THE RELIEF – AN IMPORTANT FACTOR IN THE EVOLUTION OF THE HUMAN SOCIETY IN SILVANIA LAND

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Abstract: The purpose of this article is to present the role played in time by the landforms in Silvania Land. During the evolution of the human society, landforms, according to their "qualities" and to the necessities dictated by the historical time, had a series of functions. Due to their geographic position and to their units' arrangement, the landforms in Silvania Land have several functions: of bordering by Meseşului and Plopişului Mountains, a socio-political function (citadels and castra built in strategic points), of support for the anthropic activity (for (human) settlements, communication ways and agriculture), of defense (citadels built in high places), of tourism and recreation and the cultural and spiritual function.

Key words: landforms, function, Silvania Land, factor

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INTRODUCTION

The landforms always had – for the human society since its beginings – a double role: of support of its entire activity and of object of labour. Expressing this function is done according to the morphometric parameters and to the dynamics of the geomorphological processes.

From a geomorphological point of view, Silvania Land is located on the hills between Plopişului and Meseşului Mountains, while to the north-west, these hills move to the higher level of the Western Plain. As a consequence, one can distinguish the following landforms (Fig.1):

- the mountain unit to which Plopisului Mountains and Mesesului Mountains belong;
- the crystalline heights (Şimleului Height, Coşeiului Height), that show a series of features similar to the above mentioned mountains;
- the hill unit, the result of the deepening of the hydrographic net within the sedimentary formations.

The Mountains bordering Silvania Land, as well as the crystalline highs within them, have a series of common features, resulting from their genesis and evolution.

Plopişului Mountains enclose Silvania Land in the south-west with their northern versant. Their structure contains crystalline schists and has a proper areal deployment up to 15 km width in some places. The dominant note of the landscape is given by the valleys deeply inlaid in the crystalline with well timbered versants. In opposition there are the wide "bridges, slightly waved on the main interstreams (remains of some level surfaces) where the forest was replaced by pastures, meadows or even agrarian cultures. On the same "bridges" the woodcutters brought from Slovakia during XVII-XVIII centuries, settled, and built the villages Făgetu, Fufez, Marca-Huta (belonging to Silvania Land) or Şerani, Şinteu, Valea Târnei, as well as the bowers used during summer.

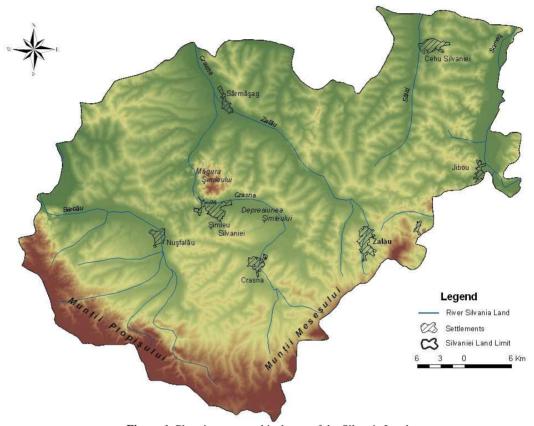


Figure 1. Phsysico-geographical map of the Silvania Land

Meseşului Mountains situated in the east, south-east border of Silvania Land, consist of a long and narrow crest (7 km) SV-NE oriented. They originate in the vicinity of Crişul Repede River, where the highest peaks can also be found (Priei High 997 m, Cornului Hill 965 m, Cornii Hill 905 m, Vlasinului Ridge 900 m). The altitude decreases to north-east up to 800 m (Osoiu Groapa Mare, 809 m) to eventually reach 514 m with Moigradului Height.

The affluents of Crasna and Zalău (Ponița, Ortelecul, Ragul) penetrated deep within them, carving among their deep valleys with escarpments, narrow interstreams, named *osoaie* by the locals (Osoiul Plopilor, Osoiul Scurt, Osoiul Stânei, Osoiul Macăului). Here, the level surfaces are less visible, for which reason the settlements lack and the forest covers them entirely.

Crystalline Heights cover a small surface, within Silvaniei Hills, but the distinct landscape – set by lithology, landforms and by the vegetation, mostly sylvan – lends them the attribute of geographic individualities (Geografia României, IV, 1992).

Şimleului Height with its maximum altitude of 596 m holds within all the prerogatives of a mountain unit: the energy of high landforms (over 200 m), accentuated horizontal fragmentation (2-3km/km²) and steep slopes (over 25°).

Its strategic geographic position and its morphometric features "recommended" it since prehistory as an ideal place of defense. Although well timbered with deciduous trees, the locals found enough terrains for vine cultures (especially on the southern versant) and lately to build holiday cottages.

