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The role of isolated farmsteads in the open landscape protection on the example of Kashubia

Introduction

A farmstead comprises a house, farm buildings and a garden; it provides a place of residence and work for a peasant or a farmer. In Poland, the traditional farmstead constituted a form of architectural and territorial unity that had a paramount importance for folk architecture [1]. Additionally, the form and location of the farmstead created the spatial structure of the village and its production-related surroundings. This fact sets the agricultural farmstead complex as a link with which various scales and issues regarding the shaping of rural area landscapes are connected. By the middle of the 20th century, a visually attractive open landscape structure with single-manor building complexes and accompanying greenery developed in many regions of Poland. Nowadays, together with the relics of folk architecture, this structure is an endangered feature of the cultural landscape of the village. The economic and environmental consequences of disorderly management of rural space in Poland have already provided the research subject for such fields of research as geography, economics, agricultural sciences or geodesy and cartography [2], [3]. Representatives of the scientific disciplines of architecture and urban planning focused their research mainly on changes to the layout of compact villages [4] and sought traditional construction elements [5] or distinguishing characteristics of the rural landscape [6]. However, knowledge of the farmstead being a rural settlement mesostructure is insufficient and requires supplementation for the sake of its future protection. In the following article, attempts are made to assess the transformation of old farm buildings and their landscape role.

The study was conducted on the border of three communes in the Pomeranian Voivodeship, i.e., the communes of Somonino, Nowa Karczma and Przywidz. The research area centres around Pojezierze Kaszubskie [the Kashubian Lake District], whose landscape is characterised by young glacial relief with numerous hills, ravines, lakes and post-glacier depressions. The region is very attractive in terms of the views it offers, which stems from the diverse terrain and picturesque, small settlements against a background of forests or meadows and greenery-covered fields. Often, scattered farmsteads or hamlets are characterised by an outstanding landscape exposure. Due to the attractiveness of the landscape, the proximity of a large urban centre and the availability of construction land, this area has become a site of expansion of single-family residential and tourist construction. The study is focused on the development of old isolated farmsteads (Fig. 1). In the conditions of energy



Fig. 1. An isolated farmstead in Kashubia (photo by A. Górk)

Il. 1. Zagroda samotnicza na Kaszubach (fot. A. Górk)

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saving, the circularity of resources and the protection of biodiversity, it is required to ensure sustainable management of farm buildings that are losing their production functions. Therefore, an attempt was made to structure a preliminary assessment of the architectural features of farmstead buildings and their exposure preserved within the landscape. The pilot study was aimed at verifying the adopted method and at making preliminary conclusions and recommendations as for the protection and shaping of the open landscape. The results lead to determining the participation of farmstead complexes in a community-led multifunctional economy in which rural cultural goods are willingly included in the process of developing tourism and education, housing properties, as well as in the protection of nature, culture and health.

Historical outline and state of research

The isolated farmsteads studied in this research are located in the area of early modern colony settlement [7]. The nature of this settlement resulted from the division of landed estates that occurred from the 2nd half of the 18th century until World War II. The division of landed estates was based on earlier changes and provided the background for the manifestations of contemporary urbanisation. In the Middle Ages, the entire Pomerania region was covered with an extensive forest, from which wood for burning charcoal was obtained. Forest clearance resulted in clearings where post-smelter settlements of agricultural people were established since the 17th century [8]. The metallurgical past of the area is legibly inscribed in the names of numerous Kashubian villages, as in the case of Grabowska Huta (Eng. smelter). Otherwise, it can be manifested in a less legible form. According to Tadeusz Wilczewski, such is the case of Połęczyn, whose former names as Połęczin, Pollentschin, Polyszyno, Polesino sounded more forest-like [9]. Since the first partition of Poland in 1772, the Kashubian area belonged to Prussia. As early as the 18th century, regulations were in place in Prussia regarding the layout and construction of buildings¹, whose aim was to reduce the risk of fire and to protect forests. In the 19th century, a great administrative reform was conducted in the Kingdom of Prussia². It strengthened state institutions and the supervision of the state in all areas of social life, including spatial planning and construction.

¹ From the beginning of the 18th century, the freedom to build in the countryside was systematically reduced in Prussia based on special edicts. These documents prohibited such practices as covering roofs with straw, reeds and shingles or ordering the construction of half-timbered buildings. During the reign of Frederick II the Great, houses were built according to official patterns. In Kashubia, the general national law for the Royal Prussian states (Landrecht) was in force from 1794. It regulated such aspects as the principle of locating houses or bricking chimney channels.

² The reconstruction of the Prussian state, known as the Stein and Hardenberg reforms (1807–1815), included such issues as the modernisation of government administration, the city system and the abolition of serfdom of peasants. The Stein-Hardenberg reforms transformed the economic system of Prussia from feudal to a capitalist one and formed the foundations of a strong rural economy.

