

# Overview for Exploring the Multisensory Landscape

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Land use change has had a fundamental impact on the livelihoods of people throughout the world. This Special Issue focuses on the research being conducted at the intersection of this land use change and the importance of maintaining landscapes that enrich humanity and our engagement with nature. Within this Special Issue, we explored the value of landscapes that heighten the senses. Visual Resource Stewardship is an area of research that closely aligns with understanding how changes in the environment may be perceived and experienced. Understanding the tools, processes, and theories involved helps us to better understand how land use change impacts humanity, which is a critical endeavor in landscape planning.

The goal of this Special Issue is to catalyze ideas and innovations between academia, practice, NGOs, and government agencies working to address the analysis, planning, valuation, design, and management of visual resources. We sought papers that investigate, exemplify, or theorize on the protection of visual resources in an era of major landscape changes on a regional, national, and global scale. This Special Issue also invites submissions that deal with multi-sensory topics at the intersection of people and the environment.

This Special Issue welcomed manuscripts that address the following themes:

- Multisensory landscape assessment;
- Visual quality and context sensitive design;
- Scenic resource valuation;
- Representation methods and systems used in assessments of visual perceptions;
- The visual effects of climate change and renewable energy.

This Special Issue stems from the fourth Visual Resource Stewardship Conference, which is part of the biennial conference series held in 2017, 2019, 2021, and 2023. The aim of these conferences is to share ideas and discuss issues associated with the assessment and protection of visual resources in an era of continued and new landscape changes—regionally, nationally, and globally. The articles from the 2017 conference have been published by Gobster and Smardon [1], and selected papers from the 2019 and 2021 conferences have been published in a Land Special Issue journal edited by Chamberlain, Hoffman, and Smardon [2].

The twelve papers within this Special Issue cover the range of themes mentioned above within the List of Contributions. Three articles address the means of assessing landscapes for different purposes. Miller et al. have developed a user-friendly means of identifying scenic viewsheds in Virginia, USA. Shen et al. have developed a method for assessing rural landscapes for restoration potential in China. Faidon et al. have developed a cumulative index for management and protection for cultural and natural heritage areas in the Parrhasion Heritage Park in Peloponnese, Greece.

Three articles specifically address multisensory landscape studies. Finnigan assessed perceived relationships between outdoor built environments and sensory sensitivities, focusing on autism, ADHD, and dyslexia. Li et al. used virtual reality and machine



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learning to assess residents' perceptions of residential landscape space in both non-snow and snow seasons. Li et al. assessed the emotional impact of high-density urban river spaces in Liangma River, China, using both qualitative questionnaires and quantitative physical data.

Two articles by Miller and Evans and Chamberlain critique the use of eye tracking methods for landscape visual assessment. Yao and Sun use preference questionnaires and eye movement heat maps to identify rural landscape visual quality in Southwestern Guihou, China. Jaing et al. analyze the tourist-perceived physical and aesthetic quality of rural settlements in Zhaoxing Dong village in China. Dunkel and Burghardt review the utilization of user-contributed data to assess perceived landscape change both spatially and temporally. Last, Gao et al. offer a systematic literature review of methods for assessing highway right-of-way visual quality.

All of the aforementioned manuscripts illustrate the use of new quantitative and qualitative methods in assessing people's perception of the multisensory environment given the challenges of landscape change, both spatially and temporally.

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#### List of Contributions

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