

# Landscape Journal and Scholarship in Landscape Architecture

## The Next 25 Years

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**ABSTRACT** Over the past 25 years *Landscape Journal* has made significant contributions to the scholarly base of knowledge needed for building the discipline of landscape architecture. The Council of Educators in Landscape Architecture (CELA), which owns *Landscape Journal*, recently identified five strategic goals for the journal: enhance subject-matter diversity, nurture scholarship in landscape architecture, increase readership and impact, reach out to diverse new contributors, and strengthen the connection to practice. Examination of its past performance relative to these goals and in comparison with other landscape disciplines and scholarly journals—through a variety of citation analysis tools, manual searches of the journal, and interviews of editors, publishers, and other decision makers in landscape architecture—shows that the journal is positioned to achieve some of these goals. Others will require substantive changes. To enhance the societal relevance of landscape architecture as a profession and ensure the intellectual growth of its academic programs, *Landscape Journal* must achieve all of CELA's stated goals. Suggestions for moving the journal beyond the creation of knowledge by and for landscape architects, and toward greater participation in the broader community of scholars and practitioners concerned with design, planning, and management of the land, are based on these findings.

**KEYWORDS** Research, online publication, citation analysis

*Landscape Journal* (*LJ*) was launched in 1982 in response to the increasing perception of educators in landscape architecture that the profession, to grow as a discipline, must take responsibility for generating its own knowledge base of research and other scholarly inquiry (Zube 1980). The journal's mission statement goal codified the goal on the contents page of every issue of its first 25 years of publication: "*Landscape Journal* is dedicated to the dissemination of the results of academic research and scholarly investigation of interest to practitioners, academicians, and students of landscape architecture."

The knowledge base developed in the journal over those 25 years, contributed mainly by landscape architects for landscape architects, has helped to identify issues central to the field; generated new information for improved research, teaching, and practice; contributed ideas and frameworks for theory development; and kept readers informed of recent books, conferences, and exhibits as well as passages of people shaping landscape architecture. These are important accomplishments,

and in these and other respects the journal is an unqualified success.

*LJ* has entered its second quarter-century of publication with a strong reputation in the discipline and is poised to make a significant contribution to the broader community of scholars, educators, and practitioners concerned with activities spelled out in the journal's subtitle: "Design, Planning, and Management of the Land." With the 2007 redesign of the journal, the insular mission statement was removed, and the following year an updated Web site anticipated a diverse audience of readers and contributors.

Participation and leadership in this broader community are critical to the relevance of landscape architecture scholarship and could raise significantly the profiles of both the profession and the discipline. *LJ* could invite many other disciplines to participate with landscape architects in transdisciplinary environmental innovation. It could demonstrate that landscape architecture is integral to endeavors increasingly recognized for their societal importance, such as green design (Sustainable Sites Initiative 2008), sustainability science (Kates et al. 2001; Wu 2008), environmental aesthetics and ethics (Carlson and Lintott 2008; Brady 2007), and the interrelationships between landscape health and human health and well-being (Butler and Oluoch-Kosura 2006; Chivian and Bernstein 2008).

Society would benefit if landscape architecture scholarship, as published in *LJ*, were more influential. Landscape architecture programs and faculty would benefit as well. Academic institutions around the world continue to challenge landscape architecture programs to defend the value of the integrative scholarship and studio pedagogy that long have been signatures of the discipline (Rodiek 2006; Swaffield 2001). Making *LJ* more demonstrably relevant to society and to other disciplines in the natural and social sciences and in the arts and humanities is a fundamental way to demonstrate this value.

The journal, like the profession of landscape architecture, is at a critical point in its history, in large part because monumental global changes and challenges

ensure that the next 25 years will be different from the last. Digital media challenge the viability of print media of all types; culture, finance, and trade have become global phenomena for better or worse; urbanization has become the dominant form of human settlement; and legacies of anthropogenic disturbance to biogeochemical systems often persist long after the causal, human, behavioral patterns cease. Uncertainty about the trajectories of these trends, as well as about their anticipated and unintended effects, abounds. Consequently, decisions about landscape design, planning, and management at all scales must be grounded in the best available place-based insights and draw upon scholarly depth and generalizable scientific knowledge.

According to Luymes, Nadenicek, and Tamminga (1995, 187), “A study of our history points out that the profession was at its most influential when it was inextricably linked with the leading environmental and social thinkers of the age—and it was at its most irrelevant when it was not.” This transdisciplinary imperative is arguably more critical today than ever. How can the leading academic journal of landscape architecture help ensure that the profession and discipline actively participate in shaping the future?

Discussion about research and scholarship in landscape architecture has continued in fits and starts since the journal’s inception (Chenoweth 1992; La Gro 1999; Milburn, Brown, and Paine 2001; Miller 1997; Nadenicek 1996; Nassauer 1985; J. Palmer, Smardon, and Arany 1984; Riley 1990; Swaffield 2001; Zube 1998). But while there is still debate about the nature and appropriate role of research in landscape architecture academic programs, few would question the value of a scholarly journal dedicated to issues shaping the field.

Planning for the retirement of Elen Deming as editor of *LJ*, CELA in 2008 articulated five strategic goals to help ensure *LJ*’s relevance, significance, and sustainability as the journal enters its next 25 years:

1. Embrace diverse subject matter.
2. Nurture scholarship in landscape architecture.
3. Increase readership and impact.

4. Reach out to new contributors and increase the diversity of contributors.
5. Relate scholarship to the practice of landscape architecture (CELA 2008).

To provide CELA with a baseline for evaluation, we investigated the journal’s past performance relative to these goals. Below, we present the methods and results of our investigation. We conclude by outlining three specific suggestions to help the journal advance landscape architecture scholarship and its relevance to society.

## METHODS

Our approach to addressing these goals relied in large part on citation analysis, a bibliometric method for quantifying the patterns, frequency, and impact of scholarly publication (Garfield 1983). The computerization of citation data within the last decade has made citation analysis an increasingly used and widely accepted means of assessing the performance of individual scholars and their institutions as well as the stature of the scholarly publications to which they contribute.

The two most prominent citation analysis databases, the Web of Science and Scopus, index a large number of academic journals and books (9,300 for Web of Science and 16,000 for Scopus) to provide a detailed profile of journal and author information. Newer, Internet-based systems such as Google Scholar provide selected information on citation counts from a broader selection of scholarly work available online, including unpublished reports, conference papers, and dissertations (Meho 2007).

All of these systems are evolving rapidly, due to the proliferation of electronic publication and demands for greater inclusion of material. For example, since the time we completed the analysis reported here, the Web of Science has added selected conference proceedings to its database search capabilities and Scopus has added *LJ* as one of its indexed journals.

Our citation analysis began in September 2008 with a manual search of *LJ* back issues from 1982 to 2008—Volumes 1(1) to 27(1)—and an online search of the Web of Science and Scopus databases. Although *LJ* was not indexed by either online database at the time of our analysis, each database provided counts of *LJ* articles cited in the publications it did index as well as useful information on authorship and publication in landscape architecture and related fields.

To broaden this base of information, we conducted a January 2009 citation search in Google Scholar and a March 2009 search of the *Avery Index to Architectural Periodicals*, both of which provide citation information on *LJ*. Finally, we conducted a selected number of phone and email interviews with journal editors, publishers, other key individuals to understand the workings of *LJ* and other journals and publishing houses.<sup>1</sup>

To understand subject-matter diversity (Goal 1), we classified the thematic content of past articles published in *LJ* and subjectively assessed the journal's niche position and size across these themes by comparing it to other landscape-related journals.