The reform contributed to the development of the economy and resulted in the regulation of village planning and development, as well as led to the standardisation of construction solutions. Many old square and street villages were rebuilt. Church and royal estates were divided into smaller parcels. In addition to granges and short linear villages, single-manor settlements were also erected, as it was assumed that locating the farm management and service centre among the land fields is the most effective farming method. The agricultural land of the granges was divided into smaller parcels in an organised manner also later when the economic or political situation was unfavourable for them [10]–[12]. During World War II and the so-called liberation crisis caused by the Soviet army, 1/3 of farms were destroyed, including numerous isolated farmsteads [13].

Restrictions on forest clearance and strict fire protection regulations³, together with the development of the building materials industry, led to changes in the characteristics of farmsteads and rural buildings. From the 18th century, four-sided farmsteads began to be replaced by administratively prescribed three-building layouts that consisted of a house, one pigsty and a barn. Brick and stone walls began to replace wooden structures, while roof tiles and roofing tar paper were used instead of straw, reed or heather thatch or roofing with wooden rails or shingles. Two types of houses from the turn of the 19th and 20th centuries exist in Kashubia, i.e., a single-story house having a steep roof with an inclination of about 45 degrees and a two-story house with the so-called semi-flat, gable roof with a slope of approximately 22 degrees⁴ (Fig. 2). The wide plan of both types of houses can be seen as a continuation of features developed by the end of the 18th century with the participation of native traditions, Prussian building standards and urban influences. The houses were built with a wooden frame construction and were erected of brick. Over time, the first type of house, having plan dimensions of 6–9 m × 10–13 m, was given an extension in the roof above the main entrance in the front wall. The two-story brick house with a semi-flat roof, having a plan with dimensions of at least 9 m × 13 m, whose shape is foreign to the native tradition, was most likely popularised by Prussian officials who used building templates. This type of house had two characteristic elements, namely the so-called erkel being a type of dormer window in the roof, and a decorative cornice between the floors [14]. Multi-story houses of this type were only built until the 1930s [15]. The size of the house and the entire farmstead depended on the farmer's wealth. There existed small farmsteads of cottagers, the landless or poor peasants, as

³ The organisation of fire protection in the Prussian partition was regulated by the Police Administration Act of 1850 and the General Administration Act of 1883.

⁴ Knyba (1987) calls this type of roof “flat”. The term “semi-flat”, which better reflects the form of a gable roof with a slight slope, was used in a study conducted in the 1980s by the Rural Planning and Architecture team led by Andrzej Baranowski at The Faculty of Architecture, Gdańsk University of Technology [14]. It was popularised in scientific and popular science publications by the authors of the study.



Fig. 2. Two types of farmstead houses in Kashubia:
a) a building with a high roof, b) a building with a semi-flat roof (photo by A. Górka)

Il. 2. Dwa typy domów zagrodowych na Kaszubach:
a) budynek z dachem wysokim, b) budynek z dachem półpłaskim (fot. A. Górka)

well as large farmer farmsteads. Even though the Prussian administration standardised the number and functions of buildings on the farm, as well as their construction, a lot of freedom was enjoyed in Kashubia in this matter. Sometimes, farmsteads had multiple buildings, while farm buildings were still built of wood at the turn of the 19th and 20th centuries. Barns were built in a half-timbered structure, but only the most recent ones have survived to this day. These barns have a pole structure boarded with wooden material.

Description of the study

The study is aimed at assessing the preservation of the architectural features of isolated farmstead buildings dating back to the turn of the 19th and 20th centuries, as these buildings were determined to constitute an important structural element of the traditional agricultural landscape from the point of view of the sustainable development of the countryside. Thus, field studies were conducted in which the results of a comparative analysis of archival maps from 1937 and contemporary maps from 2020 were used. The cartographic study made it possible to recognise the location of old farmsteads, compare the historical and contemporary building layout in them and distinguish buildings that likely date back to before 1937 and later.

Based on the model features of farmstead structures known from the available literature and described above, an expert verification of the cartographic analysis results was conducted as a field study. Owing to the adopted review-like nature of the present study, a decision was made to conduct a non-systematic observation along the selected scenic routes. The preservation condition of the traditional farmstead buildings is described in the study with the use of the following features of the building layout and forms:

- farmstead exposure,
- spatial layout of the farmstead,

- bodies of buildings,
- building façades.

The change in the exposure of the farmstead in the landscape was determined by analysing the modifications of the neighbourhood that resulted from the appearance of new single-family buildings. The lack of such transformations came to be known as maintaining the integrity of the homestead layout and its context. An assessment of the preservation condition of the farmstead layout was made by comparing the current and historical (dating from 1937) internal outline of the farmyard and the external outline of the entire complex. The unchanged outline of the farmyard came to be known as maintaining coherence, while the outline of the farm being the same as the one of 1937, came to be known as maintaining compactness of the farmstead layout. Due to the specificity of the pilot study, a more detailed analysis of the type of transformations to the body and/or wall material was excluded from the discussion. Additionally, the condition of the buildings was recorded. They were assigned the characteristics as follows: used, degraded or ruined. In the case of buildings covered with a steep roof, the type of roofing constitutes an important feature of the landscape pattern. However, in the analysed period, the original roofing materials were completely replaced. Therefore, this factor was excluded from the study. The fact that the buildings were entered into the municipal register of monuments (gminna ewidencja zabytków – GEZ) was signalled, as it can be considered a manifestation of social knowledge of the cultural value of such architectural objects.

