

88 Heritage value and stakeholders' perception of four geomorphological landscapes in Southern Iceland

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Geomorphological heritage and landscapes have one common characteristic: their existence depends on a certain socio-cultural context and on the subjective view of different observers. Indeed, considering landforms or portions of land as heritage results from a process of "heritage making" ("patrimonialisation", Di Méo 2008): an object is considered as heritage when the values assigned by society or by some actors are sufficiently important to justify its preservation and transmission to future generations. From the perspective of geomorphologists, the central value of a landform is its geoscientific interest (Grandgirard 1997; Reynard 2004), i.e. its interest in understanding geomorphological processes, reconstructing the formation and the evolution of a landform, etc. The values that justify the heritage recognition of a landform may also be related to its beauty (aesthetic value), its cultural interest or its ecological value.

A geomorphological landscape refers to a landscape whose geomorphological component is of heritage interest. Some landscapes have gained international recognition for their geoscientific value, particularly the 93 sites included in the UNESCO World Heritage List that meet criterion viii – "to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features". Obviously besides their scientific interest, most of these sites are also landscapes of particularly high aesthetic value.

As part a PhD thesis in progress (Bussard, in prep.), we first assessed the heritage value of four geomorphological landscapes in southern Iceland from a geomorphological perspective and, then, we conducted a series of interviews to see to what extent the heritage values assigned by different local stakeholders overlap with this assessment. The four geomorphological landscapes are Skaftafell Glacier, Laki craters, Torfajökull caldera in the vicinity of

Landmannalaugar and Breiðamerkur Glacier and its proglacial margin, including Jökulsárlón.

The assessment of the heritage value showed that all four geomorphological landscapes have a high geoscientific value, related to their rarity, representativeness and paleogeographical interest. With only little impacts of human activities, these sites are almost intact. These sites are also spectacular and beautiful landscapes and have acquired a relevant cultural value because of the major impacts that volcanic eruption and glaciers advance had (and occasionally still have) on the local population. As a result of the development of tourism, these sites have come under increasing pressure, raising questions about the protection of their heritage value.

Twelve semi-structured interviews were conducted in August and September 2020. Four interviewees are from the tourism sector (tourism service providers, representative of a regional tourism office), four are managers of protected areas (national park and nature reserve), two are representatives of a geopark and two are mayors of local municipalities. Not surprisingly, the heritage awareness of managers of protected areas (Vatnajökull National Park, Fjallabak Nature Reserve and Katla Geopark) that include these geomorphological landscapes is high. The interviews also show that other types of stakeholders, such as tourism services providers, tourism promoters and representatives of local authorities, are also aware, to some extent, of the high geoscientific value. The establishment of Katla Geopark in 2010, the extension of Vatnajökull National Park to Breiðamerkursandur and Jökulsárlón in 2017 and the inscription of the park on the UNESCO World Heritage List in 2019 are evidence of a process of heritage making.

The societal and institutional recognition of the heritage value of these geomorphological landscapes is closely linked to their use as territorial resource for tourism, with the risks that the aesthetic aspects tend to mask the geoscientific value and that

a more economic approach increases tensions between conservation and tourism development. The lack of appropriate management plans and infrastructure in several tourist sites, particularly in the most accessible ones, due to the rapid increase of tourism activity since 2010, was pointed out by the majority of stakeholders as a major issue to ensure that tourism is compatible with landscape

conservation. The ongoing elaboration of several management plans for protected areas and tourist sites will reveal the extent to which the heritage values of geomorphological landscapes are actually taken into account in relation to other interests and uses.

References

- Bussard J, Reynard E (in prep.) Heritage value and stakeholders' perception of four geomorphological landscapes in Southern Iceland. Geoheritage [submitted]. Di Méo G (2008) Processus de patrimonialisation et construction des territoires. In: Actes du colloque "Patrimoine et industrie en Poitou-Charentes : connaître pour valoriser", 12 septembre 2007, Poitiers-Châtelleraut, France. pp 87–109.
- Grandgirard, V. 1997. <https://doi.org/10.5194/gh-52-47-1997>. Reynard E (2004) Géotopes, géo(morpho)sites et paysages géomorphologiques. In: Reynard E, Pralong J-P (eds) Paysages géomorphologiques. Institut de géographie, Lausanne, pp 123–136.