Coşeiului (Chilioarei or Țiganilor) Height is less prominent (Ascuțit Peak 416 m) and has a more reduced spatial extension. However, it also presents the same features like Şimleului Heights

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only much more attenuated (ample fragmentation 2-2.5 km/km²), relatively high energy (100 m), accentuated slopes (between 15-35°).

The hills constitute the landform most extended in Silvania Land, being the result of the subaerial shaping of the pannonian deposits. The main interstreams with an altitude between 280 and 325 m are large and irregular. The interstreams along the side valleys are long and usually have mild slopes that make them fit for partial human usage or for total use for roads or agricultural purposes.

The existence of the saddles on the interstreams – the result of the regressive advancement of the torrential organisms or of the hydrographic net – facilitated the communication between neighboring countries.

The main feature of the valleys in Silvania Land is the irregularity, echo of the geological structure and of tectonic activity. The right versant of the main valleys is a cuesta; on the left versant there are the terraces of the rivers, stressing even more their irregularity, some of them being, in fact, small depressions well enclosed by the cuesta versant: e.g.: Barcăului Valley (downstream Valcău de Jos), Crasnei Valley (upstream and downstream Cehei gorge). The presence of the two types of versants within the hills (cuestas and quasi-structural surfaces) demands a certain approach in the exploitation of the landforms, according to the favorableness and limitations of each of them.

The main valleys formed axes of local development with a very powerful energy flux, substance and information, for the regional system of Silvania Land: Barcăului Valley and its affluents (Upper Barcău Depression or Nușfalău), Crasnei Valley, upstream the Cehei gorge (Şimleului Depression) and downstream; Zalăului Valley, Sălajului Valley, Maja Valley, as the existence of some large saddles on the main interstreams created favourable conditions for the creation of a major axis of unification of the local ones: the axis: Jibou-Zalău-Şimleu Silvaniei-Marghita.

By means of these axes the connections and the flux of the regional system in Silvania Land with the neighboring regions were set: Barcău for Crişana, Crasna for Câmpia de Vest (Western Plain), Sălaj for Valea Someșului. In the same way, the existence of some large saddles in the mountain area bordering it allowed the transaction of material and informational exchange with the regions outside Silvania Land: through Meseșului Gate with the Someșan Plateau, through Oșteana and through Plopiş with Crişul Repede Valley.

The socio-economic relations in Silvania Land developed highly around large hydrographic basins, with the main valley as the axis – even irregular - of every subunit: the hydrographic basin Barcău, the hydrographic basin Crasna, the hydrographic basin Zalău, the hydrographic basin Sălaj. The non-dissociative connection between the main valley – as axis – and its side valleys provides us with the understanding of certain phenomena and processes of social, economic and cultural nature.

THE FUNCTIONS OF THE LANDFORMS

In the course of human evolution, as well as today, the landforms, in relation to their "qualities" and with the imperatives (necessities) of the history, had various functions.

Delimitation function

We have already showed that in the case of Silvania Land, the landforms, represented by the two mountain units (Plopişului Mountains and Meseşului Mountains), holds this function. Even if the altitudes of the mountains are reduced, they dominate with over 500-600 m the hills forming the core of Silvania Land and the contact between the two landforms units is obvious, as it is their role of "barrier". On both sides of the mountains – more obvious in the case of Plopişului Mountains – there are two distinct worlds. "The angle" between the two mountains sheltered and it still does now, a region with a uniform specific – within it – and distinct in regard to the neighboring units.

Socio-political function

The first political structures were formed by settlements grouped on geographic criteria (large valleys, depressions, timbered areas) lead according to the old Romanian tradition by judges and princes (cneji).

The beginning of the century XI means the beginning of the organization of the so called borough counties. Solnoc and Crasna – like the other counties in Transilvania – were organized based on the relationship between the collectivities and the central power in a simple system with a complex functionality (Rusu, 1978).

But, the first citadels built in Silvania Land are the castrens type and are dated between VIII and IX centuries as well as from the middle of the XIIIth century. They concentrated around them all the economic, administrative, juridic and military activity of the political formations they were in. The castra were surface buildings, of medium size, protected by moats and ramparts provided with logs (Rusu, 1978).

The castra of the Romanian prestatal formations were mostly taken over by the Hungarian crown and organized according to the new political realities. In the northern extremity of Silvania Land, there was *Solnoc castrum*, having a defensive role (situated according to the majority of the historians in the proximity of today's Bobota), one of the oldest fortifications in Transylvania. Its military role (of defense) was much reduced after the conquest of Transylvania by the Hungarians.