Results

The study was conducted in seven locations. These included Roztoka and Czarna Huta, Czystocin (Przywidz commune), Piotrowo and Połączyno (Somonino commune) and Grabowska Huta and Jasiowa Huta (Nowa Karczma commune), in the period from July to September 2022.

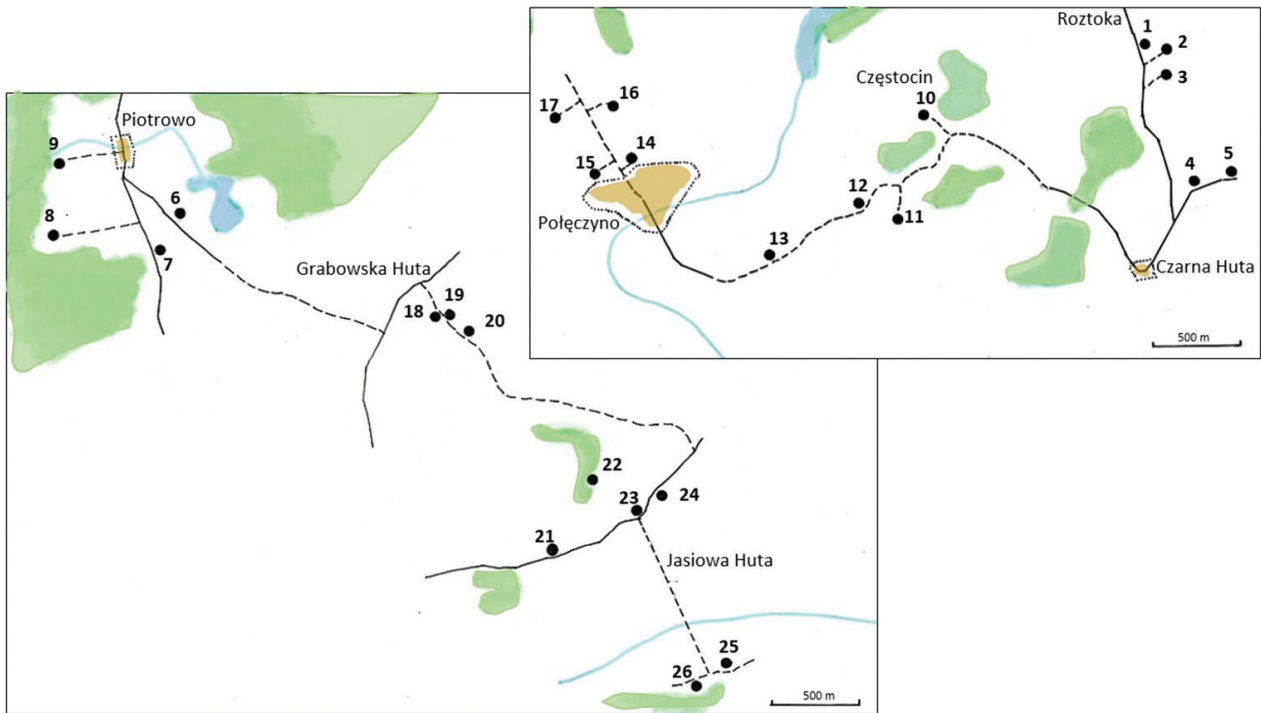


Fig. 3. Scenic routes with farmsteads. Solid lines mark local roads, dashed lines – field roads, homesteads are marked with numbers (drawn by A. Górka)

Il. 3. Trasy widokowe i zagrody. Liniami ciągłymi oznaczono drogi lokalne, liniami przerywanymi – drogi polne, zagrody oznaczono numerami (rys. A. Górka)

No 18: Grabowska Huta 38, 83-403

No 19: Grabowska Huta 39, 83-403

▭ before 1937 r., ▭ after 1937 r.

M – a modified building body or facade; U-used; D - degrading; R- in ruins

No 18, No 19



map from 1937 with building data from 2020



orthophotomap and building data from 2020



Fig. 4. An example of a farmstead inventory card (elaborated by A. Górka)

Il. 4. Przykładowa karta inwentaryzacyjna zagrody (oprac. A. Górka)

Along the scenic routes, 26 historic farmsteads were identified (Fig. 3). Each of them was described on an inventory card, in accordance with the model shown in Figure 4. Based on cartographic research and expert analysis of architectural features, buildings dating back to before 1937 and ones that were erected later were identified. They were documented in photos, their condition was described while modifications to traditional features were noted.