To consider how the journal nurtures scholarship in landscape architecture (Goal 2), we sampled full-time landscape architecture faculty at research-oriented schools in North America and searched Scopus and the *Avery Index* to identify faculty members' patterns and rates of peer-review publication in *LJ* and other journals.

To investigate readership and impact (Goal 3), we used Scopus and the *Avery Index* to look at the range of journals in which landscape architecture faculty members publish and used a Web of Science Cited Reference Search and a Google Scholar search to identify themes of top-cited *LJ* articles. We also estimated the impact factor for *LJ* and used the Thomson Reuters *Journal Citation Reports 2007 Edition* (2008) to compare it to the impact factors of other landscape-related journals.

To help understand author diversity (Goal 4), we classified the disciplinary affiliation of *LJ* authors and used Scopus to compare them with author affiliations in other landscape-related journals.

Finally, to see how *LJ* might better connect the research and practice aspects of landscape architecture (Goal 5), we compared the communications structure of landscape architecture in North America (that is, *LJ/CELA—Landscape Architecture/American Society of Landscape Architects [ASLA]*) with that of other landscape-related fields and interviewed leaders in landscape architecture organizations. Further detail on specific methods is given in the text and in tables of our findings for each goal.

We acknowledge the limitations of our approach. The quantitative measures of citation analysis cannot address the richness of scholarly work in a field such as landscape architecture (Perkel 2005), which includes well-established traditions of book publishing, peer-reviewed conference proceedings, juried exhibitions, design competitions, and peer-reviewed project work. Additionally, our database measures are not always commensurable with each other, and in some cases they prevent making direct comparisons with our manually collected *LJ* data. Despite such limitations, we think our findings are significant and present them below as a basis for continuing discussion about scholarly publication in *LJ* and more broadly in landscape architecture.

## RESULTS AND IMPLICATIONS

### Goal 1: Embrace diverse subject matter

In investigating this goal we found that while *LJ* content has addressed diverse landscape themes over the years, its strongest niche areas are narrow. To investigate subject-matter diversity, we first categorized the articles published in *LJ* from 1982 to 2008.

Empirical work comprises about two-thirds of the journal's content, and of this, landscape history and design themes have risen in importance over the years while other themes—particularly those dealing with environmental management, technology, and landscape perception—have decreased markedly. Of the remaining themes, 19 percent of content includes papers focused primarily on theory and criticism of several of the above-mentioned themes, 10 percent is on research

Table 1. Thematic content of *Landscape Journal* articles, 1982–2008

Editorships Article Category	Alanen/ Morrison		Riley/ Brown		Helphand/ Melnick		Deming/ Palmer		All	
	n	%	n	%	n	%	n	%	n	%
Landscape history/ people/historic preservation	16	18	29	34	27	26	25	31	97	27
Environmental management/ sustainable design/urban forestry	10	11	5	6	4	4	8	10	27	8
Technique/GIS/computer graphics/visualization/etc.	7	8	1	1	1	1	2	3	11	3
Landscape perception/ assessment	20	23	13	15	10	10	4	5	47	13
Design case study/ methods	6	7	4	5	13	12	11	14	34	9
Regional landscape planning/ policy study	9	10	2	2	5	5	9	11	25	7
Theory/criticism of design, ecology, aesthetics	12	14	22	26	24	23	9	11	67	19
LA education/ research/profession	8	9	9	10	8	8	10	13	35	10
Other (photography/literary/ tribute/sketch/poetry/etc.)	0	0	1	1	13	12	2	3	16	4
<b>Total</b>	<b>88</b>	<b>100</b>	<b>86</b>	<b>100</b>	<b>105</b>	<b>101</b>	<b>80</b>	<b>101</b>	<b>359</b>	<b>100</b>

and education in landscape architecture, and about 4 percent is devoted to other forms of expression, including photography, sketches, and poetry (Table 1).

This part of our analysis largely replicates a recent, independent investigation by Powers and Walker (2009), and while the content categories of their study differ from ours, both analyses identify a burgeoning of historical studies and a concomitant decrease in articles dealing with environmental management and landscape planning. In a recent *LJ* editorial, Deming (2008) also observed this trend, and while she explained it as a reflection of the interests of the contributors and a rigorous peer-review process, she also challenged *LJ* contributors to concern themselves with the increasingly critical social and environmental problems related to design, planning, and management of the land.

While landscape architecture as a discipline has good reason for addressing these broader concerns, *LJ* faces some stiff competition in doing so. Looking at the themes identified, we attempted to assess subjectively how *LJ*, in comparison with other landscape-related journals, is positioned to address them (Table 2). Some niches, such as those dealing with environmental management and landscape planning, are big and occupied

by other journals including the large, well-established *Landscape and Urban Planning* and *Environmental Management*, and an increasing number of newcomers such as *Urban Forestry and Urban Greening* and *Living Reviews in Landscape Research*, which focus on specialized subtopics.

Other niches in which *LJ* is strongly positioned are quite small and, if not framed in a broader societal context, may be perceived as of low relevance to all but a narrow audience. This suggests that *LJ* subject matter should be diversified in ways that both authentically represent the discipline and realistically appraise opportunities to demonstrate relevance and increase readership of the journal beyond the discipline.

### Goal 2: Nurture scholarship in landscape architecture

In assessing performance on this goal we found that while *LJ* has been highly successful in the demanding and important work of nurturing entry-level scholars in landscape architecture, it has been less successful in drawing submissions from established scholars, especially those within the discipline producing the largest number of refereed publications.

Table 2. Niche position and size of *Landscape Journal* in relation to other journal publications (Authors' assessment).

Themes	LJ niche position	Niche size	Competing journals
Landscape history/ people/historic preservation	Strong	Small	<i>Landscape Research, Environmental History, Studies in the History of Gardens &amp; Designed Landscapes, Buildings and Landscapes</i>
Environmental management/ sustainable design/ urban forestry	Weak	Big	<i>Landscape and Urban Planning, Journal of Environmental Management, Environmental Management, Urban Forestry and Urban Greening, Landscape Ecology, Landscape Online</i>
Technique/GIS/ computer graphics/ visualization/etc.	Weak	Medium	<i>Photogrammetric Engineering &amp; Remote Sensing, International Journal of GIS Science, Remote Sensing of the Environment</i>
Landscape perception/ assessment	Weak	Medium	<i>Landscape and Urban Planning, Journal of Environmental Psychology, Environment and Behavior, Journal of Environmental Management, Environmental Management</i>
Design case study/ methods	Strong	Medium	<i>Journal of Urban Design, Journal of Landscape Architecture, Places</i>
Regional landscape planning/policy study	Weak	Big	<i>Landscape and Urban Planning, Environmental Management, Environmental Science and Policy, Land Use Policy</i>
Theory/criticism of design, aesthetics, ecology	Moderate	Medium	<i>Journal of Urban Design, Landscape Ecology (Perspectives), aesthetics Environmental Ethics, Journal of Aesthetics and Art Criticism, Trends in Ecology &amp; Evolution</i>
LA education/research/ profession	Strong	Small	<i>Journal of Landscape Architecture</i>
Other (photography/ literary/tribute/sketch, poetry/etc.)	Strong	Small	<i>Places</i>

To understand how *LJ* might further nurture scholarship in landscape architecture, we identified permanent faculty members (assistant through professor level) employed in 30 research-oriented graduate programs of landscape architecture in the United States and Canada (Table 3). We chose 17 programs from Tai's (2003) study of doctoral programs in landscape architecture and added four doctoral and nine master's level programs based on our experience and information from ASLA, departmental, and other websites. From this sample we removed listed faculty members who were not landscape architects or did not teach landscape architecture courses. This gave us a sample of 284 individuals, and we

searched the Scopus database for the articles they published in the past 10 years (1999–2008). Scopus tracks 16,000 peer-reviewed journals in the sciences, arts, and humanities along with some professional journals (including *Landscape Architecture* magazine), but since it did not cover *LJ* at the time of our analysis we manually added *LJ* data to our sample.

