

IOAN MAC (\*)

## THE GEOMORPHOLOGICAL LANDSCAPE OF DERASION. A MODEL FROM RUMANIA

ABSTRACT: MAC I., *The geomorphological landscape of derasion. A model from Rumania.* (IT ISSN 0391-9838, 1996).

This paper presents a specific geomorphological landscape, created by the process of derasion, which is characterized by specific features. Belonging to the group of discrete landscapes, but different in content and extension, it is modelled by the combined effect of gelifluxion, cryoturbation, cryofraction, pluvionivation and the gravitational movement of materials on the slopes in periglacial condition. The processes of derasion create two categories of products: deluvial and taluvial deposits and residual relief. The main characteristic of the derasional landscape is the continuous multiplication of relief forms until the complete destruction of the initial landscape is reached, and there is emergence of a secondary landscape. The most illustrative morphological element of the derasion landscape is represented by the derasion valley.

KEY WORDS: Derasion valleys, Landscape of derasion, Rumania.

RIASSUNTO: MAC I., *Il paesaggio geomorfologico di derasion. Un modello dalla Romania.* (IT ISSN 0391-9838, 1996).

Questo lavoro vuole rappresentare un particolare paesaggio geomorfologico creato dal processo di derasion, che è caratterizzato da forme tipiche. Appartenente alla categoria dei paesaggi «discreti», ma con differenti elementi ed estensione, esso è modellato dagli effetti combinati di geliflusso, crioturbazione, crioclastismo, pluvionivazione e movimenti gravitativi nei versanti in condizioni periglaciali. L'azione dei processi di derasion crea due categorie di prodotti: *talus* detritici e rilievi residuali. La principale caratteristica di questo paesaggio è data dalla continua moltiplicazione delle forme del rilievo fino alla completa distruzione del paesaggio iniziale e allo sviluppo di un paesaggio secondario. Il più tipico elemento morfologico di questo paesaggio è rappresentato dalle valli di derasion.

TERMINI CHIAVE: Valli di derasion, Paesaggio di derasion, Romania.

The geographic landscape, in its most obvious manifestation, that is its physical appearance represents the result of the combination of geographic components (substratum, community, hydro-atmospheric mass) on the territory. As a temporo-spatial product the landscape has a gra-

dual edification and a territorial multiplication as its cooperation between the above mentioned components remains in the limits of some reciprocal sustainment and adjustment relationships. This means that a landscape may suffer changes and may even be replaced by another landscape, in the case in which the geographical state modifies.

Unlike the geographic landscape, the product of a complex integration (global), the geomorphologic landscape is defined by the prevailing of certain forms of relief, such as glacial, eolian, volcanic or littoral forms. It is an expression of the intimate relationship between form and process.

The variability of the above mentioned relationship and its quantitative and spatial dimension, explain the dominance of some geomorphologic landscapes on the surface of the Earth (glacial landscape, desert landscape, littoral landscape, etc.) and the presence in small areas, of the others.

Usually, the landscapes generated by more *discrete processes*, such as supergene processes, karstic, cryogene, anthropic processes, have an intimate ambiental relief which makes them more attractive for science and knowledge.

Belonging to this group of discrete landscapes, very different in content and extension, is the derasion geomorphologic landscape (PECSI, 1995).

Derasion is understood as the combined effect of gelifluxion, cryoturbation, cryofraction, pluvionivation and the gravitational movement of masses of materials, on slopes, in periglacial conditions. The above mentioned processes are worthy to be associated with snow melting and sheetflooding, developed in the same periglacial morphoclimatic conditions. These processes work especially on the slope surfaces and their effect is greater the more some conditions are fulfilled. Among these, it is remarkable the presence of the slightly coherent deposits sensitive to freezing - defreezing, superumectation, pluviodenudation, cryoturbation (sands, loess, sandy clays, sandstones, microconglomerates, deluvial covers, weathering crust).

(\*) «Babeş - Bolyai» University, Faculty of Geography, Cluj Napoca (Rumania).