A detailed description of the location of all farmsteads and a comparative summary of changes in their layout in the years 1937–2020 are provided in Table 1.

In the 26 examined farmsteads from 1937, 22 traditional houses, 16 livestock buildings and 9 barns remained. In total, by 1937, 49 out of 75 farmstead buildings were demolished. In the analysed period between 1937–2020, 6 new houses and 30 farmstead buildings were erected,

Table 1. Buildings preserved from 1937 and built after 1937 (elaborated by A. Górka)
Tabela 1. Budynki zachowane z 1937 r. i wybudowane po 1937 r. (oprac. A. Górka)

| No | Location | Buildings in historic farmsteads | | | | | buildings in 1937 |
|----|---|----------------------------------|-------------------------|----------------------------|--------------------|------|-------------------|
| | | erected after 1937 | | dating back to before 1937 | | | |
| | | house | outbuilding | house | livestock building | barn | |
| 1 | Południowa 17, 83-047 Roztoka | 1 | 2 | 1D | – | – | 3 |
| 2 | Południowa 19, 83-047 Roztoka | | 1 | 1 | 1 | 1 | 3 |
| 3 | Południowa 18, 83-047 Roztoka | | 1 | 1 | 1 | 1 | 3 |
| 4 | Błękitna 3, 83-047 Czarna Huta | | 1 | 1 | – | 1D | 3 |
| 5 | Szara 4, 83-047 Czarna Huta | | 1 | 1 | 1R GEZ | 1D | 3 |
| 6 | Piotrowo 7, 83-315 Piotrowo | | | 1 | 1 | – | 2 |
| 7 | Piotrowo 8, 83-315 Piotrowo | | 1 | 1 | 1 | 1 | 3 |
| 8 | Piotrowo 10, 83-315 Piotrowo | | 1 | 1 | 1 | – | 3 |
| 9 | Piotrowo 11, 83-315 Piotrowo | | | 1 | 1 | – | 3 |
| 10 | Letnia 10, 83-047 Częstocin | | 2 | 1 | 1 | – | 3 |
| 11 | Południowa 11, 83-047 Roztoka | 1 | 2 | – | – | 1D | 2 |
| 12 | Południowa 12, 83-047 Roztoka | | 1 | 1 | – | – | 4 |
| 13 | Akacyjowa 10, 83-047 Częstocin | | 4 | 1 | | – | 3 |
| 14 | 54°12'02.5"N 18°12'40.1"E 54.200704, 18.211150 Połączyno | | 3 | 1 | 1 | – | 4 |
| 15 | 54°11'59.0"N 18°12'27.9"E 54.199732, 18.207735 Połączyno | 1 | 1; 1 in construction | – | 1D | – | 4 |
| 16 | Połączyno 59, 83-312 | 1 | 2 | – | 1 | | 3 |
| 17 | Połączyno 9, 83-312 | | | 1 | – | – | 3 |
| 18 | Grabowska Huta 38, 83-403 Grabowska Huta | | | 1 GEZ | – | – | 1 |
| 19 | Grabowska Huta 39, 83-403 Grabowska Huta | 1 | | – | 2 | 1 | 3 |
| 20 | Grabowska Huta 2, 83-403 Grabowska Huta | | | 1 GEZ | 1 | – | 3 |
| 21 | Przywidzka 9, 83-403 Grabowo Kościerskie | | 2 | 1 | | – | 2 |
| 22 | Jasiowa Huta 8, 83-403 Jasiowa Huta | 1 | | 1 | – | – | 3 |
| 23 | Jasiowa Huta 12, 83-403 Jasiowa Huta | | 2 | 1 | – | 1D | 2 |
| 24 | Jasiowa Huta 11, 83-403 Jasiowa Huta | | 2 | 1 | – | – | 3 |
| 25 | Jasiowa Huta 4, 83-403 Jasiowa Huta | | | 1 | 1 | 1 | 3 |
| 26 | 54°09'52.2"N 18°11'45.5"E 54.164508, 18.195968 Nowa Karczma, Grabowo Kościerskie | | | 1 | 1 | – | 3 |
| | Total | 6 | 30 | 22 | 16 | 9 | 75 |

D – building in poor technical condition, R – building in ruins, buildings in use – unmarked,
GEZ – building entered into the municipal register of monuments

Table 2. Alterations in farmstead structure features (elaborated by A. Górka)
Tabela 2. Zmiany cech układów zagród (oprac. A. Górka)

| Farmstead number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|----------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Integrity with the neighbourhood | ○ | ○ | ○ | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ○ | ○ | ● | ● | |
| Compactness of the layout | ○ | ● | ○ | ● | ● | ● | ○ | ○ | ● | ○ | ○ | ● | ○ | ○ | ○ | ● | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | ● |
| Coherence of the layout | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● |

● maintained; ○ unmaintained

which constitutes a 75% reconstruction of the building asset. This indicates stagnation rather than an increase in production and housing needs. No new barn was erected. The results of the study show a greater durability of houses, as compared to farmstead buildings (livestock buildings and barns). This fact may result from the more solid construction of residential buildings or may indicate the necessary adaptation of auxiliary farmstead buildings to the changing requirements of agricultural production (this claim seems to be confirmed by the disappearance of barns). Presumably, some of the newly erected farmstead buildings were built on the site of the previously demolished buildings; perhaps along the traces of the former barns that were no longer considered useful. Additionally, the research identified only one complex in which likely all of the old buildings were preserved in good condition (homestead No. 25). The limited certainty in this case results from the fact that although the architectural features of the house, the barn and the cowshed (shape, details of the wall façade), as well as the shape of the homestead itself clearly indicate its historical origin, the location of the house differs from the location indicated by the archive map.