Crasna castrum – not precisely located – functioned as a borough county.

Moigrad castrum (VIII-IX centuries), situated at "Meseșului Gate" had the same strategic role as the other ones.

The Halmăşd fortification was also considered to be of castrens type, having the same strategic role as the others.

The second type of citadel – occurred in the second half of the century XIII century – is a feudal based institution: *Valcăului Citadel*, the domain of which occupied the whole county of Crasna, *Cehului Citadel*, registered for the first time in the year 1319, being together with the mart with the same name, an economic center of a domain that numbered 37 localities, in the century XVI (Wagner, 1984).

In the same position was Şimleului Citadel (1341-1351) built on Măgura Hill, to which all the Crasnei Valley belonged, from Pericei to Măeriște. In the beginning of the century XV its military role was reduced, but its economic importance was kept (oppidum Somllyó).

The function of support of the anthropic activity

a. Support of human settlements – the habitation function

Uniformity, continuity, the slopes, the fragmentation are attributed to the landforms that favor or restrict the location, the development, the structure and the texture of the settlements. In Silvania Land, where the versants are predominant, their stability had an important role in the selection of the habitation terrains. From here, there results a very strong relation ship between landforms and settlements, sometimes imposed by the historic conditions.

Regarding the relation landforms – settlements, one can distinguish the following situations:

- villages situated on the main valleys. The landforms allowed their spatial expansion and the valley attribute of the axes stimulated the demographic growth of the settlements. In general, these are big villages, and according to their lay-out in the valley one can distinguish:
 - villages disposed on the water meadows (river meadows) and on the glacis between the meadow and the versant: Marca, Ip, Zăuan, Boghiş (along Barcău); Pericei, Vârşolţ, Sărmăşag (along the Crasna); Ratin and Huseni (along Ratinului Valley); Borla (on Zalău) etc.;
 - villages disposed in the meadow, on the bridge of the inferior terraces and on the glacis: Crasna, Nuṣfalău, Valcău de Jos, Bobota, Cosniciu de Jos;
 - villages situated in the confluence areas: Carastelec, Chieşd, Crasna;
- villages that have found as place of refuge, during hard times in history, the source of the hydrographic net, with a glacis "amphitheatre" shape. They are seen on most of the tributary streams

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of the main rivers: Sighetu Silvaniei, Bilghez, Dioşod, Bocşiţa, Doba Mică, Hereclean, etc;

- villages set in places where the hills meet the mountains, some of them in small depressions of contact (Halmăşd, Plopiş, Cerişa), others along the valleys or their versants: Fizeş, Sâg, Mal, Tusa, Sârbi, Pria, Meseşenii de Sus, Stârciu;
- villages situated in short, obsequent valleys on the versants of the main valleys: Recea Mare, Dobrin, Domnin, Cristuru-Criseni;
- the mild interstreams proved themselves to be good places for some villages (for all of them or for the majority): Aleuş, Doh, Recea Mică, Drighiu;
 - the mild versants, of dip slope type, also provided the option for certain settlements;
- there are many a village that are spread on very diverse landforms (versant, glacis, saddles on rivers): Lazuri, Bădăcin, Hereclean, etc.;
- some of the settlements developed around Şimleului High, because of its proper refuge conditions. They are older settlements, some with a continual existence since the Neolithic period (Şimleu Silvaniei). The others are: Ceheiu, Giurtelecu Şimleului, Pusta, Poiana Măgura, Bădăcin.

The side valleys are also axes, at a local level, communicating with the "axis" of the main valley, and sheltering a small net of settlements; e.g.: Cerişa–Cosniciu de Sus–Cosniciu de Jos (in the Barcău basin), Valcău de Jos–Valcău de Sus–Subcetate (along Barcău), Valea Pomilor-Colonia Sighetu Silvaniei-Şamşud (in the Maja basin), Măerişte-Doh-Dumuslău (in Valea Câmpiei, tributary stream of Crasna), Bobota–Zalnoc; Bocșa–Bădăcin–Sici (in the Zalău basin).

