ROMANIAN REVIEW OF REGIONAL STUDIES, Volume III, Number 2, 2007

AN OUTLINE OF THE EVOLUTION OF RURAL CULTURAL LANDSCAPES IN POLAND

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ABSTRACT – The paper outlines the evolution of rural cultural landscapes in Poland against the background of landscape classification. It defines cultural landscape types and subtypes, based on several criteria of landscape classification, such as: genetic, morphological, functional, and economic. A review of rural landscapes, based on genetic criteria, considers the following historical periods: the primeval community, the feudalism, the manorial system, the industrial revolution, the interwar period of 1918 – 1939, the period of socialist economy, and market economy. The processes that most significantly influenced the contemporary shape of the rural landscape occurred just after the Second World War: urbanization and industrialization, settlement in western and northern territories, as well as structural and spatial transformations that took place after the year 1989 related to the promotion of sustainable and multifunctional development of rural areas.

Key words: rural landscapes in Poland, evolution.

INTRODUCTION

Over the last decades, most researchers have expressed the view that landscape is a synthesis of the natural and cultural environment. According to Zonneveld (after Richling et al., 1998), landscape is characterised by the following fundamental features: it encompasses a fragment of space, it has a defined visual image (physiognomy), and it is a dynamic system. Based on Bertalanffy's theory (1984), we can say that the way a landscape functions is determined by the number and type of its constituents and interrelations between them, including noticeable synergistic and antagonistic effects (Koreleski, 2007).

For the needs of the European Landscape Convention, a definition has been adopted, according to which "landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (2000). We can therefore speak about a natural landscape and a cultural landscape, that is a landscape that has been more or less considerably anthropogenized. The progress of civilisation lies at the root of the evolution, transformation of the natural landscape into the cultural landscape. Together with the development of particular civilisation formations, various elements of this development (economic, organisational, technological) appear, on the basis of the economy and politics that correspond to them, which lead to significant transformations, most frequently of an evolutionary character.

The contemporary rural landscape came into being, above all, as a result of the process of bringing land under cultivation. Up to a moment, this activity harmoniously complemented the natural landscape – the pattern of arable land and wooden-thatched houses enriched the landscape; it was delicately integrated with it and did not disturb the natural spatial order. With the intensification of agricultural production and increase in settlement density, the role of anthropogenic factors in landscape began to grow: modern buildings and arable land patterns most often contrast with landscape – they generate the impression of chaos and disharmony (Bański, 2006).

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The aim of this paper is to outline the evolution of rural cultural landscapes in Poland, against the background of landscape classification. The outline shall be based on specialist literature and personal deliberations using the method of logical and descriptive analysis.

1. THE BASIC CRITERIA OF RURAL LANDSCAPE CLASSIFICATION

The classification of rural cultural landscapes is based on various criteria and approaches. Kostrowicki (1975) distinguishes four approaches to rural landscape, in which agriculture is the leading function: ecological, geographical, technological-economic, and planning-spatial. In the ecological approach, landscape is treated as a complex of rural ecosystems, wastelands, and rural building patterns. In the geographical approach, rural landscape is a spatial system of natural and social-economic elements. According to the technological-economic approach, landscape is related to the dominating type of human activity, while in the planning-spatial approach to the method of space use and its suitability. Rural landscapes are classified with respect to their genesis, morphology, and economic functions (Cymerman et al., 1992).

As far as **genetic** criteria are concerned, we can distinguish a series of historical periods from the primeval community until now, during which, visible changes in rural landscape have occurred.

Regarding landscape **morphology** (relief), three physiognomic landscape types are most often distinguished in Poland: lowland landscapes (subtypes: river valleys, seacoasts, river deltas, marshes, outwash and moraine landscapes etc.), upland landscapes (subtypes: loessial landscapes, landscapes developed on carbonate rocks, landscapes on silicate rocks) and mountainous landscapes (subtypes: the landscape of mountain valleys and basins, mountain slopes, ridges and peaks).

