-field shutters: A- Kościuszki 19 (No.26), B- Reymonta 29 (No.65), C- Krótka 10 (No.32), D-Andriollego 35 (No.1)

As it has been mentioned before, only 2 houses had shutters with 4 fields, whith the uppermost and downmost fields oriented horizontally, and the middle ones vertically (Fig.17).



Figure 17. Shutters with four fields: A- Narutowicza 53 (No.56), B- Moniuszki 20 (No.50)

In case of a series of three adjoining single-unit windows, their shutters had to either be wider, or - to preserve the slender proportions - another shutter unit was added. This solution was found in 9 buildings in total, 5 out of them had shutters divided into 3 fields, and 4 of them had 4 fields in each shutter unit.



Figure 18. Shutters with single, wide shutters on each side: A- Mała 3 (No.38), and shutters divided into with two asymmetrical casements on each side, connected with hinges: B- Lelewela 7 (No.33).

Out of these 9 buildings, 5 had shutters made of single units on each side, or in other words, each of the shutters was separate (Fig.18A), but in this case they were wider by ca. 30% (Tab.1 building No.57 ul. Piaskowa, building No.6 ul. Czarnieckiego 6, building No.38 ul. Mała 3). In 3 buildings, there was an additional casement added on each side, meaning that each shutter unit was made of a main shutter with an additional, narrower (also about 1/3 of the width) casement fixed to the main shutter (Tab.1, building No.33 ul. Lelewela 7, and

building No.60 ul. Poetycka 21). In one case, we observed shutters made of double-casement shutters on each side, so each shutter was made of two casements of similar width, connected to each other with hinges (Tab.1 building No.14 ul. Jaremy 5- Fig.19A). The building no. 44 at Mickiewicza 35 was an exception. It had double-casement shutters on each side, made of two casements of equal width, connected with hinges (Fig.19B).



Figure 19. Shutters made of two casements each, connected with hinges: A- casements of similar width, Jaremy 5 (No.14) and B- of identical width, Mickiewicza 35 (No.44)

There were very few windows that would include all of the decorative elements: cornices above windows, decorative bands below windows, batten framing and shutters (Table 1, building No. 66 ul. Samorządowa 8, building No. 18 ul. Konopnickiej 7 and building No.20 ul. Kościelna 18; see also Fig.20)



Figure 20. Windows with all the decorative elements: A- Samorządowa 8 (No.66), B- Kościelna 18 (No.20)

#### SUMMARIES AND CONCLUSIONS

The research revealed that 93% of the analysed Świdermajers' buildings in Otwock are still inhabited. Only 6% are empty, and 1% is in a ruin. This proves that the technical condition of those buildings is sufficient. However, many of the dwellers complained about very bad thermal, acoustic and humidity insulation, especially around the windows, giving examples of water pouring inside during heavy rains. A vast majority of the dwellers criticised building owners for not allowing them to replace the old windows that did not fulfill their functions anymore, as well as for the lack of proper maintenance and conservation of the buildings. Chart 1 presents the structure of different kinds of use of the buildings.



Chart 1. Structure of usage types in percentages

Most (46%) buildings had original windows with typical structure for Polish windows (frame with two swinging casements and lateral hinges). Additionally, this kind also appeared in buildings where at least one family replaced their set of windows with new, plastic PCV windows (29% of the buildings). Nonetheless, an important number of buildings - as much as 26% of the buildings under research - had only modern windows. It is expected that due to the poor state of preservation, the percentage of replaced windows will grow in the upcoming years. Chart 2 presents a summary of the amount and types of windows in the wooden Świdermajers' buildings under research.



Chart 2. Number and type of windows in the buildings under research, together with a table with percentual share of the results

The antique windows have a typical Polish structure (a casement windows formed by a frame with two swinging casements). In 58% of the cases, the windows had a complex composition, divided into three fields with a rectangular transom.

Decorative cornices above the windows were not obligatory in the Świdermajer style, and they appear only in 33% of the buildings under research. The results have been definitely influenced by the fact that over a half of the buildings were erected in the interwar period, when ornaments tended to be less rich. In most cases, the cornice had the form of a little roof that protected the window against rainfall.

The number and type of ornamental motifs used in the cornices above windows has been presented in Chart 3.



Chart 3. Number and types of decorative motifs above windows

Decorative bands below the windows were present in 24% of the buildings. This is almost by 10% less than in the case of cornices. This is due to the fact that this ornamental element was not very popular. It may be so also due to the period when the buildings were erected, when ornaments were less elaborate in general. The most frequent kind of decoration placed below the window was a profiled batten. The number and types of decorative bands below the windows has been presented in Chart 4:



Chart 4. Number and types of decorative motifs below windows

Shutters were one of the most popular decorative elements in antique Świdermajer buildings, and appeared in a high number of buildings (61%). They had the structure of frame

and recess. Quite often they had various different colours, with diverse dimensions and divisions, but triple-recess shutters were the most frequent. A summary of shutter presence in houses is shown in Chart 5 and 6.