In querying this database we found that landscape architecture faculty produced an average of 2.8 peer-reviewed articles over the last 10 years, or less than one article every three years. We also discovered that almost half (46 percent) of the landscape architecture faculty members in our sample did not publish any peer-

Table 3. University Ph.D. and masters' degree programs in landscape architecture included in the sample for analysis (Tai, 2003; ASLA Web site; Internet search)

University	Masters	PhD
Arizona State University	MLA	Environmental Planning and Design
Clemson University	MLA	Environmental Design and Planning
Harvard University	MLA	Program in Architecture, Landscape Architecture and Urban Planning
Iowa State University	MLA	None
Louisiana State University	MLA	None
North Carolina State University	MLA	Design Program in the College of Design
Ohio State University	MLA	None
Pennsylvania State University	MLA, MSLA	None
State University of New York at Syracuse	MLA	Graduate Program in Environmental Science, emphasis in Landscape Architecture
Texas A&M University	MLA	Urban and Regional Science, College of Architecture
Texas Tech	MLA	Land-Use Planning, Management, and Design
University of Arizona	MLA	None
University of British Columbia	MSLA/MALA	None
University of California-Berkeley	MLA, MLAEP	Environmental Planning
University of California-Davis	MSLA	Geography, Environmental Horticulture, Ecology or Community Development w/ emphasis in landscape architecture
University of Colorado	MLA	Design and Planning
University of Florida	MLA	Design, Construction and Planning
University of Guelph	MLA	Program in Rural Studies
University of Illinois Urbana-Champaign	MLA	Program in Architecture and Landscape
University of Maryland	MLA	Urban and Regional Planning, Natural Resource Sciences
University of Massachusetts	MLA	Regional Planning w/emphasis in landscape architecture overlap
University of Michigan	MLA	Landscape Architecture
University of Minnesota	MLA, MSLA	None
University of Oregon	MLA	Landscape Architecture
University of Texas-Arlington	MLA	Urban Planning and Policy
University of Virginia	MLA	None
University of Washington	MLA	Urban Design and Planning or Built Environment w/ emphasis in landscape architecture
University of Wisconsin	MSLA/MALA	None
Virginia Tech	MLA	Environmental Design and Planning
Washington State University-Spokane	MSLA	Design (Interdisciplinary Design Institute)

reviewed articles over the period, 20 percent published one article, and only 6 percent of the sample averaged one or more peer-reviewed articles per year.

With respect to publication in *LJ*, we found that the journal is an important, widely used venue for publishing by landscape architecture faculty members. Of the 153 landscape architecture faculty members who had published at least one peer-reviewed article over this period, 25 percent (n = 39) published one or more articles in *LJ*. Together, their 47 articles amount to one-third of the journal's 144 articles published between 1999 and 2008.

We also learned that *LJ* is the exclusive venue of scholarly publication for a large proportion of landscape architecture faculty members who have contributed

articles to *LJ*. One quarter (n = 10) of those who published one article in *LJ* did not publish any other articles in peer-reviewed journals. With another six individuals publishing more than once but only in *Landscape Architecture*, a full 40 percent (n = 16) of the 39 contributing landscape architecture faculty members had no other peer-reviewed publishing experience except *LJ* in that decade.

Finally, we found that *LJ* authors did not publish as many scholarly papers as landscape architecture faculty members who published in some other highly regarded landscape journals. Faculty members in the sample who published in *LJ* averaged four refereed publications over the 10-year period, with 24 percent publishing five or more. This compares unfavorably

Table 4. Additional articles by landscape architecture faculty members 1999–2008 as identified by the *Avery Index to Architectural Periodicals*

Title	Articles	Reviews	Total
<i>Landscape Architecture</i>	46	37	83
<i>Landscape Journal</i>	7	51	58
<i>Places</i>	27	2	29
<i>Journal of the American Planning Association</i>	4	22	26
<i>Land Forum</i>	9	12	21
<i>Studies in the History of Gardens &amp; Designed Landscapes</i>	5	10	15
<i>Journal of Architectural Education</i>	9	5	14
<i>Arcade</i>	7	0	7
<i>Harvard Design Magazine</i>	6	1	7
<i>Journal of Architectural and Planning Research</i>	2	5	7
<i>Architecture + Design</i>	6	0	6
<i>APT Bulletin</i>	2	3	5
<i>Garten + Landschaft</i>	5	0	5
<i>Journal of Planning Education and Research</i>	2	3	5
<i>Planning</i>	4	1	5
<i>Journal of Green Building</i>	4	0	4
<i>Journal of Landscape Architecture (India)</i>	3	1	4
<i>Journal of the Society of Architectural Historians</i>	0	3	3
<i>Topos</i>	3	0	3
<i>Urban morphology</i>	1	2	3

with landscape architecture faculty members who published in *Landscape and Urban Planning*, where the average was eight refereed publications, with 51 percent publishing five or more.

These last findings suggest that *LJ* will be a less appealing outlet for those who publish most frequently. Using refereed papers identified in the Scopus database as the metric, in the past 10 years only one of the top 20 most productive landscape architecture faculty members published in *LJ*.

As a crosscheck of our Scopus analysis of landscape architecture faculty-member publication productivity, we compared our findings with Milburn, Brown, and Paine (2001), who conducted a 1999 self-report survey of 297 North American landscape architecture faculty members. They found an average yearly publication rate of .48 refereed articles for 1996 to 1998, compared with our average yearly rate of .28 for 1999 to 2008. They also found that 64 percent of their sample reported one or no publications over the three-year-period of their study and that about 11 percent reported more than one publication per year, compared with our

findings for a period of 10 years of 66 percent and 6 percent, respectively.

Two differences between the Milburn, Brown, and Paine study and ours may help to explain why we found a considerably lower annual rate of refereed publication. First, we examined a 10-year period (1997–2008) and Milburn, Brown, and Paine examined a three-year period (1996–1998) preceding our study period. Second, Milburn, Brown, and Paine analyzed self-reports of the number of refereed papers published over three years, while we analyzed refereed papers as reported by Scopus, supplemented by our manual count of publication in *LJ*. Slight differences in the time periods, as well as differences in what were included as refereed papers, may account for the substantially different annual refereed publication rates.

To further compensate for the limitations of using Scopus citations and our manual check of *LJ* alone, we searched the *Avery Index to Architectural Periodicals* for author publications for the period 1999 to 2008. While this database does not provide citation counts or other sophisticated citation analysis statistics, it does track the publication of articles in *LJ* and several other scholarly and professional periodicals not indexed by Scopus.

