

THE IMPACT OF THE MORPHOLOGICAL DISPARITIES ON THE REGIONAL SYSTEM IN THE LAND OF LOVIȘTEA

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ABSTRACT - The morphological component plays an important role in the evolution of a specific land region. The relief has greatly contributed to setting up the limits of the region, it has favoured and imposed certain paths of development and land use while playing the support role for all the other components and phenomena. The morphological component has also acted as a physical support, favouring intense humanization (the hollow's guard). However, we should not miss out on the housing function it had during several critical periods, the role it played in preserving and increasing the human element, all of which have greatly contributed to the apparition and permanence of the Land of Loviștea within the national territory.

Key words: regional system, land, relief, morphological disparities, impact.

1. GENERAL CONSIDERATIONS

Disparity, in its broad sense, refers to the lack of harmony, the inequality between the elements of a whole. Disparity, from a geographical point of view, has wider implications and its effects are felt through a certain impact (be it positive or negative) "within the territory seen as a system, the quantification of subsystem performance differences and their relation to the performance media of the territorial system is the highlight of territorial disparities" (Ancuța Cătălina, 2008). Usually, regional disparities are the consequence of characteristics such as isolation from neighboring regions on the basis of a rich cultural and social background of the human community. As main effect of the manifestation of regional disparities we can remind here the isolation and the appearance of human center/periphery type of settlements, differing in ranks. In order to analyze the morphological disparities specific to the Land of Loviștea, we will refer to those differences that exist between the main relief types. These disparities have determined certain different directions in space development and use, they have contributed to setting up the region borders, they have dictated the localization of home settlements, they have influenced the type of agriculture to be practiced, as well as the other economic areas, and, last but not least, they have had an impact upon the other physical components of the regional system. Within the Land of Loviștea, various types of relief are included. It starts with a depression area, characterized by hill-like shapes, a lower area, seemingly a high plain, specific to the Olt's meadow and a high area, characterized by different degrees of fragmentation depending on the substratum and on the modeling systems. From a geomorphologic point of view, the Land of Loviștea overlaps the Loviștea depression space and the surrounding Carpathian massifs. Thereby, in the North, there lie the Lotru Mountains and the Western Extremity of the Făgăraș Mountains, in the South, the Căpățâni Mountains and the Cozia Mountains, in the West the Latorița Mountains and an extension of the Lotru Mountains, and, in the East, the westernmost continuation of the Făgăraș Mountains. These mountains all circle round in the central area the Brezoi-Titești Hollow (the Loviștea Depression).

Since, from our perspective, the morphological disparities are assimilated to the relief differences, we will continue the present study by referring to the impact that these differences have on the regional system of Loviștea.

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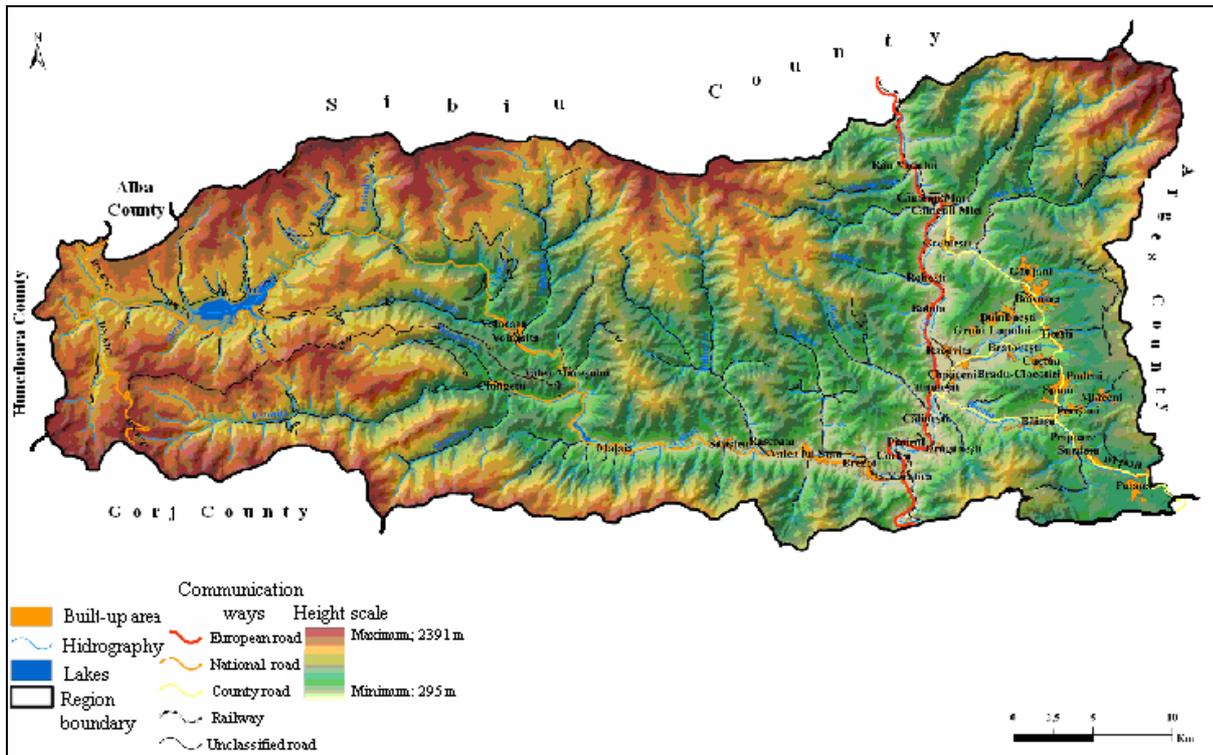


