Qualitative assessment of landforms and landforming processes for geoheritage evaluation – how to define ‘significance’

Piotr Migon
Institute of Geography and Regional Development, University of Wroclaw, pl. Uniwersytecki 1, 50-137 Wroclaw, Poland

The current focus in geoheritage, geosite and geodiversity studies is towards maximizing objectivity of the assessment through the use of various quantitative indices. Nevertheless, qualitative assessment remains a key ingredient of various projects, especially at an early stage when a long-term strategy of geoheritage promotion is to be established and when decisions are made whether to proceed with nominations for global geoheritage-oriented programmes such as UNESCO World Heritage or UNESCO Global Geoparks. Likewise, at regional and local level, while talking to non-specialists, informed qualitative assessment may be more meaningful than numbers. The issue is particularly relevant in the context of UNESCO World Heritage, which defines criteria to be met by prospective candidates for the World Heritage distinction. Two of these criteria are explicitly relevant to geomorphology. Criterion (vii) emphasizes the occurrence of superlative natural phenomena and in recent nominations the focus tends to be on geomorphic diversity over limited areas. Criterion (viii) directly refers to landforms and on-going surface processes and states explicitly that these landforms and processes have to be ‘significant’ without specifying how to understand and evaluate ‘significance’. It is argued that the significance of landforms may be considered in several ways. First of all, landforms may be significant for the science of geomorphology itself and reasons for this may be many. They may be the biggest of its kind, the best examples of particular trajectories of geomorphic history, unique in terms of evolutionary way or landform configuration, or best researched being thus ‘classic’ localities. However, landforms may be also significant for other natural science disciplines, particularly biology and ecology, as well as they may have wider cultural significance, for history, architecture, general landscape aesthetics, art, or religion, underpinning cultural developments. To better determine the conditions to be fulfilled by a property to be considered as geomorphologically significant at the highest global level required for World Heritage listing seems a timely exercise.