THE REGIONAL CHOROTYPE OF THE NiŞCOV RIVER BASIN

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Le chorotype régional du bassin versant de Nișcov. Le bassin versant de Nișcov est un système construit par plusieurs éléments qui se trouvent toujours en relations entre eux. Ces relations ont déterminé le développement général du système. Un rôle important dans l’organisation de l’espace revient à la société par les adaptations continues du cadre naturel aux nécessités propres humaines (l’exploitation des ressources naturelles, la construction des voies de communications, l’emplacement des localités).

Mots-clés: chorotype, pôle de croissance, axe de développement, flux, synapse, tropisme, région répulsive.

Chorotipul regional al Bazinului Râului Nișcov. Bazinul Nișcov este un sistem alcătuit din mai multe componente aflate în interacţiune. Relaţiile dintre acestea au determinat dezvoltarea regională a sistemului. Un rol important în organizarea spaţiului îl are societatea, prin adaptarea continuă a cadrului natural la propriile necesităţi (exploatarea resurselor naturale, construirea căilor de comunicaţie, amplasarea aşezărilor).

Cuvinte cheie: chorotip, pol de creştere, axă de dezvoltare, flux, sinapsă, tropism, regiune repulsivă.
1. INTRODUCTION

The Nişcov River Basin is located in south-eastern Romania, in Buzău Subcarpathians (Curvature Subcarpathians) (Figure 1). Nişcov River is a right tributary of the Buzău River. Its position is very important because it explains the torrential character of this tributary.

The Nişcov River’s flows are „low and unsteady in low-rainfall periods and rich and unsteady, too in the rainy periods” [1]. The Nişcov flows through the Romanian counties: Prahova and Buzău. It flows into the Buzău river, est of Buzău city. Its total length is 40 km.

Figure 1. Geographical location of the Nişcov Basin

The Nişcov basin is a complex region who has several subunits: Lapoş- Ciolanu Hill in northern (Fântâna Hoţilor Peak- 753,4 meters), Nişcov Depression in the center of the basin and Istrîta Hill in southern (Istriţa Peak- 750 meters).

2. THE REGIONAL CHOROTYPE OF THE NISCOV RIVER BASIN

The “chorema” is a modern method propused by the French geographer Roger Brunet [2]. This method is used for highlighting the development features of the Nişcov
system and how the community has organized its own living space. So, chorema is an „alphabet of space”. „With its help it can be seen the reality of this space and the diversity of spatial structures that belongs to this system” [3].

The Nișcov Basin is represented by a policentric structure and an asymmetric spatial configuration. The polycentric character is given by the high number of communal centers - Vernești, Nișcov, Grăjdana, Tisău, Haleș (Photo 1). The asymmetric character is generated by positioning the main polarizing center (Buzău) in the Eastern region and this is possible because the subunits of the relief are likely to lead to such a configuration. The main axis is established according to this configuration of the relief.

The regional chorotype is established „for understanding the regional trend, the orientation of the main flows and for viewing the weaknesses and geospatial involutions” [4]. The major elements that led to the establishment of the regional chorotype (Figure 2): growth poles of different sizes and functional groups, the existence of an external polarization center with different rank and functions (Buzău), development axes of regional and local interest, characteristic types of the relief's units with a typical economic profile (in Ciolanu and Istrița Hills the economic profile is mixed - agriculture, grazing and oil exploitation and in Nișcov Depression - an agriculture profile), anthropogenic flows, synapses (connections established with extra-regional centers).
Analyzing the regional chorotype of Nişcov Basin we can see the integration of two synthetic patterns of space organization:

- **the centripetal pattern**: is conditioned by the existence of a single polarizing center - Buzău, who has the main role in coordinating the whole system. Buzău is a large settlement, located East of the Nişcov Basin. „This city guides the main flows of matter, energy and information from Nişcov Basin and has an important role in maintaining a balance of the development and functionality system” [3];

- **the axial pattern**: is conditioned by „the existence of the development axes. Along these axes are shown the intraregional polarizing centers with different sizes and functionalities” [3]. So, the Nişcov Regional System has a main longitudinal development axis that is located in the center of this area and that is conditioned by morphological aspects and by transport infrastructure. The Nişcov System has a main transverse axis (from Haleş to Ciolanu Monastery and further, to Măgura) and eleven secondary axes, too. The secondary axes are mostly perpendicular to the Nişcov River or to the main development axis.