The influence of the orographic factor in the development of the settlement net in the upper basin of Crasna is obvious. The village of Crasna lies in the confluence area (in bunch) of the tributary streams of the river with the same name. An entire network of chain settlements (with the same arrangement) developed along them: Ratin-Huseni (along Husenilor Valley), Peceiu-Bănişor-Ban-Sâg (along Banului Valley), Horoatu Crasnei-Pleşca-Cizer (along the upper course of Crasna).

b. The landforms – support of the communication network

The existence of some large chutes (major axis) at the periphery of Silvania Land (Crişului Repede Valley in the south and Someşului Valley in the east) triggered the development of a network of important roads along these chutes, the area between them remaining in a "circulation shade". Nevertheless, based on research we determined the following:

- the main valleys (Barcău, Crasna, Zalău, Sălaj) represented local circulation axes where an entire network of important roads developed, not only for that axis but for the entire Silvania Land, because they represented the connection with the neighboring regions (Zalău–Sărmăşag–Satu Mare; Şimleu Silvaniei–Nuşfalău–Marghita–Oradea);
- the energy of the landforms being reduced, the existence of the saddles on the streams allowed the connections between the main valleys to be realized on another major axis of the road network. Here, the only "inconvenients" are the slope (on the top of the cuestas) and the landslides (DN 1H Jibou-Zalău-Şimleu Silvaniei-Nuṣfalău-Marghita);
- the fact that the mountains that form the south-east and to south-west barrier are low allowed the existence of road connections with the neighboring regions (Zalău Meseşului Gate Someşan Plateau; Nuşfalău Şinteu Crişul Repede Valley; Zalău Ciucea over Oşteana saddle);
- the fact that the side valleys are large with well developed meadows and glacis, fostered the development of a road network within them, that separates from the main valley road connecting all the villages;
- the connections between the settlements on the neighboring valleys (main or tributary) are realized over the low saddles on the interstreams (Nuṣfalău-Huseni; Nuṣfalău-Ṣimleu Silvaniei; Zalău-Jibou, Vârṣolṭ-Zalău, Bocṣa-Pomilor Valley-Ṣamṣud; Ṣamṣud-Sighetu Silvaniei);
- the long and mild interstreams were "considered" to be suitable to be followed by the local roads (Dioşod-Chieşd; Dioşod-Hereclean; Nuşfalău-Drighiu; Sărmăşag-Chieşd, a part of the road between Camăr și Ip);

- the bridges of the terraces provided very good conditions for laying out certain portions of the roads (Nusfalău–Drighiu; Nusfalău–Plopis);
- other roads were built along some mild and stable versants (dip slope of a cuesta) like those connecting Bozieş with Drighiu, Boghişul de Iaz, Şimleu Silvaniei–Bic–Crasna;
- the only railroad in Silvania Land passes through Cehei chute (Crasna Valley) and connects Silvania Land with the Western Plain.

Landforms - object of labour

The landforms, as *natural resource* of Silvania Land, are the object of the main anthropic activity: the agriculture. The morphometric features of the landforms allowed the practice (without major limitations) of all forms of agriculture – plant cultivation, viticulture, orcharding, rearing. "The improvement" of the natural qualities of the landforms by agrotehnique and hydrotehnique methods (versant offset, embankment, drainage) increased the infields and their production.

The processes taking place on the versants (landslidings, the gorge creating process, land erosion) are still inconvenient as they may reduce the agrarian production or even destroy certain terrains.

The landforms have a great influence on the manner in which people use the terrains. Thus, the largest arable surfaces are along the valleys of the large rivers, that present meadows, terraces and well defined glacis, while the versants of the hills have mild slopes: along Barcăului Valley, in the middle section of Crasna along Sălajului Valley. Along side valleys the favourable conditions can be found on the dip slopes of the cuestas where also the most part of the arable land is.

The defense function of the landforms in Silvania Land resides in the existence of some particular landforms characterized by "insularity", reduced acces (highs, peaks), position within the valleys or depressions. Their major role decreased during history and especially today.

Since Antiquity or Middle Ages, defense citadels were built on this kind of landforms (Simleului High, Marca High, Moigradului High).

The touristic and recreational function of the landforms (by themselves or in association with other anthropic or scenic elements). Without displaying spectacular landforms, the mountains on Silvania Land's border, as well as the two crystalline highs are elements of local tourist attraction. The gorges at Tusa, Preoteasa, Marca, Subcetate (along Barcău), at Cehei along Crasna, the deep valleys of the rivers that penetrate a long distance in Meseşului Mountains (Ortelec, Ponița, Poicul), well timbered, can attract tourists during weekends. The same interest may be observed regarding the almost flat "plateaus" in Mesesului Mountains.

This function of the landforms can be amplified by the value of the tourist potential with specific facilities. The peaks constitute places of sightseeing of the entire Land of Silvania and of the regions around it.

The cultural and spiritual function is usually expressed by the association with other elements of the same field (churches, monuments).

The monument at Guruslău is set on the chine of a hill, so that it may be easily noticed and also to create an observing point of the area around.

The traces of the old citadels on the mountain on high tops create, together with the landforms, a singular historic assemblage (Moigrad, Şimleu Silvaniei, Valcău de Sus).

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