In searching the *Avery Index*, we identified an additional 364 articles published by the 284 landscape architecture faculty members included in our sample. This raised the average annual publication rate for individuals from our Scopus estimate of .28 to .40 per year over the 10-year period, closer to the annual rate of .48 per year reported by Milburn, Brown, and Paine in 2001. As they noted (2001), this is a low publication rate compared with other scholarly disciplines. The articles identified from the *Avery Index* were published in more than 50 different periodicals; the top 20 periodicals used by landscape architecture faculty are shown in Table 4 and account for 85 percent of all articles we identified in the *Avery Index*.

Two things in Table 4 are noteworthy. First, the *Avery Index* extends the diversity of scholarly publication venues for landscape architecture faculty, augmenting the venues included in Scopus. This range includes

scholarly research journals, professional design magazines, regional publications, and technical bulletins—some but not all of which are peer-reviewed scholarly publications. Consequently, our revised estimate of .40 peer-reviewed publications per year by landscape architecture faculty members may be an overestimate.

Second, the *Avery Index* tracks a broader range of article types than does Scopus. For example, while Scopus tracks some of the same periodicals as the *Avery Index*, including *Landscape Architecture*, *Journal of the American Planning Association*, and the *Journal of Architectural and Planning Research*, it tends to list only regular or feature articles. By contrast, the *Avery Index* includes other article types such as book reviews and columns. Of the additional articles identified by the *Avery Index*, 45 percent were identified as reviews, usually book reviews but sometimes reviews of conferences, exhibits, or software. Distinguishing regular or feature articles from other types of non-review contributions listed in the *Avery Index* was sometimes difficult, but the index appears to include a greater diversity of material such as columns, editorials, roundtable discussion summaries, and interviews than does Scopus.

One important implication of the Scopus analysis is that *LJ* may become a less attractive venue for publication as research institutions become increasingly attentive to the impact factor of refereed journals, a rating developed by those affiliated with Thomson Reuters and available through their *Journal Citation Reports* to estimate and compare the scholarly stature of academic journals (Garfield 2003). Thomson Reuters delisted *LJ* several years ago, and a recent effort by UW Press to reinstate it was declined. This could ultimately affect *LJ* readership and scholarly impact (see next section), but the impact factor is also an issue for landscape architecture faculty members, who may be less interested in submitting their work for publication in *LJ* should it remain unlisted by Thomson Reuters or have a relatively low impact factor.

One implication of our analysis of the *Avery Index* is that many landscape architecture faculty members make important scholarly contributions in addition to

the peer-reviewed articles tracked by Scopus or listed by Thomson Reuters. But while book reviews and other forms of scholarly communication are essential functions of disciplinary development, active participation in the widely acknowledged and globally accessed sphere of refereed publications is a central part of academe and the broader realm of scholarship.

Together these findings indicate that even in the top research-oriented landscape architecture programs, peer-reviewed publication remains low, and a significant percentage of *LJ* authors likely do not become active participants in advancing this important aspect of scholarship in the discipline.

### **Goal 3: Increase readership and impact**

In addressing this CELA goal, we found that both the scholarly impact and the readership access of *LJ* are limited in comparison with other landscape-related journals. These limitations truncate recognition of the societal relevance of landscape architecture scholarship. They also constrain financial revenues to the journal, and this in turn limits technological and procedural changes that might enhance *LJ* readership and impact.

Our analysis of the *Avery Index* presented above and in Table 4 found that *LJ* was among the top choices for publication by landscape architecture faculty members in our sample of 30 graduate programs among a wide variety of journals. Our Scopus analysis augmented by our manual analysis of *LJ* (Table 5) strengthens this finding and identifies *LJ* as the third most frequently chosen journal for publication among nearly 200 different journals in which faculty members have published in the past 10 years. Journals with the most publications by landscape architecture faculty members are closely tied to the broad topic of landscape, but Table 5 also shows the wide range of options open to both new and seasoned scholars.

While *LJ* holds a prominent place among other journals in the frequency of articles published by landscape architecture faculty members, looking at these publications in terms of scholarly impact tells a somewhat different story. Using the impact factor as a measure



Table 5. Top 25 journals among landscape architecture faculty members, 1999–2008, and associated impact factors (Scopus, *Landscape Journal*, Thomson Reuters *Journal Citation Reports 2007*)

Journal	Number of articles	Impact Factor
<i>Landscape and Urban Planning</i>	84	1.633
<i>Landscape Architecture Magazine</i> (not refereed)	78	*
<i>Landscape Journal</i>	46	*
<i>Environment and Behavior</i>	19	0.795
<i>Environmental Management</i>	14	1.240
<i>Landscape Ecology</i>	12	2.061
<i>Natural Hazards Review</i>	12	*
<i>Journal of Planning and Education Research</i>	11	0.849
<i>Journal of Environmental Planning and Management</i>	9	*
<i>Transportation Research Record</i>	9	0.206
<i>Journal of the American Planning Association</i>	7	1.729
<i>Journal of Forestry</i>	7	1.259
<i>American Journal of Health Promotion</i>	6	1.766
<i>Ecological Engineering</i>	6	2.175
<i>Forest Ecology and Management</i>	6	1.579
<i>Journal of Environmental Psychology</i>	6	1.172
<i>Journal of Planning Literature</i>	6	1.533
<i>Conservation Biology</i>	5	3.934
<i>Ecological Applications</i>	5	3.571
<i>Ecological Indicators</i>	5	1.576
<i>Environment</i>	5	1.293
<i>Journal of the American Water Resources Association</i>	5	1.436
<i>Journal of Architectural and Planning Research</i>	5	0.220
<i>Wetlands</i>	5	0.973
<i>Environment and Planning-A</i>	4	1.726

\*Not indexed by Web of Science or included in *Journal Citation Reports*

of scholarly impact in combination with the Scopus analysis, we found that *LJ* was not competing well with other landscape-related journals. Many of the journals available to the community of designers, planners, and managers of the land—including the journals most widely used for peer-reviewed publication by the most prolific landscape architecture faculty members—have relatively high impact factors. Although impact-factor scores are sensitive to journal size, average number of authors per article, subject matter, and other factors that make comparisons difficult (Amin and Mabe 2003), the success of *LJ* must be weighed in part against these other landscape-related journals.

As noted earlier, *LJ* papers dealing with the theme of landscape perception have decreased markedly over

the years. In terms of scholarly impact and readership by the broader landscape community, this trend may not bode well for the journal. Using the Web of Science, we conducted a cited-reference search of *LJ* and found that nearly all the 20 top-cited articles relate to the theme of landscape perception (Table 6). These 20 articles account for more than 50 percent of all the citations ever received by the journal. Furthermore, 55 percent of the journal's 359 published articles have never been cited in Web of Science-indexed publications (Figure 1).

As an additional check on these findings, we conducted a similar search of citations for the wider range of literature tracked by Google Scholar. Here we found that Google Scholar sources cited 58 percent of *LJ* papers at least once and that the 20 top-cited papers accounted for 52 percent of all *LJ* citations. Fifteen of the 20 most-cited articles in the searches of the Web of Science and Google Scholar were the same, and of the five papers Google Scholar ranked highest, one was a landscape perception paper, two were theory papers, and two were history papers (Table 6).