Despite the new buildings erected since 1937, the majority of the farmsteads retained integrity (no division of the farmyard occurred) (Table 2). This fact may suggest the durability and contemporary usefulness of the tradi-

tional method of using the farmyard as a communication zone within the farm. Changes in compactness, namely the appearance of new buildings located outside the former outline of the farmstead, concern 12 building complexes. The construction of new auxiliary buildings results from the increased demand for warehouse, storage or garage space. New buildings having a non-agricultural function are visible in the neighbourhood of 13 farmsteads (the lack of integrity of the farmstead and its context).

An active building development process was observed in the touristically attractive surroundings of the Czarna Huta hamlet and in the area of Połęczyn. In the Czarna Huta area, the emergence of new single-family buildings has led to a disturbance in the picturesque view corridor marked by slopes of greenery-covered hills interspersed by farmsteads and trees (Fig. 5). The new buildings around Połęczyn led to the creation of a chaotic panorama strongly exposed from the south (Fig. 6). The integrity of the context of settlements located further away from local roads remains unaffected (for instance farmsteads 10, 11, 12, 25).

The number of buildings in historic farmsteads not always resulted from the wealth of the farm, which is usually assumed for simplification based on model farm projects developed for the reconstruction of villages in independent Poland [16]. In the studied area, both small multi-building farmsteads and two-building layouts of



Fig. 5. New building closing the scenic corridor (photo by A. Górka)

Il. 5. Nowy budynek zamykający korytarz widokowy (fot. A. Górka)



Fig. 6. Panorama of Połęczyn (photo by A. Górka)

II. 6. Panorama Połęczyna (fot. A. Górka)

Table 3. Alterations in the characteristics of traditional farm buildings (elaborated by A. Górka)
Tabela 3. Zmiany cech tradycyjnych budynków zagrodowych (oprac. A. Górka)

| | | House | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Farmstead number | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| Building body | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ | / | ● | ● | ● | / | / | ● | ● | / | ● | ● | ● | ● | ○ | ● | ● |
| Façade | | ○ | ○ | ○ | ○ | ○ | ○ | ● | ○ | ● | ○ | / | ○ | ○ | ○ | / | / | ○ | ○ | / | ● | ● | ○ | ○ | ○ | ● | ● |
| | | Livestock building | | | | | | | | | | | | | | | | | | | | | | | | | |
| Building body | | / | ● | ● | / | / | ● | ● | ● | ○ | ○ | / | / | / | ● | ● | ● | / | / | / | 2 | ● | / | / | / | ● | ○ |
| Façade | | / | ○ | ○ | / | / | ○ | ○ | ● | ● | ● | / | / | / | ○ | ○ | ○ | / | / | / | 2 | ○ | / | / | / | ● | ● |
| | | Barn | | | | | | | | | | | | | | | | | | | | | | | | | |
| Building body | | / | ● | ● | ● | ● | / | ● | / | / | / | ● | / | / | / | / | / | / | / | / | ● | / | / | / | ● | / | ● |
| Façade | | / | ● | ● | ● | ● | / | ○ | / | / | / | ● | / | / | / | / | / | / | / | / | ● | / | / | / | ● | / | ● |

● maintained; ○ unmaintained; 2 – two traditional farm buildings on the farm

wealthy farms remained. More modest farmsteads - away from local roads (for instance farmsteads 2 and 3) – may have emerged as a result of parcellation conducted by Polish credit associations societies before World War I or may have originated later. The few but distinctive farmsteads with brick multi-story buildings located by local roads (such as farm 21) probably emerged owing to the colonisation campaign conducted by the Prussian state and belonged to German settlers [17]. During the reconstruction of the village after World War I, non-flammable, cheaper and implementable concrete structures were being popularised [18]. Hence, probably at least some of the plastered farm buildings that date back to before 1937 were built of concrete blocks rather than brick.