Figure 1. *The three-dimensional map of the relief in the Land of Lovișteța*

The impact of morphological disparities on the region limits

The borders of the region are drawn by physical-geographical discontinuities. Thus, Lovișteța came into being under the direct influence of the relief, and through the sheltering character it provided for the human community. Starting from the border drawing of the region, we observe the critical role the relief played, which, by being massive has represented a real orographic barrier. In the Land of Lovișteța, we encounter a great variety of the physical-geographical conditions, due to the peculiar evolution, to the action of various natural, economic, social, political factors, but also due to the fact that this region has functioned, in time, as a link between the northern and southern regions of the Southern Carpathians.

The impact on the relief

The analyzed region ranges hypsometrically between 300 m (the Olt's meadow) and 2400 m (the Făgăraș Mountains), although a great part of it is covered by the Brezoi-Titești Hollow with altitudes from 400 to 800 m. The present geomorphologic processes impose certain restrictions in the valorization of the relief, namely because of the amplexity they have in the Land of Lovișteța. On the more active slopes affected by landslides and severe soil erosion, there are proper conditions to practice agriculture or any other type of activities. Landslides represent the most dangerous geomorphologic process, with visible implications on the slopes and with a differentiated dynamics depending on the impact of other factors such as precipitation or land-clearing. The occurring of this phenomenon leads to a limited land use in the area. Gully erosion most commonly appears upstream, on the cuesta fronts, but the phenomenon is not that widely spread. In the mountain area, where there are deposits of highly asperous rocks, weathering processes take place, providing material for the water flows. Flooding is most frequently encountered in the rivers' meadows and has as main source the fall of high quantities of precipitation in a short period of time, and if this phenomenon combines with snow melting, the flooding amplitude increases.

The impact on the climate

The role of the relief in defining climatic peculiarities in the region is overwhelming, mainly through the variables which define the underlying surface, but also through the influence manifested on the air mass circulation. Being a depression area, surrounded by mountains, the Land of Lovișteța is characterized by a relatively mild and moderate climate, making in-dwelling possible. Because of its peculiarities (altitude,

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exposure, declivity, massiveness, fragmentation, etc.), which manifest themselves through differentiated temperature and precipitation values within the studied perimeter, between higher areas and those situated at lower altitudes, the relief has a major influence on the climate. The sheltering climate is due especially to the wider spreading of the depression right from the Olt River, behind the mountain massifs, thus offering it a milder climate, with annual average temperatures of 6°-9°C and annual average precipitation of 1000 mm. Considering the climate from a regional perspective, as well as under the direct influence of the relief, we must proceed to a topo-climatic regional distribution of the Loviștea region with the mention that climatic particularities are manifested in the area that are specific to the defile topo-climate, to the mountain crests, slope and depression topo-climate, crest topo-climate, the topo-climate of terraces and meadows, and forest and grassland topo-climate.

The impact of morphologic disparities on the hydrographic network

The rivers in the Loviștea region are characterized by rich discharges with tremendous energy having great level differences between the spring and the river mouth. The hydrographic network is characterized by an asymmetry of the hydrographic basin, a mainly surface water supply, proceeding from rain, snow and frequent flooding. These aspects are especially due to the relief characteristics. The rivers in the Land of Loviștea belong, in their overwhelming majority, to the Lotru and the Olt hydrographic basins and are included in the southern group of rivers, tributary to the Danube. Due to their peculiarities (rough substratum, steep crests, high quantities of precipitation, etc), the mountains are considered to be the region's water source. The setting up of reservoirs for energetic aims has been influenced by the presence of certain conditions met by the water flows and the geological substratum, with the goal to obtain electric power.