With respect to landscape **functions**, the following landscape types are most often distinguished: the agricultural landscape (subtypes distinguished on the basis of methods of land use: for cereal crops, orchards, fodder plants etc., and on the basis of field systems: the open-field system, the patchwork field system, the fief field system etc.), the forest landscape (subtypes: coniferous, deciduous, mixed), the tourist-recreational landscape (subtypes connected with: agro-tourism, rural tourism), the industrial, service, and communication landscape. The combination of the agricultural function with other economic landscape functions is the most frequent functional type of rural landscapes in Poland.

2. THE EVOLUTION OF RURAL CULTURAL LANDSCAPES

The review of rural landscape transformations in Poland will be mainly carried out according to the genetic criteria (Cymerman et al., 1992, Bański, 2006).

At the age of the **primeval community,** man started to change the primeval character of the landscape. Tribes subsisted on hunting and gathering. Those who founded permanent settlements started to cultivate land. Burnt forests were taken over by settlements and arable lands. Besides primitive farming methods characteristic for the Neolithic period, agriculture based on plough starts to develop, especially in river valleys and wetlands.

Earlier settlement subsisting on potatoes is gradually supplanted by bigger settlements with multi-family buildings (Biskupin); base-camp settlement types start to appear (such as Lasek near Lubań in the region of Greater Poland – Polish: Wielkopolska), as well as huge burial mound structures (e.g. in the Kuyavia region – Polish: Kujawy), finally defensive settlements in the vicinity of Krakow, Kalisz, Wrocław, and Poznań. Moreover, first flint mines are developing as well as weaving, pottery, carpentry, or leather, bone and horn processing.

The **feudal period** was marked mainly with transformations in land ownership patterns. The following social classes developed: large landowners and peasants who worked their land. The former community land cultivation was substituted by family farming. The development of agriculture was also possible thanks to inventions, such as a plough or a frame harrow. A three-field system with one-third fallow appeared. It was also the period of noticeable settlement expansion (especially in the areas of forest thinnings), which influenced the development of the field patchwork. The landscape started to abound with more and more settlements founded under Polish law, until the 12th century, and at the end of this century

settlements under German law started to appear. Villages founded under German law were characterised by an open-field system, while the areas of forest thinnings – by the fief field system.

Communication trails were also very significant in landscape. These included land routes (paved with wood in marshy areas) and water routes with their flat-bottomed barges. In addition, weirs and bridges were built. In villages, inns, lumber mills and fuller mills started to appear, while in some areas, mining and obtaining salt by evaporation of brine developed. At the turn of the 13th and 14th centuries, windmills appeared in the landscape of Greater Poland. Moreover, horticulture and fruit farming started to develop. Orchards were mainly filled with apple, pear, cherry, and plum trees.

With the **manorial system,** the size of individual farms decreased, while manorial estates grew bigger and bigger. At the same time, the methods of agricultural production were continually improving.

The landscape of this economic system can be characterised by three types of feudal property: great feudal landowners (one manorial estate, called folwark, including from several up to several dozen villages in the area of the Ruthenian Voivodship), middle nobility property (1 folwark consisted of 1 village – Greater Poland, Lesser Poland – Polish: Małopolska), and lesser nobility property (mainly the regions of Podlachia – Polish: Podlasie and Masovia – Polish: Mazowsze).

A plough, an iron fitted cart, a harrow, and a fork were more and more widely used; a three-field system dominated. Cattle breeding was very well developed in Greater Poland, while in mountainous areas it was sheep breeding. Numerous agricultural processing plants appeared in the landscape. Fishing and bee-keeping expanded. In the Vistula's watersides, various facilities connected with crop trade, which was then floated to Gdansk, appeared.

At the turn of the 16th and 17th centuries, the wetlands of the Vistula Fen Country (Żuławy) and Kuyavia, as well as Pomerania (Pomorze), were drained, which was followed by the Dutch settlement in these areas. At the turn of the 17th and 18th centuries, during wars, numerous villages were damaged and a part of folwarks went bankrupt. On the one hand, land property started to be consolidated. On the other hand, differences in the size of land belonging to individual farmers appeared. Beside huge farms (the region of Pomerania), there were still quite many smaller ones, belonging to better-off peasants called kmieć (12-16 ha), and very small farms (particularly in Lesser Poland and Masovia, and the eastern part of Greater Poland). A particularly intensive field patchwork (up to several dozen plots per one farm) was visible in the regions of Masovia and Podlachia. As far as magnate estates were concerned, huge folwarks predominated; however, they did not exceed 320-340 ha.