Google Scholar citation counts for papers averaged 56 percent higher than those of the top-cited Web of Science papers. The relative ranking of papers changed slightly between the two citation sources, with a Spearman rank order correlation of  $r_s = .71$  ( $p < .01$ ). But the trend remains, even given the broader range of themes included in the most-cited articles as tracked by Google Scholar. The most frequently cited papers relate to the theme of landscape perception.

We acknowledge that *LJ* has had an important impact in contributing to building knowledge in books and to applied knowledge in government reports, both of which are not ordinarily included in Web of Science or Impact Factor accounting. The difference between our result using Web of Science and that using Google Scholar (Table 6, Figure 1) suggests that articles published in *LJ* may be reaching an influential audience, beyond the limits of refereed scholarship (Bauer and Bakkalbasi 2005), that may enhance the societal relevance of landscape architecture scholarship. As noted

Table 6. Top-cited *Landscape Journal* articles, 1982–2008, on Web of Science and Google Scholar databases

Author	Title	Year	Web of Science cites	Google Scholar cites
D. Amadeo, D.G. Pitt, E.M. Zube	Landscape feature classification as a determinant of perceived scenic value	1989	—	22
J. Appleton	Prospects and refuges revisited	1984	23	58
I.D. Bishop, P.N.A. Leahy	Assessing the visual impact of development proposals: The validity of computer simulations	1989	32	35
W.L. Cats-Baril, L. Gibson	Evaluating aesthetics: The major issues and a bibliography	1986	9	—
R.E. Chenoweth	Visitor employed photography: A potential tool for landscape architecture	1984	15	17
R.E. Chenoweth, P.H. Gobster	The nature and ecology of aesthetic experiences in the landscape	1990	11	34
H.R. Gimblett, R.M. Itami, J.E. Fitzgibbon	Mystery in an information processing model of landscape preference	1985	12	25
P.H. Gobster	An ecological aesthetic for forest landscape management	1999	20	52
G. Groening, J. Wolschke-Bulmahn	Some notes on the mania for native plants in Germany	1992	—	17
T.R. Herzog	A cognitive analysis of preference for natural environments: Mountains, canyons, and deserts	1987	30	28
C. Howett	Systems, signs, sensibilities: Sources for a new landscape aesthetic	1987	—	16
R.B. Hull, G.J. Buhyoff, H.K. Cordell	Psychophysical models: An example with scenic beauty perceptions of roadside pine forests	1987	20	24
D. Hulse, J. Eilers, K. Freemark, C. Hummon, D. White	Planning alternative future landscapes in Oregon: Evaluating effects on water quality and . . .	2000	17	22
W.D. Iverson	And that's about the size of it: Visual magnitude as a measurement of the physical landscape	1985	10	—
L.A. Mozingo	The aesthetics of ecological design: Seeing science as culture	1997	—	17
J.I. Nassauer	Messy ecosystems, orderly frames	1995	50	107
R.G. Ribe	A general model for understanding the perception of scenic beauty in northern hardwood forests	1990	21	36
S. Schauman	Scenic value of countryside landscapes to local residents: A Whatcom County, Washington case study	1988	12	—
R. Sommer, H. Guenther, P.A. Barker	Surveying householder response to street trees	1990	9	—
F. Steiner, G. Young, E.H. Zube	Ecological planning: Retrospect and prospect	1987	—	29
C. Steinitz	A framework for theory applicable to the education of landscape architects (and other environmental . . .	1990	17	65
R.L. Thayer	The experience of sustainable landscapes	1989	12	29
L. Zonn	Landscape depiction and perception: A transactional approach	1984	10	—
E.H. Zube	Themes in landscape assessment theory	1984	32	32
E.H. Zube, D.E. Simcox, C.S. Law	Perceptual landscape simulations: History and prospect	1987	49	72

earlier, however, similarities dominate over differences in a comparison of the results from Web of Science and Google Scholar: while Google Scholar shows that *LJ* articles are cited in a wider variety of source material, the thematic content and specific articles identified as widely cited by Google Scholar are similar to those identified by a Web of Science search of citations confined to refereed articles.

Overriding considerations affecting readership are the stature and impact of the journal. The Thomson Reuters impact factor published in *Journal Citation Reports* is an imperfect measure of a journal's impact in the world of scholarship, but it is the most widely accepted standard, increasingly used as a criterion in faculty promotion and grant proposal evaluation (Monastersky 2005). Journal impact as measured by the impact factor

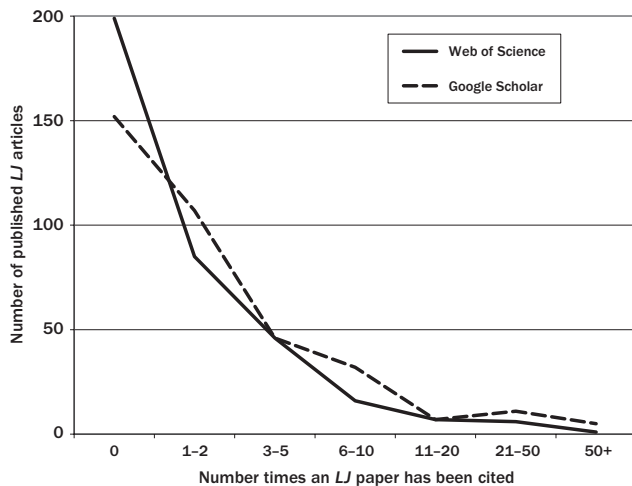


Figure 1. Frequency analysis of Landscape Journal article citations, Web of Science and Google Scholar, 1982–2008 (total published articles = 359).

is somewhat like academic testing—highly controversial among scholars but widely used by administrators.

According to UW Press, several years ago Thomson Reuters deselected *LJ* as one of the journals it tracks for its *Journal Citation Reports* for reasons related to the number and regularity of papers published. While regularity has been adequately addressed, the low number of papers and citation rates remain impediments to reinstatement.

One publishing editor with whom we spoke estimated *LJ*'s impact factor at about .1 to .3, and our own estimate for 2007 indicates the figure may be on the lower end of this range.<sup>2</sup> This puts the journal at the bottom of competing and complementary journals in the field; if *LJ* were reinstated today, it likely would enter the field with an impact factor below that of the *Journal of Architectural and Planning Research* and the *Journal of Urban History* (Table 7). These two journals are of high quality but cater to small, specialized audiences.

While we recognize the hazards of “teaching to the test” and becoming slaves to numerical measures of success, strategic action toward reinstatement and increase of the impact factor may help *LJ* is to expand readership and scholarly impact

Readership is a fundamental measure of journal importance, and numbers of subscriptions provide not only an indicator of readership but also a measure of a journal's financial health. Industry trends such as consolidation of subscriptions at the university level and increasing preference for online access lead to reduced numbers of paper subscriptions.

State-of-the-art digital technology and editorial processes could increase reader access to *LJ*. In 2006, the new journal of the European Council of Landscape Architecture Schools, the *Journal of Landscape Architecture*, was introduced as a paper journal with online subscription to enhanced graphic features. In 2009, the journal *Places*, established about the same time as *LJ*, moved from being a paid-subscription paper journal to an open-access online-only journal.