Chart 5. Presence or lack of shutters in the buildings under research

During the replacement of original windows with new ones, shutters were often removed, which is confirmed by the presence of hinges left in the window frames. However, in most cases, in spite of window replacement with modern ones, many original shutters still remain.



The presence and absence of shutters in original and replaced windows has been indicated in Chart 7. We can see that even in cases where all the windows in a building were

replaced with new ones, in most of them (60%) the original shutters were left intact. In 31% of the buildings that still have antique window carpentry, there are no shutters (they have been preserved in 69% of the buildings). In buildings where the original windows have been only partially preserved, roughly a half of them still have the original shutters (they have been preserved in 52% of the buildings).



Chart 7. Presence and absence of shutters in original and replaced windows

The decorative element that characterises a 100% of Świdermajers' buildings is an additional framing made of battens around the windows. This element is present in every house included in the research. The framing usually had a darker colour than the window itself, providing a nice visual highlight on the façade.



Chart 8. Percentual share of each kind of window ornaments. The chart does not include the batten framing, whose presence was observed in 100% of the cases - in all 80 buildings under research.

A collation of the decorative window motifs in antique wooden Świdermajers' buildings shows that there was an equal number of buildings without any decorations, as those with shutters as an ornament (23 houses in each case). This proves that the windows were not richly ornamented or the original ornaments did not survive until today. A quantitative comparison of different kinds of window ornaments shows that shutters are the most frequent. In 11 cases, buildings were ornamented with both shutters and cornices above the windows. Windows with a full range of decorations were observed in only 8 of the buildings. The second largest set of decorations were buildings that had both shutters and decorative bands below the windows. Four buildings had only cornices as decoration. Three houses had decorations both underneath and above the windows. There was one building whose only ornament was the band below the window. Chart 8 presents the percentual share of each kind of decorative element.

More and more wooden Świdermajers' buildings face the risk of collapsing or burn in fires. Sometimes, the fire is set deliberately, because the ground where the buildings stand is very attractive and tempts new investors. On the other hand, more and more newly erected, contemporary buildings include ornaments inspired by the characteristic Świdermajers' style. Some newly erected buildings have those characteristic wooden verandas. Entire residential estates are built, but unfortunately the ornaments are not handcrafted. Nonetheless, it becomes clearly visible that people draw inspiration from the traditional style, including its decorative motifs.

# REFERENCES

- 1. CICHY A., 2007: Znaczenie ozdobnego deskowania w periodyzacji drewnianej architektury w pasmie otwockim. Problematyka badawcza i konserwatorska, Ochrona Zabytków nr 3, s.35-58.
- 2. LEWANDOWSKI R., 2012: Twórcy stylu "Świdermajer", Józefów 2012.
- 3. MIKUŁA R., 2015: Tradycyjne zdobnictwo drewnianych chałup podlaskich w gminie Bielsk Podlaski, Praca inżynierska na kierunku - Technologia drewna wykonana pod kierunkiem dr inż. Piotra Mańkowskiego, Warszawa.
- RADOMSKA A., 2001: Architektura drewnianych ośrodków podwarszawskich, s.94-116, [w:] Dziedzictwo kulturowe Mazowsza, red. Brzeziński W., Sołtysiak M., Warszawa.
- 5. RUSZCZYK G., 2007: Drewno i architektura. Dzieje budownictwa drewnianego w Polsce, Warszawa.
- 6. TAJCHMAN J., 1990: Stolarka okienna w Polsce, Warszawa.

**Streszczenie**: *Tradycyjne zdobnictwo okien budynków w stylu świdermajer w miejscowości Otwock*. W artykule dokonano analizy okien w zabytkowych budynkach drewnianych utrzymanych w stylu świdermajer, położonych w miejscowości Otwock. Ujawniono, iż wiele z nich zostało już wymienionych na nowe. Zwrócono uwagę na ościeżnicową konstrukcje okien zabytkowych oraz podział pola otworu okiennego na podślemię i nadślemię, dodatkowo rozczłonkowane krzyżowymi lub pionowymi szczeblinami. Przeanalizowane zostały tradycyjne elementy zdobnicze stolarki okiennej takie jak: nadokienniki, podokienniki, ramy okienne i okiennice oraz ich klasyfikacja ze względu na występujące motywy.

Słowa kluczowe: architektura drewniana, okno, Świdermajer, Otwock, zdobnictwo

## Corresponding author:

Anna Rozanska Department of Technology and Entrepreneurship in Wood Industry Institute of Wood Sciences and Furniture, Warsaw University of Life Sciences – SGGW, Ul. Nowoursynowska 159, 02-776 Warsaw, Poland e-mail: annamaria.rozanska@gmail.com

ORCID ID:

Rożańska Anna	0000-0003-1865-3571
Beer Piotr	0000-0002-2906-1208