By the end of the 18th century, brick manor houses started to appear. Characteristic cottages without chimneys, called kurna chata, appeared mainly in Lesser Poland, less frequently in the central part of the country. In the regions of Greater Poland and Pomerania, the number of cottages with characteristic arcades decreased, since landowners of that time preferred to build cottages for peasants in the simplest and most economical way.

The period of the **industrial revolution** (with Poland under partitions) linked with the process of granting freehold ownership of land to peasants significantly influenced the rural landscape. The diversification of the level of socio-economic development in Poland, divided into three parts, resulted from different levels of socio-economic development and different administrative-legal systems in Russia, Austria and Prussia. The development of industry and dynamic urbanization processes stimulated the development of commercial agriculture. The methods of land cultivation improved, yield per hectare increased (thanks to new agrotechnological measures, mineral fertilizers, new machines and tools); crop rotation was gradually introduced. As a result of the agrarian reform introduced in Prussia in 1826, peasants were granted freehold ownership of land and folwark fields were enclosed (aggregated). The poorest peasants migrated to cities, where they found employment in industry.

In the area of the Prussian partition, several characteristic landscapes can be distinguished, such as: the landscape of the Greater Poland countryside, with the domination of state property, after royal and church estates had been confiscated; the landscape of the Silesian countryside, with a large number of villages and a significant diversification in terms of agrarian structures; the rural landscape of Western Pomerania, with a strong position of Prussian landed nobility (2/3 of the total acreage); the rural landscape of Gdańsk Pomerania, with a significant share of Polish and German landowners, and the rural landscape

of Mazuria and Warmia, where land ownership remained in German hands and where, on a large scale, Polish peasants were removed from their land.

In the Austrian partition (Galicia), small and middle-sized folwarks dominated, as well as small individual farms, while low prices of agricultural products did not improve the economic situation in the countryside.

In the Russian partition (the Kingdom of Poland), agriculture was the basic form of activity of the dominating part of the society. It is also where the level of technological development was the lowest, when compared to Prussia and Galicia, and the number of poor peasant farms was very high.

In terms of farm buildings, considering both folwarks and peasant cottages, insignificant changes occurred in Galicia and the Kingdom of Poland, while substantial transformations took place in the area of the Prussian partition, where more durable materials were used, the entire complex of farm buildings was surrounded by a wall and insurance against fire became obligatory. Brick buildings become more popular only in the second half of the 19th century, particularly in the case of best off farms.

The scope of rural trade shrank gradually with the development of manufactories, which with time took on a character of the factory industry.

In the **interwar period of 1918-1939**, the landscape of rural areas recovered from immense war damages, which particularly affected farms, land, infrastructure, villages, and small towns. More significant transformations of the rural landscape were caused by the agricultural reform of 1920, modified in 1925. As a result of this reform, arable land was parcelled out among war-disabled persons and farm labourers. Polish settlement was carried out in the region of Volhynia. At the same time, the size of forest areas used for agricultural production diminished. After the First World War, wide polarization regarding the size of farms was visible: approximately 20% of the total number of farms constituted estates larger than 1,000 ha (Kostrowicka et al., 1984), while over 1 million farms had an area below 2 ha. For example, Greater Poland and Pomerania were dominated by farms larger than 100 ha; in the Baltic coast, fishing settlements concentrated; in the central voivodships, farms of 0.5 – 5 ha comprised 45% of the total number; Lesser Poland and Western Ukraine were characterised by a significant percentage of small farms.

Incredible damages, also affecting rural areas, were brought about by the Second World War. Landscape changes in the period of the **socialist economy** (1945-1989) commenced with the agricultural reform of 1944. Instead of liquidated huge land estates, state-owned farms, production cooperatives, and private farms (up to 50 ha of arable land) appeared. Western and northern territories were marked with the most significant percentage of nationalized farms. From the beginning of the 1960s, activities within the scope of meliorations, consolidations, buildings for livestock, electrification, water supply, and local road network were carried out. Moreover, objects connected with commercial activity, as well as services, appear in the landscape. In housing construction, most standard architectural projects were applied.