  The main longitudinal development axis follows the main river - Nişcov and the most important road from this region - the „100 H” County Road. This axis has boosted the development of the largest settlements in the Nişcov system. This is about the most important polarizing centers (the villages that have a communal residence function - Verneşti, Tisău) and two other centers who have the second polarizing rank (Nişcov, Izvoru, Haleş). The flows of matter, energy and information come in and come out from the Nişcov system along this main axis, permitting the connection with the furthest and the most important polarizing center (Buzău).

  The Nişcov Valley represents a „meeting space between the natural phenomena and the human activities. The main direction of natural processes follows the longitudinal vectors (Nişcov River and the silts) and the transverse direction is less useful (landslides, rain wash)” [7]. From ancient times, the anthropogenic component had contradictory directions: „in a first phase, the population sought safe valley’s areas, away from flooding and geomorphological processes, but near drinking water and then, in a later stage, they shifted to the corridor, where carried the main industrial and agricultural occupations” [7].
Along the Nișcov River are achieved the main flows of goods, raw materials and passengers. None of the listed centers "does not have the strength to become the attraction
center of the region because the transverse inserts are weak. If natural elements have usually only one direction, from upstream to downstream, the human being and its activities have bi-univocal move along the development axes” [7].

The main transverse axis follows the Haleş Valley (Photo 2) (Haleş is a tributary of Nişcov River) and the „203 G“ County Road (between Haleş and Măgura localities) for establishing contact with the polarizing center outside the Nişcov system, Măgura locality.

![Photo 2. Intensive grazing in Haleş Basin (Bogdan Adriana, June 2012)](image)

The secondary axes (third-order axes) have local significance, being much more of the same type in the system, corresponding of Nişcov tributaries or communal roads. These axes, by directing flows of matter, energy and information have coalesced the settlements in the region.

The discrepancies related to economic development have determined the identification of two types of areas: with positive tropism, with negative tropism and balance area. „Tropism means an accommodation and orientation tendency of an organism in one direction, under the influence of external excitation...” [8].

- areas with positive tropism (Verneşti - Buzău area), including; the concentration of activities (from secondary and tertiary sectors) and the geographical position in the center of the system, the transport infrastructure, witch is less developed compared with other parts of the system, the main concentration of population (young and active);
- areas with negative tropism (in the Eastern side of Nişcov system and the highest peaks) include areas with isolated data, situated at the edge of the system; the population is aging and the profile is predominantly agricultural;
- balance areas - are near the main development axes of the Nişcov system.

Between the polarizing centers inside the system and outside centers were established relations. Buzău is an important center meaning the orientation of economic flows and workforce. The others centers have less importance because they serve mainly to satisfy the social needs of the population and because the distances between them are large.

Despite the fact that the system configuration is asymmetric, its coherence is ensured through synergy cooperation and complementary of the local components.

The analysis of space components allows us to express it as a chorema, based on the idea that „space is made by setting the basic structures that are in a relatively small number” [9]. Natural flows (matter and energy) enter in the Nişcov Basin from the west, north-west as oceanic air masses (weather flows) and from high-subcarpathian area (hydrological flows).

In this system there are two repulsive regions: the Nişcov slopes because they have risk areas (landslides, depopulation, aging, unemployment, subsistence agriculture and underdeveloped infrastructure).

The attractive region is the Nişcov axis. In the twentieth century, the industry has resulted in propelling the whole region, putting pressure on the environment and human society, which was forced to face a significant flow of people. The lack or poor development of infrastructure caused the widening of regional disparities, so that some parts are true unattractive „islands” [7]. Opposed them, there are areas where human activities running pressure on the natural environment by: purchase of building materials (Verneşti - sand, gravel, clay), planting vines and fruit trees (plum - medium height hills, apple, pear, cherry), massive deforestation (Photo 3), intensive grazing (cattle), oil exploitation in Tisău.
3. CONCLUSION

The Niscov system is a region with a high natural potential. This characteristic is given by the relief resources and configuration. These are good for placing the settlements and the means of communication.

The "society signature" on this space is obvious. The human being has modified this subcarpathians area through deforestations, intensive grazing (important in producing the landslides), construction materials and oil exploitation, roads construction (modifying the riverbeds) and agricultural use. All these have determined the population migration from repulsive areas to attractive ones. Because of that, the region has an asymmetric character.

The evolution of Niscov basin will be possible through the development of synapses between this area and other areas from nearby. The achievement of these links will be relieved because in 2011 the roads had been modernized (the 100 H and 203 G County Roads had been rehabilitated and the second part of 203 G County Road had been built-Leiculesti/ Izvoru/ Haleș).

4. REFERENCES


