



## Geomorpho-Landscapes

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Landscape is the object of human perceptions, being the image of spatial organization of elements and structures: mankind lives the first approach with the environment, viewing and feeling the landscape.

Many definitions of landscape have been given over time: in this case we refer to the Landscape defined as the result of interaction among physical, biotic and anthropic phenomena acting in a different spatial-temporal scale (Foreman & Godron)

Following an Aristotelic approach in studying nature, we can assert that “ Shape is synthesis”: so it is possible to read the land features as the expression of the endogenous and exogenous processes that mould earth surfaces; moreover, Landscape is the result of the interaction of natural and cultural components, and conditions the spatial-temporal development of a region.

The study of the Landscape offers results useful in order to promote sustainable development, ecotourism, enhancement of natural and cultural heritage, popularization of the scientific knowledge.

In Italy, a very important GIS-based tool to represent the territory is the “Carta della Natura” (“Map of Nature”, presently coordinated by the ISPRA) that aims at assessing the state of the whole Italian territory, analyzing Landscape. The methodology follows a holistic approach, taking into consideration all the components of a landscape and then integrating the information.

Each individual landscape, studied at different scales, shows distinctive elements: structural, which depend on physical form and specific spatial organization; functional, which depend on relationships created between biotic and abiotic elements, and dynamic, which depend on the successive evolution of the structure.

The identification of the landscape units, recognized at different scales of analysis, allows an evaluation of the state of the land, referring to the dual risk/resource which characterizes the Italian country. An interesting opportunity is to discover those areas of unusual value -referring to biodiversity, geodiversity, culture- which can be considered as a special heritage.

Starting from the concept of Geomorphosite, a geomorphologic landform with a scientific, cultural and socio-economical value (Panizza 2001), we propose a further definition, useful in the preliminary steps of the landscape analysis: “geomorpho-landscape” as a spatial object or component of a geological landscape, whose geo-morphological evolution, linked to the geological setting, are elements of aesthetic, semiological as well as historical and cultural value.

The structure of the landscape is represented by the physical shape and spatial organization, in dynamic way: it is necessary to provide a readout of the landscape components that supplements the geo-morphological, lithological, geodiversity data (Lugerì et alii, 2012).

The concept of “geomorpho-landscape” is conceived to address the need to describe by a synthetic approach the geological processes emerging at the landscape scale, allowing to link spatial patterns to geological processes. Each geo-form has in itself geological, geo-morphological, landmark, historical and cultural features, of such