Of the 22 former country houses, 21 are still being used (including 18 of them in use year-round and 3 used for holidays), whereas one has been abandoned. The vast majority (20) retained a recognisable, traditional form with a high or semi-flat roof (Table 3). 8-storey brick houses with a semi-flat roof survived, 4 of which having preserved brick façades (in farmsteads 4, 7, 8, 9). The remaining buildings are single-story buildings with high roofs, including one having a visible mixed structure (farmstead 20 entered into

the GEZ), and two buildings having brick façades (farmsteads 25 and 26). The second house listed in the GEZ (in farmstead 18), probably having a wooden frame structure, was negligently covered with Styrofoam (Fig. 2). In other houses with high roofs, the structure is hidden under old plaster or a plastered layer of insulation. In some of them, their shape was rebuilt (annexes, superstructures), but with no changes to the scale, which moderately affects the visual perception, unlike colourful plasters and roofs visible from a distance. Based on the pilot study, it can be concluded that brick houses with semi-flat roofs tend to be more resistant to changes, probably due to their more solid structure. Additionally, as the most recently erected buildings, they meet modern utility requirements more effectively.

Of the 9 preserved wooden barns, 5 survived in decent condition. The remaining former farm buildings include 11 buildings with plastered walls, 4 brick buildings, 3 of which have stone foundations, and one with stone ground floor walls and a wooden gable. The only livestock building listed in the GEZ was demolished. Newer farm and residential buildings generally retain the scale of traditional building development. A rather negative impact on the aesthetic impression is exerted by the contrast between excessively

different structures of old farms and single-family buildings, as well as the generally low culture of using the farmstead space and maintaining the buildings themselves. Few buildings with well-preserved traditional features and aesthetic values were found (buildings in farmsteads number 7, 9, 19, 21, 25, 26). In the study area, an active disappearance process of the architectural features in terms of traditional rural buildings as a result of thermal modernisation was noted.

Discussion

For centuries, the farmstead provided the centre of work on the family farm. Currently, in the study area, the farmstead either serves various functions or its buildings are falling into ruin. The family farm is considered the most economically, environmentally and socially sustainable form of agricultural production, as its operation is based on continuance [19]. The flexibility of operation of family farms and their protectiveness of the environment and landscape support food security and ensure the viability of culture, the rural economy and the natural environment. As the international community appreciates the importance of landscapes created by family farms, action is taken to preserve them [20]. Furthermore, in various places around the world, efforts are being made to maintain old farmstead building development, which may no longer always be a place of agricultural production, but still defines a space where people remain in close connection with their territory, namely with the cultural landscape, including agricultural one, with the natural surroundings, as well as the broader social environment [21]. It is believed that preserving agricultural dwellings provides the landscape with visual attractiveness. Further use of their development and protection of their ecological, production-related and landscape context supports biodiversity, reduces the carbon footprint, contributes to the richness and continuity of material culture and can serve as a source of social and economic innovativeness. The European Union's (EU) long-term vision for rural areas until 2040 [22] draws attention to the need to protect the soil surface and land quality, both of which are fundamental to the protection of life. The EU's mission on soil quality [23] is aimed at forming connections between rural and urban communities and land managers. Therefore, the method by which the development of isolated settlements is managed exerts a multidimensional impact on the resilience of large areas. This explains the need to harmonise their relationship with the production landscape and to formulate recommendations for the future management of agricultural and rural space with regard to new challenges [24].

The results of the undertaken studies are contributive to completing a vivid portrait of the Kashubian village. Traces of contemporary transformation are superimposed onto earlier layers, thus the boundary between them is blurred. The first major transformation of villages in Gdańsk Pomerania occurred in the post-enfranchisement period. World War II is considered to have put an end to the development of construction with regional characteristics [25]. The changes that followed after 1989 indicate the decline of agri-

cultural settlements. The construction boom of the 1950s affected compact rural settlements and the areas in their immediate vicinity. On the other hand, the development of residential buildings after 1989 mainly affects agricultural areas unrelated to the original village dwelling. The current parcellation of agricultural land is usually run by small, unprofitable family farms. This process is common and rather disorderly. The random location of new housing estates and houses causes the built-up and agricultural areas to mix, hence the harmonious panoramas of the village are degraded. The atrophy of agricultural villages and their landscapes occurs jointly with the nostalgic creation of rurality as a result of developing rural tourism. Moreover, the experiences of the COVID-19 pandemic have given a new outlook on the social value of a healthy lifestyle associated with the countryside. Therefore, an increase in the importance of rural scenery in making business and investment decisions can be expected, as is the case in other EU countries [26].

The field research results have confirmed that the exposure of the traditional form of a farmstead in an open landscape is in danger. The threats include the abandonment and devastation of old farms, the disappearance of historic architectural features resulting from modernisation and the loss of the landscape context due to the development of residential buildings. However, numerous attractive landscapes where the form of the farmstead is clear have survived. In these cases, the traditional farmstead still serves as an element that structures and enriches the view. Therefore, the protection of preserved farmsteads as distinguishing features of the agricultural landscape may provide a tool with which to effectively support the shaping of spatial order in large areas. The protection of view, by preventing excessive dispersion of buildings and infrastructure, will also avert the reduction of the production value of agricultural land. Additionally, it will counteract the reduction of biodiversity and retention, and the decline in the tourist attractiveness of landscapes due to their loss of the natural environment values. The conclusions from the universal landscape audit, conducted in Poland for the first time in 2019–2022, have pointed out the need to broaden knowledge of landscape physiognomy so that the principles of its protection can be optimised. However, deeper systemic changes are required for the reconstruction of spatial order based on the protection of the visual landscape. These changes include the integration of spatial planning of municipalities (local plans) with the principles for the shaping of agricultural production space (agricultural management plan)⁵ and the mandatory inclusion of the results of landscape studies into spatial policy. The system of integrated rural development planning, in force in Bavaria [27], can be a model to follow. Integrated management of rural space offers the possibility to regulate the boundaries of agricultural land and non-agricultural

