

Editor's Introduction

IN MEMORIAM

Many of us in the academic community represented by the Council of Educators in Landscape Architecture were deeply saddened to learn of the passing of Beth Diamond, Assistant Professor of Landscape Architecture at the University of Michigan on April 29. The University of Michigan School of Natural Resources and Environment website notes that Beth was an energetic and inspiring instructor in teaching the first quarter design studio. Prior to her appointment at Michigan, she was a member of the landscape architecture faculties at California Polytechnic State University in San Luis Obispo and the University of Kentucky. Her contributions to *Landscape Journal* include *Awakening the Public Realm: Instigating Democratic Space* (Spring 2004, 23(1): 22–39. Her spirited presence at CELA meetings will be missed.

EDITORIAL TRANSITIONS

At the end of 2013 calendar year, co-editor Lance Neckar and managing editor Vincent deBritto will leave the *Landscape Journal* (LJ) Editorial Office. Professor Neckar is now Professor of Environmental Analysis and Director of the Robert Redford Conservancy for Southern California Sustainability at Pitzer College in Claremont, CA. Senior Lecturer deBritto has returned to his full-time responsibilities in instruction and research in the Department of Landscape Architecture at the University of Minnesota. Their intelligence, collegiality, wisdom, and enthusiasm will be missed. While production of volumes 29, 30, 31, and 32 has been a joint venture among the current staff, Neckar and deBritto were particularly instrumental in the conceptualization and production of the special double issue on the philosophy and influence of Lawrence Halprin (31:1–2), and deBritto also receives full credit for the redesign of the *Journal's* format introduced with the 32:1–2 issue. His brilliant efforts in producing volumes 29–32 are particularly note-worthy.

With approval of CELA Board and Landscape Journal Editorial Board, Professor Daniel Nadenicek, Dean of the College of Environment and Design at the University of Georgia (UGA) and former Book Review Editor for the Journal, will succeed Neckar as co-editor. Similarly, UGA Associate Professor Ashley Steffens will succeed deBritto as managing editor. Editor Pitt welcomes these individuals with proven track records in academic publishing to the LJ editorial team. As of January 1, 2014, the editorial office of LJ will be located at the following address:

Landscape Journal Editorial Office
College of Environment and Design
285 South Jackson Street
University of Georgia
Athens, GA 30602

Manuscript submissions and communications after January 1, 2014 should be submitted to this address.

The co-editors wish to affirm the intent of the two universities that their involvement in the editorial process of *Landscape Journal* will persist only through the completion of the current editorial term, which will end on December 31, 2016.

ABOUT THIS ISSUE

In issues 29:2 (Fall 2010), 30:1 (Spring 2011), and 30:2 (Fall 2011), we issued calls for papers to be published in this special issue of *Landscape Journal* on multifunctional landscapes. In these calls, we defined multifunctional landscapes as those that deliver four types of material and immaterial benefits (or ecosystem services) for humankind in a specific place over a determined period of time. Regulating services make it possible for humans to inhabit the earth (e.g. atmospheric regulation of insolation); resources of direct utilitarian value (e.g. food and fiber) are products of provisioning services; and cultural services provide

immaterial values associated with education, aesthetic experiences, and cognitive development. Finally, supporting services include the value of sustaining resilient ecosystems capable of delivering the other three types of services.

An ecosystems service based definition of multifunctional landscape demands the use of metrics to monitor performance of an ecosystem in delivering a desired mix of services. We suggested the need for “adaptive design” strategies that could identify desired mixes of services and model and compare the capacity of alternative design scenarios to deliver desired levels of performance. Multifunctional landscapes involve an explicit coupling of human and natural systems. They therefore evolve in a non-linear and organic manner that responds to the intentions and actions of a society making and implementing design decisions that affect but do not dictate the trajectory of biophysical and socio-cultural attributes of a particular setting. Of critical importance is the means by which “desired mixes” of services are defined. The necessity of engaging multiple publics in defining desired services and multiple disciplines in specifying and measuring performance requires a design and planning approach that is collaborative and transdisciplinary. The questions of to whose ecosystem services are we attending and in what manner raise the issues of equity and political empowerment among multiple stakeholder groups in the design of multifunctional landscapes. Finally, we raised issues about the effects of time on the delivery of multiple ecosystem services in a specific location.

There are some in the landscape architectural community who consider the issue of multifunctional landscape design to be a case of “old wine in new bottles.” Indeed, in developing programs for the design and planning of landscapes across geographic scale, the issues of identifying and evaluating the diverse needs of multiple user groups have always been the basis for developing the design program for identifying, specifying and organizing uses desired by the multiple stakeholders who will use a landscape design/plan. Similarly, since the foundational work of Frederick Law Olmsted, Horace William Shaler Cleveland, Charles Eliot, Warren Manning and others, landscape architecture has always attended to biophysical and socio-cultural aspects of a site and its context.

The ground-breaking work of Randy Hester and others provides a firm foundation for community landscape design based on the needs and perspectives of those who must live with the results of a design/plan. A multifunctional approach to landscape design and planning can be distinguished from precursors by its emphasis on defining a mix of specific ecosystem services that will be delivered in the creation of multifunctional landscapes, its emphasis on engaging pertinent stakeholders in defining an appropriate “mix of specific services” to be provided, its focus on the use of landscape metrics to evaluate performance of a design/plan in actually delivering a desired mix of service, and its use of an adaptive design process that defines and evaluates alternative design/planning scenarios relative to a mix of agreed upon mix of ecosystem services.

We received multiple manuscript submissions related explicitly to our call as well as other submissions having a clear link to the design of multifunctional landscapes. The submissions responded in their own ways to the themes established in the call. We will introduce the 11 articles and their authors appearing in this issue according to the themes they reflect.

