

# Mountain

Attempts to provide a general and universal definition of a mountain either become bogged down in vagueness (a mass rising above the surrounding lands) or run into multiple exceptions (high plateaux, island volcanism) whenever slope and altitude are considered separately.

Definitions of an administrative type emphasise limits (thresholds) (the French 'Mountain' law of 1985 stipulating an average municipal altitude above 700 metres and a slope steeper than 20%), as well as the potential handicaps for such spaces in the face of a shortened growing season and the mechanisation of agriculture (the European Structural Funds). There is therefore an explicit acknowledgement that the local development conditions of these spaces place them at a disadvantage that justifies compensatory measures.

In addition to these normative definitions, those authors who emphasise the physical context in order to apprehend the mountain insist on differences in slope and elevation as central components of the mountainous environment. The specific nature of a mountain would derive from the amplification of phenomena linked to gravity (erosion, landslides, avalanches), while the combination of altitudinal and bio-geographical factors would introduce limits (trees, persistent snow, a permanent habitat) and an altitudinal zonation which vary according to latitude and exposure. Together, more in the mountain than elsewhere, all these factors produce partitioning, 'ecological niches' and various superpositions of ecosystems. This variability of environments, these contrasts, and numerous cases of biological endemisms lead to a view of mountains as conservatories of the planet's biodiversity.

According to the model of plate tectonics, the conditions that have contributed to the formation of mountains make it possible to distinguish between several types of orographic ranges. Mountain chains are classified either as peri-continental chains resulting from subduction mechanisms (the Cordillera of the Andes, the massifs of the Asian archipelagos) and characterised by strong volcanic activity, or as still uplifting chains corresponding to the collision of two continental plates and to the closure of an ocean (Alps, Himalayas) or finally as intra-continental chains (Pyrenees, Caucasus) shaped by compression and sliding movements inside a continent.

Ancient massifs are not 'old mountains', but parts of the platform uplifted and reshaped inside continents. In the case of the Vosges, the Black Forest and the French Massif Central, recent movement has caused their fragmentation.

The nature of the rocky substratum and the imprint of fluvial and glacial relief produce a variable degree of penetrability and an unequal capacity to bear traffic (the width of valleys and steepness of their sides, the altitude of passes). Elsewhere, however, isolation from legal traffic and flows in some massifs may be conducive to smuggling or the cultivation of narcotic plants. In contrast to the representation built around the idea of sanctuary, but corresponding to situations of isolation, mountains as symbols of natural borders are also the theatre of guerrilla warfare and of territorial claims for national minorities (the idea of the mountain as shelter). These situations reinforce the idea that –n many latitudes, they constitute marginal spaces.

Extending this symbolic dimension, other approaches (B. Debarbieux) insist on the fact that beyond the objective characteristics of mountain spaces, their use belongs to the scope of collective representations. Whatever the period or the continent, populations have projected their cosmology onto mountain heights, and more generally their whole psychic, social and spiritual imagination. Whether considered according to myths of hygiene (health, regeneration, protection) or in relation to Promethean myths (development, conquest, sporting challenge), by their location at the margins of the oikumene, summits have always fascinated populations with a twofold perception of attraction and repulsion.

As original spatial systems, mountains function within the framework of evolving interactions between very diverse geo-systems and forms of development and human density. Uses of the different parts of mountain spaces correspond more to arbitrations made by human communities between socio-technical capacities, risks and local potentialities than to a-temporal cultural or pastoral 'vocations'.

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## Bibliographie

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