In the 1970s, a significant growth in the number of machines and tractors could be noted as well as an increase in cattle breeding and pig farming. Huge barns and piggeries were raised. Due to difficulties in obtaining feed from abroad (Reagan's restrictions since 1981), many of these buildings still remain unused. Nonetheless, the resource basis for the food-processing industry increased and the number of food-processing plants augmented. Yet, due to the intensification of agricultural production, significant negative changes occurred in the natural environment.

By the end of the 1980s, under the influence of political transformations, we could observe favourable changes in the rural landscape, particularly concerning the increasing area of private farms (gradual liquidation of unprofitable farms), progressing mechanisation, and motorization of individual farms, the developing network of service outlets. With respect to physiographic units, Polish rural landscapes can be outlined, as presented below. The entire area of the Baltic coast is dominated by compact settlement, with villages built around a central square. As a general rule, agricultural villages are small, with approx. 50 homesteads (150–300 inhabitants). Agricultural villages are usually built in such a way as to prevent fires and there are three basic elements in their typical homestead (a house, a cowshed, and a barn). Substantial part of the area is also covered by rural settlement, roads, and railway tracks, as well as wastelands (e.g. sand dunes) and marshes. There is a significant percentage of meadows and pastures among agricultural lands. The state of investment in fixed assets here is a result of the economic past and particularly the situation after the Second World War. Fixed investments exert a powerful influence on the

landscape and decide about its anthropogenic character. In the rural landscape, buildings connected with rural settlement predominate; and as we approach towns and cities or larger industrial centres, we start to deal with suburban settlement, with the domination of villa-type buildings and service outlets. In the narrow coastal strip, where recreational-tourism settlement dominates, buildings of a holiday-type architecture predominate. Communication routes, particularly roads along the coast, roads running towards the centre of Poland and the railway network, constitute this type of investment that particularly accentuates its presence in the landscape.

Rural landscapes of the Polish lake districts (Pojezierza) are characterised by a relatively sparse settlement network and predominance of villages with a nodal building system. Structurally, within this settlement system, particular settlements, comprising a given village, are very condensed and localised along an axis with various building patterns overlaid historically. Compact villages can be found here as well as dense villages and dispersed villages. The characteristic feature of the settlement pattern is that small and medium-sized villages predominate here (between 100–500 inhabitants). As far as land use patterns are concerned, agricultural lands dominate. Other forms of land use include: forests, waters, settlement areas, including dwelling areas, areas used by industry and communication infrastructure.

As far as the area structure of individual farms is concerned, farms of more that 10 ha prevail; in the vicinity of urbanized areas, small and very small farms (0.5–2 ha) dominate. Among fixed investments, the concentration of communication lines in the valley of the Vistula is worth mentioning (railway lines, roads, gas pipelines, high-voltage transmission lines at 110 kV and 220 kV). The natural landscape is cut with four traffic routes with a latitudinal run. Transmission lines run north of Konin. An oil pipeline from Russia runs in the vicinity of Włocławek.

The rural landscape of Central Polish Lowlands (Niziny Środkowopolskie) is dominated by compact villages, laid out along multiple axes, a single axis, or around a central square, and dense villages laid out along multiple axes or a single axis. Large and medium-sized villages with a very compact building pattern prevail. There is a high percentage of hamlets and dispersed settlements. In the western part of the region there is a significant number of small farms 0.5 – 2 ha; in the central part, the percentage of middle-sized farms increases (5 – 10 ha); while in the north-eastern part the percentage of farms above 10 ha grows. Investment in fixed assets intensifies particularly in suburban areas, that is around Wrocław, Łódź, and Warsaw. It mainly concerns the density of road and railway networks. It is also the region where two gas pipelines run from east to west. High voltage transmission lines, at 110 kV, 220 kV, 400 kV, originate in the area of Zagłębie Turoszowskie (a lignite mining region).

The concentration of fixed assets transforming the surrounding landscape is linked with Warsaw and international road and railway routes. The weakest and sparsest technical infrastructure can be encountered in the north-eastern part of the analysed area.