#### Goal 4: Reach out to new contributors and increase diversity of contributors

In examining journal performance on this goal, we concluded that the disciplinary base of current contributors is narrow and may dampen the potential relevance of the journal. For this analysis we looked at back issues of *LJ* and classified the disciplinary affiliation of authors. We found that over all the issues we examined (359 articles), 70 percent of all authors and coauthors were teaching in a landscape architecture department or had a terminal degree in landscape architecture.

Authors from outside the field of landscape architecture were from a wide range of other disciplines, particularly planning, geography, history, and architecture. Looking only at lead authors, we found that authorship by those in landscape architecture increased to 77 percent and ranged from a high of 80 percent under the first editorship (Morrison and Alanen) to 57 percent under the Deming and Palmer editorship.

Using the “affiliation” field in Scopus, we also searched different journals in the database for the disciplinary affiliations of article authors, and while the method is not strictly equivalent to our *LJ* analysis, it provided a rough comparison. We found the proportion of landscape architecture authorship in *LJ* to be high in comparison to other landscape-related journals and higher than any other disciplinary affiliation of authors to journals within their own disciplines (Tables 8 and 9). Even when we combined affiliations for “landscape architecture” with the more general “landscape,” we found that landscape-related affiliations accounted

Table 7. Impact factors of selected journals (*Journal Citation Reports 2007*)

Journal Title	Impact Factor <sup>1</sup>	Journal Title	Impact Factor <sup>1</sup>
<b>Interdisciplinary Environmental</b>		<b>Health</b>	
<i>Environmental Management</i>	1.240	<i>Health &amp; Place</i>	2.367
<i>Landscape and Urban Planning</i>	1.633	<i>American Journal of Health Promotion</i>	1.766
<i>Journal of Environmental Management</i>	1.446	<i>American Journal of Public Health</i>	3.612
<i>Society &amp; Natural Resources</i>	1.053	<i>Annual Review of Public Health</i>	8.978
<b>Environmental Psychology</b>		<b>Geography</b>	
<i>Environment and Behavior</i>	0.795	<i>Annals of the Association of American Geographers</i>	2.962
<i>Journal of Architectural and Planning Research</i>	0.220	<i>Geographical Review</i>	0.458
<i>Journal of Environmental Psychology</i>	1.172	<i>Cultural Geographies</i>	1.000
<b>Planning</b>		<i>Population Space and Place</i>	1.293
<i>Journal of the American Planning Association</i>	1.729	<i>Professional Geographer</i>	1.139
<i>Journal of Planning Education and Research</i>	0.849	<i>Progress in Human Geography</i>	3.762
<i>Journal of Planning Literature</i>	1.533	<i>Regional Studies</i>	1.797
<b>Leisure</b>		<i>Social &amp; Cultural Geography</i>	0.917
<i>Journal of Leisure Research</i>	0.784	<i>Transactions of the Institute of British Geographers</i>	4.067
<i>Leisure Sciences</i>	0.792	<i>Environment and Planning A</i>	1.726
<b>Forestry</b>		<i>Environment and Planning B-Planning &amp; Design</i>	0.740
<i>Forest Science</i>	1.258	<i>Environment and Planning D-Society &amp; Space</i>	1.807
<i>Forestry</i>	0.909	<b>Ecology</b>	
<i>Journal of Forestry</i>	1.259	<i>Biodiversity and Conservation</i>	1.421
<b>Environmental History</b>		<i>Biological Conservation</i>	3.296
<i>Environmental History</i>	0.976	<i>Biological Invasions</i>	2.125
<b>Ethics</b>		<i>Conservation Biology</i>	3.934
<i>Journal of Agricultural &amp; Environmental Ethics</i>	0.833	<i>Diversity and Distributions</i>	2.965
<i>Environmental Values</i>	0.741	<i>Ecohealth</i>	1.492
<i>Environmental Ethics</i>	0.135	<i>Ecological Applications</i>	3.571
<b>Law And Policy</b>		<i>Ecology Letters</i>	8.204
<i>Land Economics</i>	1.042	<i>Environmental Conservation</i>	1.143
<i>Land Use Policy</i>	1.213	<i>Environmental Science &amp; Policy</i>	1.415
<i>Natural Resources Forum</i>	0.709	<i>Frontiers in Ecology and the Environment</i>	4.269
<i>Natural Resources Journal</i>	0.111	<i>Journal of Wildlife Management</i>	1.528
<b>Urban Studies</b>		<i>Landscape Ecology</i>	2.061
<i>Cities</i>	0.612	<i>Natural Areas Journal</i>	0.600
<i>Environment and Urbanization</i>	0.731	<i>Restoration Ecology</i>	1.928
<i>Journal of Urban History</i>	0.180	<i>Trends in Ecology &amp; Evolution</i>	14.797
<i>Urban Geography</i>	0.541	<i>Wetlands</i>	0.973
<i>Urban Studies</i>	1.274		

<sup>1</sup>The number of citations of articles published in a given journal during 2007 divided by the total number of articles published in that journal during 2005 and 2006.

for only 8 to 18 percent of the articles in *Landscape and Urban Planning*, *Landscape Research*, or *Landscape Ecology*. This might be expected in such explicitly multidisciplinary journals.

For a more apt comparison with *LJ*, we looked at more strictly disciplinary journals, ranging from *Environmental History* on the low end, in which 25 percent of articles included an author affiliated with history, to the *Journal of Planning Education and Research*, in which 60 percent of articles included an author affiliated with planning. Both are notably lower proportions

than the 70 percent of contributors to *LJ* who were landscape architecture faculty or landscape architects.

Opportunities to increase the diversity of contributors to *LJ* are enormous. A survey of the most-cited articles in related journals published over the past 10 years shows topics of heightened concern in various disciplines (Table 10): landscape change, fragmentation, and measurement (landscape planning and landscape ecology); place attachment, psychological restoration, and environmental concern (environmental psychology); collaborative and participatory

Table 8. Affiliation of authors of articles in selected landscape journals (Scopus)

Discipline/ journal (start of coverage)	<i>Landscape Journal</i> (v1 1982)	<i>Landscape Research</i> (v4 1979)	<i>Landscape and Urban Planning</i> (v13 1968)	<i>Landscape Ecology</i> (v1 1987)
Landscape Architecture, Landscape Planning, etc.	276	58	311	84
Geography, Geographical Sciences, etc.	21	60	215	110
Planning	20	37	239	24
Psychology, Psychological Sciences, etc.	6	3	15	1
History	12	13	5	14
Architecture	11	16	72	4
Forestry, Forest Ecology, etc.	8	6	247	205
Leisure/recreation/tourism	2	7	18	5
Environmental Studies, Environmental Sciences, etc.	9	46	330	59
Number of articles	359	438	1715	1049
% Landscape affiliation	77	13	18	8

planning (planning); climate change, invasive species, and biodiversity protection (conservation/restoration ecology); and physical activity and health (public health, leisure sciences, planning). Sustainability is an overarching theme of many of these articles, as are issues of equity and multiculturalism.

#### Goal 5: Strengthen the connection to practice

In examining performance related to this last goal, we looked at the organizational linkages between research and practice in landscape architecture and related professions. Here we concluded that *LJ* could be the basis for a better system of communication to link research and practice. Compared to other land-based professions, the link between academic scholarship and the practice of landscape architecture is weak. It has been said that there is nothing so practical as a good theory, yet many within landscape architecture practice have a “negative to ambivalent” attitude toward theory and research, fueled in part by the perception that most scholarly inquiry is too esoteric or narrow to apply to real-world situations (Milburn et al. 2006, 120).