⁵ According to the Polish Standard of 1997, agricultural facilities are a set of planned measures (technical and organisational); they take into account natural, economic, legal and social conditions and are aimed at adapting the spatial structure of a given area to the needs of a rational organisation of agricultural production space.

development areas so as to preserve the strategic production value of the agricultural land, as well as the natural, cultural and aesthetic resources of the landscape.

As a territorial unit, the isolated farmstead is now losing its traditional architectural and landscape expression. Being a trace of the former connection between the countryside and agriculture, it should be considered an endangered cultural asset that requires protection; it should be seen as vital for preserving the richness of experience. However, public attention is hardly focused on other elements than the traditional country house. Imitating the architectural features of such a house becomes a substitute for landscape protection. Architectural competitions for regional houses were organised in the past, but they generally ignored the local conditions of the project. Local development plans, landscape park protection plans and protected landscape area plans are at risk of having selective architectural parameters. In this way, actions to protect the rural landscape are feigned, while the actual obstacles to spatial order remain unchanged. Moreover, problems result from the popular method of external thermal modernisation, as such interference deprives traditional buildings of their distinctive features. In other EU countries, the earlier manifestation of this phenomenon prompted the reaction of promoting an integrated approach to the renovation process, with an account of technical and cultural aspects [28]. The identification and assessment of the resources of traditional farmstead development provide a condition on which increasing their adaptability and participation in the development of the sustainable development economy is possible. Such identification and assessment may lead to the formulation of rules for modernisation and use of old building development for new functions or to the establishment of mechanisms by which to recirculate building materials in the event of demolition.

Effective protection of the farmstead as an integral part of the agricultural landscape is only possible in a situation in which the local community appreciates it and wants to maintain its attributes, recognising and taking advantage of the opportunities such farmsteads provide. So far, even the strong sense of cultural identity and attachment to place, which is characteristic of the inhabitants of Kashubia, has not translated into the reproduction of the landscape value. Improvement of the quality of experiences is among the goals of sustainable development. Thus, public awareness of the importance of aesthetic values must be strengthened. Social awareness depends on collective knowledge. The digitisation era, the development of media and the accelerated flow of information create particularly favourable conditions for the increase in social awareness. The spread of digital technology, including mobile applications, facilitates the sharing and co-creation of spatial data. It makes it possible to launch and integrate databases with information concerning territorial resources. Additionally, the operation of thematic rural platforms that ensure the flow of information and communication is enabled. Furthermore, volunteer research and citizen science may serve as ways to simultaneously raise awareness and collective knowledge [29]. The increase in the activity of residents in these fields, as well as the use

of digital tools, would be extremely useful, in such cases as creating a record of local architectural forms. Attachment to the values of the local landscape should be developed by means of direct experience, school education and training activities with adults in their place of residence. Over time the regional knowledge acquired in this manner will trigger commitment and innovation in the protection of landscape resources.

Conclusions

The study was aimed at conducting a preliminary assessment of the cultural potential enjoyed by traditional single-manor settlement development in the protection of the open landscape, as well as in the process of restoring spatial order in rural areas. The main assumption behind the study was that the protection of the visual landscape value, which brings together the interests of various spheres and stakeholders, plays a fundamental role in sustainable development conducted by the local community.

A field pilot study, based on the results of comparative cartographic analysis, was conducted along the selected scenic routes in the dispersed rural settlement area of Central Kashubia that emerged at the turn of the 19th and 20th centuries. Architectural features of buildings that affect the quality of aesthetic experience within the landscape were examined in the study. Changes in the exposure and spatial layout of 26 farmsteads were determined, together with alterations in the shape and materials of the façades on the walls of the farmstead buildings, as compared with their historical pattern. A threat of degradation of all the examined development features and a chance to preserve their landscape values in selected areas were determined in the course of the study. The need to take remedial measures at several levels was indicated. The following were indicated:

- creating an integrated approach to managing the cultural heritage of agricultural landscapes, with an account of its participation in the circular economy,
- raising awareness and providing education on the importance of landscape heritage for human well-being, as well as of the need for environmental quality in order to involve the local community in the process of change management and spatial planning.

