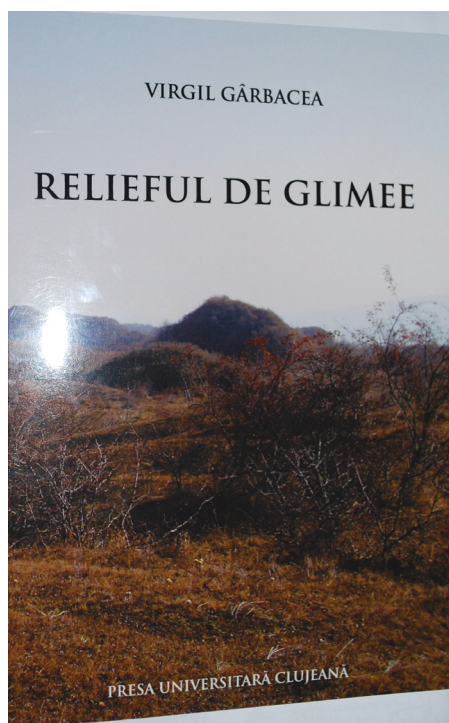


BOOK REVIEWS

Virgil Gârbacea (2013), *Glimee relief*, Edit. Presa Universitară Clujeană, 258 p.

The work *Glimee relief* of professor Virgil Gârbacea is much more than an event. The arguments could cover, from a journalistic point of view, fifty years of introspection on Transylvanian' slope dynamics, but it wouldn't succeed to value the emotions, the feelings and the enthusiasm of an analyst researcher, who loves the detail and the scientific accuracy of the information, like professor Gârbacea.



Glimee- type landslides from Transylvania have represented for the geomorphologist Virgil Gârbacea a first challenge in the

international scientific arena. UIG Congress form New Delhi in 1968 have confirmed for the first time his scientific excellence by accepting the *glimee* term for monticule landslides from Transylvanian Depression, term proposed by the Romanian delegation (Morariu, T., Gârbacea,V).

The work *Glimee Relief*, structured in 13 chapters, approaches the complex issue of the place of the landslides from Romania, the factors that have a contribution to their genesis, the role of glimee in defining the function and the stability of the slopes, their role in defining the Transylvanian geomorphological landscape, the morphography and morphometry of glimee, glimee' morphodynamics, their age and geographical spreading in Romania, the particular morphodynamics of glimee from the Romanian geomorphosites and the possibility to value the lands with glimee.

The morphodynamics and the morphology of the landslides is analyzed in this study through the production mechanism and age (Tardiglacial and Holocene), the author made a distinction between the landslides from the Subcarpathians or flysch Carpathians. Remarkable through the content of the terms given to the landslides in Romanian and international geomorphological literature, the work represents a masterpiece for professor Gârbacea's research and for the Cluj-Napoca'geomorphology School among the slopes dynamics and landslides in Transylvanian Depression.

the didactical and scientific exigency of the work can also be expressed by the precision of the quotes (page, line, article, review), but also by the relevant thoughts, as a magister of disciple, among the research results. The author quotes exactly the sources in the research history and arguments the landslides type in sub-chapter 2.3.

It is highly unusual the analysis of the glimee by the position on the slope and absolute altitude, an aspect approached in chapter III. "Usually, the glimee-type landslides affect half or the superior third of the slope, the moved masses rarely getting to the rivers that drain the valley". The upper statement is not applying to the landslides from Tăuț, Fizeș, Daia, Apold, Măgherani, Fânațele Clujului, Valea Teleacului, Trittenii de Jos, Suatu, Aruncuta, Bozieș, etc., where the landslides bodies (glimee) came to the river bed. Special cases are the landslides which are to be found on water paths (Sâmboieni, Bozieș, Dipșa, Sicutard, Suatu Nou, Romanești-Păucea, Țeline).

The location of glimee in inferior hydrographical basins and the land' mass movements determined by the main river erosion reveals the regressive character of these, the movements begin on the inferior side of the slope and then, advance to the upper part.

The relief evolution by the Holocene glimee-type landslides is, partial, a certifying of the Albercht Penck's (1858-1954) model regarding slopes intersection under anterior surfaces, due to the sliding masses which "determined a lateral movement of the rivers that disturbed the equilibrium of the opposite slopes", according to the author, and to denudation complex (p.31, line 2).

The IV-th chapter emphasizes the morphographical and morphometrical characters of glimee. *Crown crack* marks the slope part in which was exceeded the resistance to encounter when the landslide occurred. The author states that "to each movement that generated a glimee area has a main crown crack", and its form makes the regional difference (Câmpia Transilvaniei, Dealurile Târnavelor, Podișul Hârtibaciului, Podișul Moldovei). Carefully analysis are made among the *sliding surface, the landslide body and the relief of glimee*, the author stating that "relief characters depend on the sliding speed, slope, lithology and strata", p.40. A special attention is given to the rows of landslides, to the longitude and transversal depressions, to the thickness of the sliding masses and to the stability of the glimee-type landslides.