The odd disjuncture between CELA with its *LJ* and ASLA with its *Landscape Architecture* lays an unfortunate foundation for separation between research and practice in landscape architecture. Other land-based professions demonstrate strong connections between scholarship and practice. The American Planning Association, the Society of American Foresters, and the National Recreation and Park Association all publish

research journals (*Journal of the American Planning Association*, *Forest Science*, and *Journal of Leisure Research*) along with their more accessible monthly or bi-monthly magazines (*Planning*, *Journal of Forestry*, and *Parks & Recreation*). They use this connection to bring the practical fruits of their research to the broader audience of practitioners, not only providing them with useful information but also demonstrating the functional connection between the academy and practice. For various reasons *Landscape Architecture* does not have a similar functional connection to *LJ*, and such a tie has never been made.

#### CONCLUSIONS

Over its first 25 years of publication *LJ* made steady progress in advancing high standards of scholarship and conveying this content with a sophisticated and engaging graphic aesthetic. These achievements have been important to the discipline, but our findings indicate that *LJ* must move quickly to accomplish even more: it must establish its relationship with the larger world of scholarship and practice, and it must respond to paradigm shifts in the technology and marketing of publishing. If five years from now it is perceived as a “boutique journal” of significance primarily to those in its small principal audience of educators in landscape architecture, it will not have achieved enough. To address CELA’s goals, we suggest three specific actions toward those larger accomplishments.

Table 9. Affiliation of authors of articles in selected disciplinary journals (Scopus)

Discipline/journal (start of coverage)	<i>Geographical Review</i> (v63 1979)	<i>Journal of Planning and Research</i> (v15 1996)	<i>Journal of Environmental Psychology</i> (v1 1981)	<i>Environmental History</i> (v1 1996)	<i>Journal of Architectural and Planning Research</i> (v1 1984)	<i>Journal of Forestry</i> (v67 1969)	<i>Journal of Leisure Research</i> (v10 1978)
Landscape Architecture, Landscape Planning, etc.	1	14	10	0	11	7	2
Geography, Geographical Sciences, etc.	<b>305</b>	27	26	13	9	15	5
Planning	6	<b>221</b>	26	2	<b>88</b>	9	7
Psychology, Psychological Sciences, etc.	2	1	<b>237</b>	0	9	0	13
History	12	1	0	<b>83</b>	0	6	2
Architecture	2	30	31	0	<b>97</b>	1	0
Forestry, Forest Ecology, etc.	2	1	17	6	0	<b>782</b>	62
Leisure/recreation/tourism	0	0	3	0	0	13	<b>202</b>
Environmental Studies, Environmental Sciences, etc.	9	32	83	25	27	94	3
Number of articles	748	370	710	332	357	1381	455
% in dominant discipline	40%	60%	33%	25%	52%	57%	44%

Note: **Boldface** entries indicate match of journal's dominant discipline with author disciplinary affiliation.

### Suggestion 1: Move to four issues per year

*LJ* must become a quarterly publication so as to be taken seriously by the scholarly community. This community includes members of allied professional societies and disciplines more likely to consider *LJ* if it offered expanded opportunities for publication. It also includes librarians from academic institutions, who consider a quarterly journal a minimum standard for subscriptions.

A third component of this community includes private-sector research organizations compiling influential citation analysis databases. Thomson Reuters considers the number of journal issues per year when selecting a journal for inclusion in its various indexes and databases. While some specialty journals that publish on an annual or semiannual basis are selected for the Arts and Humanities Index, generally more frequent publication is preferred. A low number of articles and low frequency of publication can dampen impact factors (Amin and Mabe 2003; Yu, Wang, and Yu 2005), and *LJ* intersects a number of content categories in which journals typically are published at least quarterly.

Moving to quarterly publication will not be easy; it likely will require additional administrative resources, an expanded editorial board, and a system and procedures that provide greater operating efficiencies (see Suggestion 2 below). But the number of articles

published in recent years suggests that *LJ* could increase in the number of issues, particularly with the success of special issues and theme sections. This could open opportunities for content aimed more squarely at practitioners, including state-of-the-art review papers and forums that bring scholars and practitioners together to address pressing issues of the field and its intersection with society.

### Suggestion 2: Adopt an electronic manuscript submission and review system

An electronic manuscript submission and review system could work well for the types of files that are typical of *LJ* submission. An electronic submission system would almost certainly increase the number and diversity of submissions by enhancing the accessibility and transparency of the editorial process. Larger publishing houses have in-house electronic manuscript submission and review systems, which have become typical among refereed publications.<sup>3</sup>

### Suggestion 3: Increase online presence and availability

Journal publication has entered an era in which online presence rivals the printed page. Unlike *LJ*, most digitally accessible journals have made an extensive set of their back issues digitally accessible as well. At a

Table 10. Top-cited articles in competing and complementary journals, 1999–2008 (Scopus)

Journal/article title summary	Cites	Journal/article title summary	Cites
<b>Landscape and Urban Planning</b>		<b>Environment &amp; Behavior</b>	
Using landscape metrics in landscape planning	91	Psychological benefits of the view from home	71
Biodiversity concepts & urban ecosystems	89	Does vegetation reduce crime in the inner city?	47
“Least-cost” modeling of landscape	64	Predicting behavior from place-based cognitions	43
GIS-based habitat suitability modeling	60	Affinity toward nature as a basis for protection	43
Urbanization and landscape change projections	54	Effects of environment on fatigue and violence	42
Landscape change and urbanization in Europe	52	Household adjustment to earthquake hazards	41
Predicting land-cover/land-use in Mexico	51	Coping with ADD: effects of green play settings	40
Conceptual intro to holistic landscape ecology	51	Restorative exp & self-regulation in favorite places	39
Valuing trees, water & open space in Holland	49	Environmental concern and household energy use	37
European cultural landscape devt & sustainability	47	Predicting college students’ car use	37
<b>Landscape Research</b>		<b>Journal of Environmental Psychology</b>	
Landscape metrics & land-cover change	27	Values as predictors of environmental attitudes	86
Designing whole landscapes	18	Environmental attitudes and ecological behavior	83
The nature of cultural landscapes	17	Defining and measuring environmental concern	81
Critical debates in public art and urban regeneration	15	Psych restoration in natural & urban settings	69
UK implementation of agri-environment regulation	15	Sense of place of lakeshore owners	49
Landscape preference & Internet survey techniques	14	Structure of environmental concern	49
Sociocultural change	13	Emotional relationships with places	44
English farmer perceptions of set-aside landscapes	13	Questions about place attachment	43
LANDMAP assessment of public preferences	12	Dis/continuities of place	40
Maps in landscape-change research	12	Place meanings & everyday experience	39
<b>Landscape Ecology</b>		<b>Journal of Planning Education and Research</b>	
Key issues and priorities in landscape eco research	128	Communicative planning & shaping places	51
Can landscape indices predict ecological processes	104	Land use/transport effects on health/quality of life	44
New measures of landscape fragmentation	101	Network power in collaborative planning	41
Effects of scale change on landscape pattern	93	The communicative turn in planning theory	29
Use and misuse of landscape indices	86	Planning practice, theory, and education	27
Gradient analysis of urban landscape pattern	85	Bringing power to planning research	26
Plant species diversity in an ag-mosaic landscape	85	Limits to communicative planning	25
Metrics for predicting stream nutrient loadings	80	Environmental justice & sustainable cities	24
Simulating land-use change in Phoenix	79	A survey of theories for planning futures	24
How to measure landscape connectivity	79	Collaborative planning & consensus building	22
<b>Conservation Biology</b>		<b>Journal of the American Planning Association</b>	
Survey of habitat fragmentation	328	Framework for evaluating collaborative planning	126
Review of ecological effects of roads	327	Modeling urban development for env planning	75
22-year study of Amazon ecosystem decay	264	Underestimating costs in public works projects	67
Fitness and genetic diversity	197	Are we planning for sustainable development?	56
Extinction rates of N American freshwater fauna	178	Toward a theory of collaborative planning	54
Fragmentation effects on forest birds	172	Does neighborhood-scale urban form matter?	50
Use of surrogate species in conservation biology	165	Neighborhood walkability and public health	43
Ecol effects of recent climate change	162	Measuring urban form in Portland	36
Metapopulation dynamics & amphibian conserv	155	Citizen involvement and government action	36
Habitat loss and extinction biodiversity hotspots	151	GIS in participatory planning	35
<b>Urban Forestry and Urban Greening</b>		<b>Society and Natural Resources</b>	
Landscape planning and stress	48	Community natural resource management	94
Ecological & aesthetic values in urban forest mgmt	21	“Protection paradigm” in biodiversity conservation	85
Quantifying aesthetic benefits of urban forestry	13	Soc-political aspects of biodiversity conservation	70
Role of urban forest in reducing air pollution	12	Collaborative natural resource management	63
Tree establishment practices in the EU	11	Social learning & collaborative management	55
Tree mortality rates in Baltimore	10	Public expectations of participation process	45
Air pollution removal by US trees	8	Fair decision making & public participation	42
Establishing green roofs in Sweden	8	Evaluating integrated resource management	42
Four methods for establishing leaf area	8	The physical environment and sense of place	41
Urban trees selection in Nordic countries	8	Attachments to special places on public lands	39