The above discussion supports the thesis that a valued scenic motif governs changes in the entire landscape frame. In the study, hope is expressed that social appreciation of a traditional farmstead image will prompt its contemporary users to protect and guard the agricultural landscape heritage. The protection of agricultural landscape heritage may support the spatial policy of agricultural communes that currently identify the expansion of the areas designated for residential development as their only opportunity. Subsequent research should cover a specific area and discuss further features of the open landscape, thus leading to the formulation of more detailed recommendations regarding the protection strategy of rural landscapes.

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Abstract

**The role of isolated farmsteads in the open landscape protection
on the example of Kashubia**

As a result of the social and economic transformation of rural areas, open landscapes are disappearing. Former farmsteads are being devastated or beginning to lose their landscape context due to the spread of residential building development. At the same time, in many places, the farmstead form is clearly legible and remains an element with which the view is structured and enriched. The article was aimed at drawing attention to the multidimensional importance of isolated farmsteads and the need to recognise their surviving resources. Being distinguishing features with which the attractiveness of an open landscape can be determined, they inspire the development of a multifunctional rural economy led by the local community. Isolated farmsteads can respond to the city’s problems and function in many non-agricultural areas, including education, tourism and recreation, nature protection and health protection. Protection of the building development of former farmsteads may provide a tool to effectively support the shaping of spatial order in large areas.

The article presents a method for describing the preservation condition of single-manor buildings developed at the turn of the 19th and 20th centuries. It is proposed that the study analyses the architectural features of farmsteads that play an important part in the recognition of such building

development in the open landscape. Observation areas were selected based on the results of remote identification of the location of historic farmsteads and buildings.

The field study was conducted in the central part of Kashubia, along selected scenic routes. These routes comprised 26 solitary homesteads. In half of the cases studied, the exposure of the farmstead buildings deteriorated due to the proximity of modern residential building development. The spatial layout of the majority of farmsteads has changed, which most commonly resulted from expansion beyond the former outline of the farmyard. Numerous historic buildings have been rebuilt. Despite the above-mentioned modifications, in the study area, the farmstead has remained a distinctive feature of the landscape and retained the potential for transformation to be used in the sustainable development economy. The results encourage the study to be continued. The identified resources and architectural values of the traditional farmstead could support the management and protection of the heritage of agricultural landscapes.

Key words: farmsteads, open landscape, heritage protection, sustainable rural development, Kashubia

Streszczenie

Rola zagród samotniczych w ochronie krajobrazu otwartego na przykładzie Kaszub

Na skutek społecznej i gospodarczej transformacji obszarów wiejskich zanikają krajobrazy otwarte. Stare rolnicze siedliska ulegają dewastacji lub tracą kontekst krajobrazowy w związku z rozprzestrzenianiem się zabudowy rezydencjonalnej. Zarazem w wielu miejscach forma zagrody jest czytelna i pozostaje elementem strukturalizującym i wzbogacającym widok. Celem artykułu było zwrócenie uwagi na wielowymiarowe znaczenie samotniczych zagród i konieczność rozpoznania ich ocalałych zasobów. Jako wyróżniki decydujące o atrakcyjności krajobrazu otwartego inspirują one rozwój wielofunkcyjnej gospodarki wiejskiej kierowanej przez społeczność lokalną. Mogą odpowiadać na problemy miasta i funkcjonować w wielu pozarolniczych dziedzinach: w edukacji, turystyce i rekreacji, w ochronie przyrody i zdrowia. Ochrona zabudowy dawnych gospodarstw może stanowić narzędzie skutecznie wspomagające kształtowanie ładu przestrzennego na rozległych obszarach.

W artykule przedstawiono metodę opisu stanu zachowania zabudowy jednodworczej ukształtowanej na przełomie XIX i XX w. Zaproponowano analizowanie cech architektonicznych zagród o istotnym znaczeniu dla ich rozpoznawalności w krajobrazie otwartym. Obszary obserwacji wytypowano, opierając się na wynikach zdalnej identyfikacji położenia historycznych zagród i budynków.

Badanie terenowe przeprowadzono w środkowej części Kaszub, wzdłuż wybranych tras widokowych. Objęto nimi 26 samotniczych zagród. W przypadku połowy z nich odnotowano pogorszenie ekspozycji na skutek sąsiedztwa współczesnej zabudowy mieszkaniowej. Układ przestrzenny większości zagród uległ zmianie najczęściej na skutek rozbudowy poza dawnym narysem podwórza. Wiele historycznych budynków przebudowano. Mimo wymienionych modyfikacji zagroda na obszarze badania pozostała wyróżnikiem krajobrazu oraz zachowała potencjał transformacji do wykorzystania w gospodarce zrównoważonego rozwoju. Wyniki zachęcają do kontynuowania badań. Rozpoznane zasoby i walory architektoniczne tradycyjnej zagrody mogłyby wspierać zarządzanie dziedzictwem krajobrazów rolniczych i ich ochronę.

Słowa kluczowe: zagrody, krajobraz otwarty, ochrona dziedzictwa, zrównoważony rozwój wsi, Kaszuby

