

Aesthetic value

Humans experience and relate to ecosystems and landscapes through their aesthetic appreciation. Scenic beauty or visual quality of the landscape are one dimension that is widely recognised, deriving from the interaction between the biophysical features and the human observer¹⁾. The aesthetic value of a landscape has been related to biological, cultural and social dimensions. The biological dimension describes landscape aesthetic values through visual concepts such as coherence, legibility, complexity, mystery and diversity, as well as visual scale concepts, such as landscape rooms, visibility, openness, enclosure, spaciousness²⁾. High values have further been associated with natural landscape features like mountains, water, and vegetation, whereas urban growth, infrastructures, or garbage decrease the aesthetic appreciation³⁾. Social and cultural aspects play an important role in the perception of aesthetic values, and differences were found between different social groups or people with different cultural background⁴⁾.

Although research in visual aesthetic quality of landscapes is well established, efficient and standardised evaluation techniques for cultural ecosystem services are still needed to support decision-making and landscape planning⁵⁾. Aesthetic values have mostly been quantified by using indicators such as visual quality, number of scenic roads or house prices⁶⁾. To map aesthetic values, mainly spatial indicators are applied describing specific landscape features or pattern⁷⁾. Questionnaires or interviews are used to gather people's judgements⁸⁾, and participatory mapping exercises can integrate the spatial dimension⁹⁾. Spatial models by combining viewshed analysis with landscape indicators and human preferences via regression analysis are suitable for analysing a great number of observer points¹⁰⁾. Recently, studies used crowd-sourced information from social media such as Flickr and Panoramio to analyse landscape preferences by relating geo-tagged photographs to landscape visual indicators¹¹⁾.

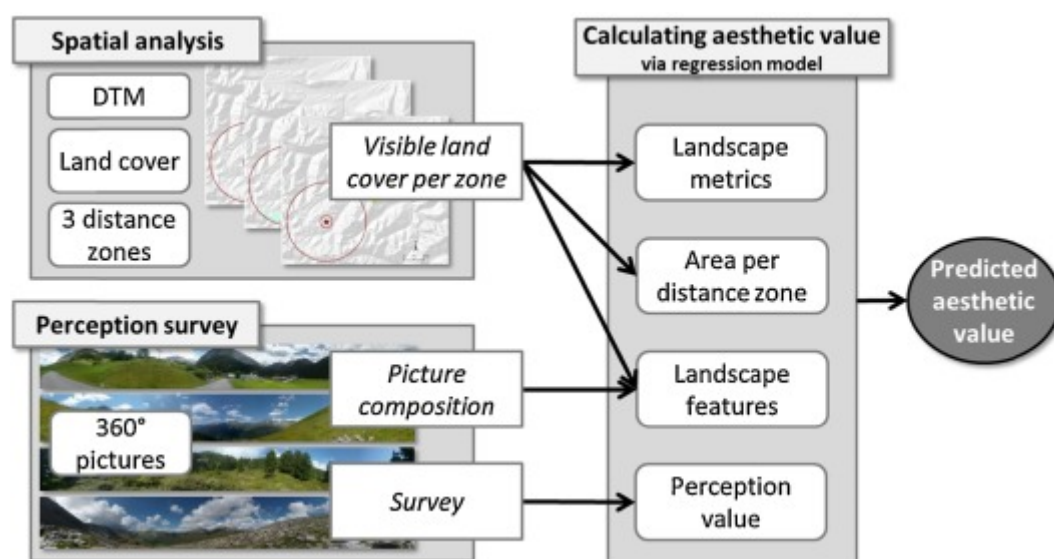


Figure 1: Spatial model to estimate aesthetic value in mountain areas (from Schirpke et al., 2016)¹²⁾. The model combines spatial analysis (landscape metrics, the visible area, landscape features) with landscape preferences from a perception survey via regression analysis. The model was applied in two study areas in the Central Alps to estimate the aesthetic value along hiking trails.



Figure 2: Examples of highly rated pictures from the perception survey (from Schirpke et al., 2016)¹³⁾

1)

Daniel TC. Whither scenic beauty? Visual landscape quality assessment in the 21st century. *Landscape Urban Plan.* 2001, 54, 267–281.

2)

Bourassa SC. *The Aesthetics of Landscape*; Belhaven Press: London-New York, UK, 1991.

3)

Real E, Arce C, Sabucedo JM. Classification of landscapes using quantitative and categorical data and prediction of their scenic beauty in North-Western Spain. *J. Environ. Psych.* 2000, 20, 355–373.

4)

Bauer N, Wallner A, Hunziker M. The change of European landscapes: Human-nature relationships, public attitudes towards rewilding, and the implications for landscape management in Switzerland. *J. Environ. Manag.* 2009, 90, 2910–2920.

5)

Plieninger T, Bieling C, Fagerholm N, Byg A, Hartel T, Hurley P, López-Santiago CA, Nagabhatla N, Oteros-Rozas E, Raymond CM, van der Horst D, Huntsinger L. The role of cultural ecosystem services in landscape management and planning. *Curr. Opin. Environ. Sustain.* 2015, 14, 28–33.

6)

Hernández-Morcillo M, Plieninger T, Bieling C. An empirical review of cultural ecosystem service indicators *Ecol. Ind.* 2013, 29, 434–444.

7)

Szücs L, Anders U, Bürger-Arndt R. Assessment and illustration of cultural ecosystem services at the local scale – a retrospective trend analysis. *Ecol. Ind.* 2015, 50, 120–134

8)

Soliva R, Hunziker M. Beyond the visual dimension: using ideal type narratives to analyse people's assessments of landscape scenarios. *Land Use Policy* 2009, 26, 284–294

9)

Plieninger T, Dijks S, Oteros-Rozas E, Bieling C. Assessing, mapping, and quantifying cultural

ecosystem services at community level. Land Use Policy 2013, 33, 118–129.

¹⁰⁾ ¹²⁾ ¹³⁾

Schirpke U, Timmermann F, Tappeiner U, Tasser E. Cultural ecosystem services of mountain regions: Modelling the aesthetic value. Ecological indicators 2016, 69, 78-90.

¹¹⁾

Tenerelli P, Püffel C, Luque S. Spatial assessment of aesthetic services in a complex mountain region: combining visual landscape properties with crowdsourced geographic information. Landscape Ecology 2017, 32(5), 1097-115.

From:

<http://www.wikialps.eu/> - **WIKIAlps - the Alpine WIKI**

Permanent link:

http://www.wikialps.eu/doku.php?id=wiki:aesthetic_values&rev=1498654616

Last update: **2017/06/28 14:56**

