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Editorial

What do we mean by "landscape"?

As a prelude to revising the Aims and Scope of Landscape and Urban Planning (LAND), our last editorial discussed the journal's "intellectual landscape" as revealed by an analysis of conceptual and proximal relationships between articles published in LAND and 50 other research journals (Gobster & Xiang, 2012). The six conceptual themes we identified-ecology, planning and management, social science, sustainability science, design and engineering, and GIScience-help situate the journal within a diverse range of disciplines and professional fields. The closest ties between LAND and other journals, however, suggest that the over-arching concept of *landscape* provides a core concern for shared involvement. But does shared involvement equate to a shared understanding of the meanings of landscape? Diverse understandings across disciplines, methodological approaches, geographies, and cultures can deepen our grasp of the problems and issues we care about, but simply assuming that landscape is well understood lends an ambiguity to our endeavor as a journal community and as editors in guiding journal content in productive directions. In this editorial and a companion essay (Nassauer, 2012) immediately following it, we examine the problems and potentials of using landscape as an organizing concept for scholarship and practice.

1. Problems

First, these examples from our brief tenure as editors illustrate some problems we have encountered in understanding the appropriateness of new submissions within the journal's aims and scope:

• Which aspects of landscape are we talking about? The authors of a recent submission on land cover change documented the rapid spontaneous forestation of their European study area following agricultural land abandonment, resulting in a homogenization of previous culturally-maintained landscape patterns but a newly realized potential for conserving a number of endangered vertebrate species, including bears and wolves. When the authors' management recommendations called for maximizing the growth of mature forest cover, one reviewer protested that the authors had focused on nature conservation rather than landscape conservation and in so doing ignored not only the millennia-old patterns of cultural activity and their attendant contemporary and heritage values, but also the significant biodiversity that landscape sustains. The subsequently published paper was revised to acknowledge this trade-off and the issue will be further addressed in a forthcoming essay by the contrary reviewer. Not only does this example reveal the multidimensional nature of landscape description, but also the diversity of values that influence how we interpret these descriptions. For an applied journal such as LAND that emphasizes the linking of research to practice, only when we are clear about which aspects of landscape we choose to address and not address can our research provide meaningful guidance for planning, design, and management.

- Where do the boundaries of landscape begin and end? LAND has been an early supporter of research on green roofs and is currently among the top 5 research journals in terms of numbers of green roof articles published. Yet what distinguishes a green roof paper appropriate for submission to LAND compared to, say, Ecological Engineering or HortScience? Surely for LAND, the landscape should play a substantive role in a submission's storyline, if not as a main actor in terms of the selection and measurement of variables for study, then as a primary component of the problem setting and its implications for planning, design, and management. Without providing an understanding of landscape, papers centering on the drainage characteristics of substrate materials or plant response to nutrient availability lessen the potential to inform bigger questions about the development of sustainable green infrastructure or contributions to functional and cultural ecosystem services, and might find a better fit in one of these alternate journals.
- How is the research effort relevant to our understanding of landscape? LAND emphasizes applied research and although most submissions deal with problems relating to a physical area of land of given extent, we also receive papers where the main focus is on modeling or methodological development and analysis. While the maxim that "there is nothing as practical as a good theory" surely also applies to modeling and measurement efforts, concerns for relevance, interpretability, and communicability across disciplines and fields must also weigh in alongside more typically used evaluative criteria of research quality such as validity, reliability and generalizability when considering the appropriateness of paper submissions to LAND. Outside of this journal, these criteria have been voiced by Dramstad (2009) in the context of the burgeoning number of landscape metrics in recent years—are they "useful indicators" or mainly "fun tools" for landscape ecologists? But they particularly apply to LAND, and not only with respect to landscape ecological metrics but with modeling and methodological efforts in other areas of ecology, GIScience, and the social sciences.

2. Potentials

While consideration of each of these questions will help inform our revision of the Aims and Scope, how we answer them hinges in part on what the term landscape means in the context of LAND. Strangely, while versions of the Aims and Scope define "landscape ecology," "landscape planning," and "landscape design" as topical areas of interest (e.g., Rodiek, 1992), there has been no official

definition of "landscape" in past editorial statements. Outside the journal, definitions of landscape by historians and researchers vary widely, from humanistic treatments of landscape as scenery beheld within a given view (Palka, 1995) to ecological renditions of landscapes as organizations of spatial patterns that influence ecosystem processes (Wiens, 1999). Longtime LAND board member Peter Jacobs places landscape at the nexus between culture and nature (Jacobs, 1991) and indeed, the journal's original Aims and Scope and its subsequent variations, while never offering an explicit statement defining landscape, offer substantive indications for a similar, integrative concept:

- focus on land use (originally exclusive to non-urban, but later including urban and urbanizing environments);
- direct primary concern toward the protection of ecological systems:
- understand human-environment interactions resulting in landscape change;
- employ multi-disciplinary approaches from the ecological and social sciences and the planning and design professions;
- provide solutions for enhancing human and environmental wellbeing through design, planning and management.

As one of the reviewers of our editorial on the journal's intellectual structure, board member Joan Nassauer took note of our mention for the need to better define what we mean by landscape. Nassauer, whose research and teaching over the past 30 years has examined the cultural and ecological dimensions of landscape and the potentials of design for aligning them in mutually beneficial ways, possesses keen insights into the meanings of landscape as they relate to this journal. In a Perspective Essay following this editorial, written for a forthcoming book on Resilience in Urban Ecology and Design (Pickett, Cadenasso, & McGrath, forthcoming) and adapted here to help clarify our aims and scope, Nassauer (2012) situates the contemporary concept of landscape within J.B. Jackson's idea of the vernacular landscape. Like this journal's longstanding focus on human use of the land, the vernacular fills a broad gap between professionally designed places and land substantially free from human development and use. While rural landscape planning remains a legitimate concern of this journal, Nassauer's emphasis on urban ecological design aligns closely with a long-evolving trend in this journal to embrace the reality that urban areas deserve increased attention, and that with current and anticipated rates of global urbanization, a commitment that the journal must take a primary role in promoting sustainable urban social-ecological systems through landscape design, planning, and management.

But Nassauer's essay goes beyond simply defining the boundaries of landscape; it also offers a conceptual framework for understanding how landscape provides a visible and integrative context for synthesis and creation of shared goals for action through landscape ecological design and planning. While members of the

journal community might vary widely in their disciplines, interests, and approaches that relate to the study of landscapes, the laws and principles proposed by Nassauer suggest how we all might find common ground for moving forward in addressing the pressing issues of landscape change. And as the current editors of this journal, her work also suggests how we might move forward with a better understanding of the meaning of landscape and how it can guide the journal in promising directions.

We invite your thoughts on this editorial and Nassauer's essay, and to further the dialogue Elsevier has kindly extended free online access to both pieces for a period of one year. If there is sufficient response, we hope to follow up on this work in a future issue of the journal with additional Perspective Essays and Commentaries (see Volume 105(3) Editorial on Article Types for submission guidelines).

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