Polish Central Uplands (Wyżyny Środkowopolskie) are characterised by the domination of the high index of agricultural production space quality. Rural settlement types are highly diversified here. In the upland region of Wyżyna Śląsko-Małopolska, dense, dispersed, and long villages prevail. The upland region of Wyżyna Lubelska is where dense, large villages with over 100 houses concentrate. The entire landscape being described here is characterised by a relatively significant and steady settlement density. Compact villages stand out noticeably, particularly those laid out along a single axis and segmental villages. Another settlement type is visible in the upland region of Wyżyna Lubelska, where villages build along axes predominate. The percentage of dispersed villages is scarce. The region of Upper Silesia (Górny Śląsk) is characterized by high urbanization of rural settlement and the dominance of purely industrial functions. The landscape of Polish Central Uplands is noticeably diversified in terms of fixed assets. The western part is the region of very intensive technical infrastructure: mines, steelworks, high-voltage transmission lines 220 kV and 110 kV, roads, including a motorway from Silesia to Lesser Poland, railway lines, coal gas pipelines etc. In Wyżyna Lubelska, most significant changes in the landscape are brought about by communication routes. More or less parallel to the communication routes, high-voltage transmission lines run. Rural landscapes of the Sudetes and Carpathians are significantly different. In the area of the Sudete foreland and the Sudetes themselves, non-agricultural functions predominate, including industry, recreation, and partially agriculture. The region of the Carpathian foothills is dominated by

industrial and recreational functions partially joined with agriculture, as well as purely agricultural and agricultural-industrial functions.

In the Sudete foreland, we can distinguish a network of large villages of more than 100 houses, situated in river valleys. Greater mosaic of villages can be found in the Carpathian foothills – the network of large villages in valleys and quite numerous dispersed settlements. The Sudetes and Carpathians boast the highest village density when compared to the entire territory of Poland. In the Sudetes, large village settlements dominate. In the Carpathian region, compact villages laid out along a single axis and dense villages laid out along axes as well as dispersed villages predominate. The Sudetes and Carpathians are characterised by a high percentage of small farms up to 3 ha. The most important elements shaping the anthropogenic landscape of the Sudetes are communication routes, the high-voltage transmission line from Turoszów to Wrocław, and a coal gas pipeline from Wałbrzych to Zgorzelec. In the Carpathians, on the other hand, the main infrastructural axis runs from Krakow, to Tarnów, Rzeszów, Przemyśl and Medyka (roads, the railway line, the gas pipeline, high-voltage transmission lines at 220kV and 110 kV).

The period of **the market economy**, which ensued after the year 1989, was marked with a significant decrease in the area of arable lands, with the simultaneous increase of fallow lands in their acerage. Moreover, there are noticeable changes in economic functions due to the popularised model of multifunctional development of rural areas. New housing estates appear in the vicinity of urban agglomerations (residential function), as well as service outlets, and, for the first time ever, shopping centres (commercial function). In housing construction in villages, the former standard projects are abandoned and better building materials are applied. The programmes of rural and agricultural development accentuate the need for realising investments in arable farms, meliorations, land consolidations, countryside restoration, agricultural-environmental programmes etc. Local spatial development plans pay particular attention to the necessity of preventing further settlement dispersion, sanitation, and fostering aesthetic qualities of the countryside.

3. CONCLUSION

Although Polish rural landscape has undergone an extensive evolution process, its current shape was most substantially influenced by the processes of urbanization and industrialization, agrarian reform, settlement in westerns and northern territories, and more and more clearly visible structural-spatial transformations occurring after the year 1989. Next to traditional agricultural activity, forestry, and fishing, Polish rural landscape started to be the site for industry, specialist construction, improved and developed infrastructure (roads, waterworks, sewerage systems, communication infrastructure), tourist and services infrastructure. The investments of this kind, which started to absorb more and more rural space, gradually transforming the monofunctional landscape (agricultural) into the multifunctional landscape, were accompanied by the processes of degradation, frequently affecting all natural elements of the landscape (soil, water, air etc.). Contemporary landscape shaping, protection, and restoration result from the adopted principles of sustainable development and are realised within the system of spatial planning and spatial management (particularly local spatial development plans), agricultural-engineering work, village restoration, land reclamation etc. The methods of landscape diagnosis are particularly important in cultural landscape shaping, as they serve as a basis for further activities that aim at ensuring the long-term development and spatial order (Koreleski, 2007).

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