

Abstract

The research in this study aims at increasing the knowledge concerning the validity of visual landscape quality assessment methods, and – more generally – at qualifying the treatment of the landscape as a visual resource in landscape and environmental planning. This is achieved by developing and applying a technique to validate existing scenic landscape quality methods. Based on an analysis and consolidation of scientific, legal and practical foundations and requirements for the evaluation of visual landscape qualities, a multi-step hierarchical research design is employed:

First, the analysis of more than 200 published methods to assess scenic landscape qualities showed that only few fulfilled the scientific criteria of objectivity, reliability and validity. This is especially true for the methods published in German language.

Second, more than 120 German local landscape plans were analysed. As has been assumed in the planning literature, the solid and representative empirical sample showed that visual landscape quality has been treated as a subordinate matter in local landscape plans during the past decades.

Third, a new method is proposed for gathering landscape quality judgements through the use of an online visual landscape quality assessment. This method applies for the first time techniques from psychological online research and online market research to a landscape planning context and to scenic landscape quality. A large number (more than 300 participants in an initial pre-test) and regarding age, education and geographical distribution diverse sample of respondents and user-based landscape assessments could be acquired. The objectivity, reliability and validity of online visual landscape assessment has been empirically tested and verified.

Finally, based on the three empirical studies described above, the main study, applying a validity test using internet-based data-acquisition methods was conducted. The visual landscape quality assessment methods from LEITL (1997) and BIELEFELD (1990) were tested regarding their validity, using case studies from all over Germany, which were photo-documented according to a standardized methodology. The empirical database of this main study consists of more than 1,600 participants and more than 5,700 complete photo assessments. Results show that for all criteria used within the two methods investigated, positive and statistically significant correlations between expert assessment (following those methods) and lay person judgements in the online assessment (used as external validation criteria) could be observed. Differences in the degree of these correlations occur: Whereas the method developed by LEITL (1997) proved to be a valid instrument to record the beauty of and overall preference for landscapes, it failed to pass correlation thresholds for the criteria of visual diversity, typicality and perceived naturalness. The method invented by BIELEFELD (1990) failed to prove its validity for all the criteria investigated.

In the last part of this study, the results achieved are critically discussed and research desiderata are formulated.