The impact on the bio-geographical resources

The bio-geographic cover of Loviștea is the result of the natural evolution but also of the anthropic conditioning, especially during the last period. The use of wood since the beginning of times until present has had negative repercussions on the forestry resource, gradually reduced in area. Thus, we are witnessing a transition of the forest functions, namely, the crossing from the sheltering function to the function of economic support. However, the expansion of cultivated land, pasture and meadows, in detriment of forested areas has highly increased, especially in the depression area. The process of massive land clearing also gave birth to the names of present locations: Arsurile, Secăturile, Molidvișu and Sterpu. Thus, the greatest impact is visible on the vegetation, especially tree vegetation, which has undergone major changes, including elimination and replacement on wide areas. The natural vegetation consists of deciduous forests, mixed forests (deciduous and coniferous), pine-tree forests but also pastures and meadows. Where there is still a steep-slope relief, significant patches of forests and pastures are still predominant, whereas within the hearth of the depression the natural vegetation has been replaced by cultivated fields. The changes of the vegetal cover led to a decrease in the protection degree of the soil cover, to the acceleration of erosion processes and to the disappearance or decrease in the number of wild animals which once populated the forests.

The impact on the soil, the subsoil and their resources

The soil cover of the Loviștea region is the result of several factors such as relief, lithologic substratum, climatic conditions, vegetation and fauna, and, last but not least, the intervention of anthropic factor. The main types of soils in the Loviștea region are the zonal soils, represented by the argillic soil class (mostly present on forested areas) and the cambisol class, a-zonal soils (hidrisols, salsodisols and vertisols). However, they all have different proprieties, depending on the class they belong to, on the way the land is used and on the degree of the vegetation coverage. In the Land of Loviștea, there are alluvial soils and alluvial proto-soils, brown acid soils mixed with podzolic brown soils and podsols, and in the higher areas, podsols and brown acid soils. The brown forest soil, typical and podsol, with low-bedding metamorphic rocks is encountered along the Olt and the Lotru valleys, especially in the northern part, while in the southern part, there is the same type of soil, but with slate and conglomerates. In the eastern and western sides, the brown acid forest soil with different degrees of podsoling predominates. The morphological disparities led to a diverse valorization of lands and implicitly to important changes at the level of the soil cover. For instance, the land clearing process led to the increase in soil instability, to the expansion of abased areas, with erosion processes and mass movements. The lands that have been affected by landslides are used as pastures and meadows, and the more evolved ones are used for fruit farming. Being in close connection with the natural

factors, the soils of the Lovișteea region are characterized by diversity and reduced fertility. Firstly, they have a vertical type of zonality depending on the morphometric factor: luvisols under the beech and holm forests, cambisols under the holm and coniferous forests and podsols under the pine-tree forests. The soil and subsoil resources valorized in the economy of this area are modest, so that construction rocks, isinglass and feldspar, high hydropower potential of waters, wood from forest exploitation are mostly predominant.

The impact of morphological disparities on the anthropic heritage

The relief functioned as a favorable physical support for humanization, influencing even the territorial repartition of human settlements as result of its morphological disparities. Thus, in the hearth of the depression, with important habitable valence, the main settlement hearths were located, while on the steep, hardly accessible crests, there are only scattered, isolated hamlet-like settlements. Many villages found support in the developmental terraces of rivers, others in the Olt flood plain or on the alluvial cones. All the settlements in Lovișteea are a reinforcement of the idea that, regardless of their size, they have adapted to the relief conditions and have overcome history at its worse, up to the present days. The morphological disparities have imposed certain imbalance in the economic development of the region, especially by affecting its primary economic branch, agriculture. The agriculture practiced in the studied area is a sustainable one, mainly animal farming and plant farming (fruit and vegetable culture). As regards the development of the tourist phenomenon in the Land of Lovișteea, we must say that there are resources for developing rural tourism despite the precarious, already-existent infrastructure. The presence of the Olt Valley within this area is an important aspect in practicing transit tourism, because the Olt Defile is considered not only a simple route, but a real tourist attraction point. However, the Land of Lovișteea is quite a particular region with an outstanding tourist potential when seen from a bird's eye view, with surrounding mountains, the Olt's Defile crossing it, the wild Lotru Valley, with cultural and historical values, with traditions and customs kept from times immemorial. It is, therefore, an appealing but under-valorized land.

CONCLUSIONS

The morphological disparities in the Land of Lovișteea played a special role in the development and functioning of the regional system, leading to the individualization of more developed areas, which had the advantage of a milder relief allowing them to form strong links with the neighboring areas. We mention here the settlements from the depression's hearth, as well as the settlements lacking easy access and communication ways as a consequence of the relief peculiarities, which are both found in the same mountainous perimeter living together in an apparent isolation. The morphological disparities are also accountable for the high degree of ruralization of the analyzed space. The only urban center is Brezoi, a town of local importance, playing the role of the polarizing center. The Lovișteea geographic space is apparently homogenous, only at a more careful look and by studying its every component individually, can we really observe its true diversity.

The morphologic factor is one of the most important components of the territorial system, with diverse functions, interacting with the other components of the system and leading, in the end, to the creation of a specific geographic entity, "the land".

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