Alpa Nawre, Assistant Professor of Landscape Architecture at Kansas State University, applies a sociologically grounded theory to enrich and advance the understanding of cultural ecosystem services associated with a type of historical multifunctional landscape found in India that is known as a *talaab* (a type of pond). Using narrative discourse and photographic illustration, the social, historical, spiritual, and utilitarian meanings attached to the *talaab* are interpreted as a series of cognitive and physical “frames” or cultural definitions of reality that organize human experience. The lamination of these frames defines and organizes human activity associated with the *talaab* and the diverse cultural services delivered by this unique form of multifunctional landscape. Also working within the realm of cultural ecosystem services, Jessica Cook, Mallika Bose, Wes Marshall and Debbi Main (from the University of Colorado and the Pennsylvania State University) examine the capacity of urban design quality to enhance the provision of opportunities for walking as a means of enhancing active living in small Pennsylvania towns. Ratings of walkability and design quality are examined to uncover

more nuanced understandings of how improvements in the built environment of small towns may be able to enhance provision of cultural services associated with active living. The authors also offer suggestions on how the integrated use of walkability and design quality indices might enhance the efficacy of design decisions for promoting active living in multifunctional urban settings.

Katherine Melcher, Assistant Professor of Landscape Architecture in the College of Environment and Design at the University of Georgia, casts a critical eye on the processes used to develop designs for multifunctional landscapes. She examines two community design case studies in Oakland, CA that used an equity-based approach of advocacy planning versus an empowerment-based strategy to create quality public space in two underserved communities. In considering lessons of the case studies, she notes that the study of multifunctional landscape must be as much about the qualitative relationship people have with the land as it is about its quantitative performance in delivering diverse ecosystem services.

Two articles focus on performance evaluation and its role in the design of multifunctional landscape. Mary Myers, Associate Professor of Landscape Architecture at Temple University, anchors her work in preparing a Landscape Architecture Foundation Case Study Investigation of the LEED certified design at the Salvation Army Kroc Community Center in Camden, NJ in the conceptual framework of Charles Jencks' ideas of multivalent design. In evaluating on-site mitigation of construction waste and stormwater as well as carbon sequestration and plant stewardship at the Kroc Center, she implies that Jencks' concept of multivalent design may be used as a metaphor for the creation of multifunctional landscapes. Gary Austin, Associate Professor of Landscape Architecture at the University of Idaho, examines the ability of decentralized systems of constructed treatment wetlands located within public open space to provide ecosystem service benefits to society at multiple geographic scales. He notes that strategic deployment of these systems has the capacity to achieve regulating ecosystem services relating to secondary and tertiary treatment standards for stormwater while also contributing provisioning services related to creating wildlife habitat and recreational opportunity and cultural services related to scenic quality and education. In addition, constructed

treatment wetlands may also be instrumental in defining a green infrastructure armature for guiding future urban development patterns.

Contributions by Katherine Crewe, Associate Professor of Planning at the University of Arizona and Joshua Zeunert, a Lecturer at the Writtle College of Design in the UK speak to ecosystem services (or disservices) involved in using native plants in urban environments. Crewe discusses the efforts of landscape architects to promote the use of Sonoran native plants in southern Arizona communities. She notes that these efforts have delivered cultural services in providing a "vernacular" landscape for Arizona's cities and regulating services in regard to mounting summer temperatures and excessive use of borrowed water. These accomplishments have come in the face of radical obstacles for use of native plants in landscape design. This theme is picked up by Zeunert, who argues that urban restoration ecology (URE) practices in Australia focusing on the reinstatement of native/indigenous vegetation in urban areas as an imposed land use approach are based on questionable interpretations of natural landscapes. He notes several ways in which URE perspectives exclude consideration of non-native biodiversity. Zeunert suggests that broader concepts of restoration and multifunctional landscape design techniques will provide more successful solutions that are specifically relevant to urban contexts of Australia.

The remaining four articles wrestle with the issues of multifunctional landscape design and planning in larger and more complex realms of time and geographic scale. Karl Kullmann, Assistant Professor of Landscape Architecture at the University of California–Berkeley examines the depopulation of Australia's Western Wheat Belt and its implications for urban design. He proposes a series of vernacularly-based urban design strategies that accommodate the changing functions of urban centers as this depopulation unfolds. Matthew Potteiger, Professor of Landscape Architecture at the State University of New York–College of Environmental Science and Forestry, argues that food and landscape are mutually constituted through shared ecological, social, and spatial system. He outlines ways of representing and shaping the relationships between food and landscape using a framework of food systems, narratives, networks, and spaces.

Meltem Erdem, Assistant Professor in Landscape Architecture at the Istanbul Technical University and Joan Nassauer, Professor of Landscape Architecture at the School of Natural Resources and Environment at the University of Michigan evaluate the ethical issues and design opportunities associated with brownfield remediation. They suggest three strategies by which landscape appearance can limit exposures to residual contamination by cueing the behavior of humans and other organisms to avoid exposures on redeveloped brownfield sites. These strategies are discussed as they affect the repurposing and reuse of land in the Gasworks Park, Duisburg Nord, and Crissy Field projects. Finally, borrowing from John Dewey's instrumental theory of knowledge, Brian Davis, Assistant Professor of Landscape Architecture at Cornell University, offers landscape instrumentalism as a means of resolving the gap between intention and reality in landscape architecture. Through a speculative proposal for the heavily polluted Riachuelo Canal in Buenos Aires, Argentina, he develops a series of methods and techniques for modeling, computation, analysis and construction of multi-functional landscapes.

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