It is to be remarked in the V-th chapter (*Factors an favorable conditions for glimee*) the insistence of the author to establish the possible correlations between the dominant monocline structure, lithology and the frequency of the glimee areas, by "holding together" all the bibliographical resources and over 50 years of experience in investigating the Transylvanian Depression landslides morphology. The conclusions are relevant and constructive because the Neogene deposits (bade-nians, sarmatians, pannonians) by stratification and lithology are susceptible to mobility in minimum slope, high season differences raining regime and general folds presence. The argument is sustained by the author, based on the analysis of the volcanism, salt, limestone, clay minerals and diagenesis process.

Glimee morphodynamics brings to the reader's attention the mechanism of the movement. The author presents few models from Transylvanian Depression (authors: Mac, I., Irimuș, I.A., Surdeanu, V., Grecu, Floare, Tövissi, I., Matei, I., etc). The form-function dynamics of slopes has originals characteristics among the type difference of glimee landslides and their territorial expression.

The insequent or asequent glimee generate different paths for the geomorphological landscape, which are to be translated through the alignment of the landslides waves, the development of the depressions between landslides waves and, the morphological evolution of these waves and, least but not last the type of agricultural or edilitary exploitation. Next geomorphological processes (ablation, rill and gully erosion, surface erosion, creeping, human exploitation) have a secondary role in the determination of the specific morphology for glimee (chapter VIII).

A provocation, in analysis, is the age of glimee. The author is critical towards the predecessor geomorphology researchers (studies before 1950), which sustained that "massive landslides from our country have been formed in the rainy years, such as 1912- 1913 or 1942". The arguments brought are the pollen analysis made by E.Pop (1952), Morariu, Diaconeasa, Gârbacea (1964), Diaconeasa (1985),

Buz, Cianga, Diaconeasa, Gârbacea, Idu (1986), Meszaros, Moisescu (1991), Pendea (2005) and the determination of the absolute age for the Pădureni landslide (Țop) through radiocarbon method (Beta Analytic Radiocarbon Dating Laboratory, Miami, Florida), in January 2013. Pollen analysis indicate an age between 127 Ka (Saalian-Eemian paraglacial, Pendea, 2005) and subboreal (Diaconeasa, 1985 and Buz, Ciangă, Diaconeasa, Gârbacea, Idu, 1986) for the Pădureni landslide (Țop), while the radiocarbon method, applied to the coal sample situated at a 2,95 m depth, in the swamp from Pădureni, confirms an absolute age for the landslide of 1820 +/- 30 ani BP.

The causes for the formation of glimee are widely analyzed reported to the morpho- climatic conditions from Tardiglacial and Holocene, but also reported to the neotectonics, seismic, biological conditions (bacterial action), diagenesis processes and cationic change to the pedogenetic horizons.

The work validates without question, in the last chapters *Glimee landslides from*

Romania and Glimee- geographic mosaic, the experience of these 50 years of research dedicated to Transylvanian glimee. The author presents in detail Transylvanian Depression' glimee, from Saschiz, Saes, Movile (Podișul Hârtibaciului), Pădureni (Țop), Bozieș (Câmpia Transilvaniei), Romanești-Păușa (Dealurile Târnavelor); glimee from Gruicul Coțești (Piemontul Getic); Centum Monticuli "Suta de Movile", from Ștefănești, from Prut' river shore; the landslide from Nehoiu-Borcea, by quoting the sources and their authors, emphasizing the major contribution to the research of the glimee-landslides from Romania.

The last thoughts of the author is for the opportunities to value these areas with glimee, finishing with the suggestion that "if the proposals will be achieved and will be proved as a really useful, this kind of studies could be generalized for other area with glimee from our country".

IOAN-AUREL IRIMUȘ

Teodorescu, Z. Virgiliu, 2013, *Tiberiu Eremie. Un om de omenie, un demn exemplu de urmat [Tiberiu Eremie. An Utterly Humane Man, an Example to Follow]*, Bucharest: Editura Agir, 196 p.

In the series entitled "Personalities in the Field of Science and Technology" published by Agir Press in Bucharest, the tireless researcher and historian Virgil Z. Teodorescu offers us a beautifully accomplished and well documented monograph dedicated to the personality and work of the late Tiberiu Eremie, a renowned construction engineer from the first half of the twentieth century. The book is prefaced by Professor Nicolae Noica, an exegete of our outstanding engineers who, through their technical-urbanistic work, left a prominent legacy in the Romanian cultural space. Bearing the title "Let us not forget them," the preface is a plea for keeping alive, in the public consciousness of the Romanians, the personalities of our technical culture, not forgetting them and/or relegating them to the margins.

The author opens the monograph dedicated to the engineer Tiberiu Eremie with an "Argument," in which he confesses that over the course of his extensive research on the public monuments in Romania, he has often encountered the name of Tiberiu Eremie, which sparked his interest in this prolific constructor. Later, impressed by his professional training, his humaneness, and the multitude and diversity of the constructions he accomplished throughout the Greater Romania, he decided to devote a monograph to him, which led to the publication of in this book. Driven by his belief - namely that the year 2018, marking the centenary of the Great Union, must be one of reflection and analysis, both individual and collective, on what each of us and all of us together have achieved for