Table 10 (continued)

Journal/article title summary	Cites	Journal/article title summary	Cites
<b>Health and Place</b>		<b>Journal of Leisure Research</b>	
Social capital: A guide to its measurement	153	Women's leisure as political practice	44
Relating social-environmental obesity determinants	86	Recreational specialization: A critical look	34
Income measures and population health status	71	Leisure, social capital, and citizenship	31
Neighborhood differences in social capital	65	Leisure involvement properties & paradoxes	31
Small area variations in health behaviors	53	Measuring perceived value of a service	30
Area effects on smoking in poor communities	51	Experiences of teen girls at swimming pools	26
Stress processes in a neighborhood context	43	Leisure context and substance use	26
Past and future mental health geographies	41	Factors affecting fan attendance	25
Seeking alternative health care in Canada	40	Languages of place and power	24
Alcohol outlet density and college drinking	36	Blacks' acceptance in leisure activities	24

minimum, *LJ* should make all back issues from its relatively short (25-year) history available online.<sup>4</sup> Some new journals such as the *Journal of Landscape Architecture* are positioning themselves to balance between these two media, while others such as *Living Reviews in Landscape Research*, *Landscape Online*, and *Places* are totally electronic. By fully employing digital media, the attractive look and feel of the current *LJ* hard copy need not be compromised as the range of expressive possibilities is expanded to include author and reader interaction.

The subject matter of *LJ* is suited to enriching online content, particularly in creative expression (sketch-book portfolios, videos, poetry, and so forth). This could include:

- Online color photography in articles as a free option to authors.
- "Online first" publishing to put forth accepted articles out and citable as soon as possible.
- Web access to extra content linked to articles (for example, downloads of high resolution maps, tables, and graphics for use in classroom lectures).
- Video and audio links imbedded in articles or as stand-alone extras. These applications would increase the richness of traditional scholarly presentation and have potential for use in exhibit and conference reviews as well in creative expression and education.
- Online forums and the possibility of taking the LArch-L discussion board to its next logical phase of evolution.

The goals set by CELA as the journal enters its next quarter-century are apt and highly complementary. The journal will achieve greater diversity in content (Goal 1) if it reaches out to new, more diverse contributors (Goal

4). As a peer-reviewed journal, *LJ* must consider and publish unsolicited manuscripts received from those within its central community of CELA members, primarily North American educators in landscape architecture. But it must also attract cutting-edge content from outside its immediate circle by identifying key issues being published in competing and complementary journals and soliciting articles from authors publishing on those topics. One way of satisfying both core and allied audiences is through the development of special theme issues encouraging transdisciplinary perspectives on key topics.

Greater diversity in content (Goal 1) will expand readership and impact (Goal 3) if *LJ* quickly adopts efficient digital technology and comprehensive online content with broad access and meets the criteria for listing in the most widely used scholarly citation indices.

Given academic settings in which "expensive" disciplines and pedagogies are increasingly on the budgetary defensive, *LJ* must nurture scholarship (Goal 2) more than ever, but the way in which it does so must be more attentive to standards and practices of the broad and diverse scholarly world (Goal 4). As scholarly publication in a wide range of disciplines is increasingly carried out via electronic platforms for manuscript submission, peer review, access, and citation analysis, research institutions worldwide have moved toward greater use of widely accepted indicators of scholarly productivity.

To further advance scholarship, *LJ* could find a constructive role in familiarizing contributors with widespread conventions for manuscript submission, providing a doorway through which landscape architecture scholars enter the broader world of academic publishing. Without this, the journal risks its own marginalization and perhaps, inadvertently, the



marginalization of the work of junior faculty members who are “learning the ropes” of scholarly publishing via their *LJ* experience.

Our findings suggest that *LJ* must be more compelling as a venue for both accomplished scholars looking for diverse means of creative expression and junior scholars attentive to their institutions’ use of citation indices in promotion and tenure. Broader scholarly impact (Goal 3) matters to both groups, and as the wide array of journals in the sciences, arts, and humanities prominently represented in citation databases illustrates, quality of expression and quantification of impact need not be mutually exclusive goals.

Finally, the *raison d’être* for scholarship in landscape architecture has always been to affect the practice of design, planning, and management of the land (Goal 5). This purpose aligns nicely with gathering calls for societal relevance from the realms of both science and art (Nassauer and Opdam 2008; M. Palmer et al. 2004; Szenasy 2008). In essence, it challenges *LJ* to be a catalyst for landscape scholars to address an audience much wider than its inner circle and to engage the profession in exploiting the entrepreneurial opportunities implicit in scholarship.

This highly interrelated set of goals may appear to be a Gordian knot, but we are confident that our simple, concrete suggestions are a good start toward its untying. The result will be a far more powerful journal and discipline.

In the world of scholarly publication, *LJ* is perhaps the single best manifestation of who we are as a discipline, who we want to be, and how others concerned with design, planning, and management of the land perceive us. *LJ* must change to provide a forum for landscape architecture to claim and grow its legitimate authority among other disciplines.

Deming’s 2008 editorial challenged *LJ* contributors to concern themselves with significant contemporary social and environmental problems related to design, planning, and management of the land, and the theme issue on metropolitan ecology that her editorial

introduced exemplifies that breadth. Landscape architecture as a discipline has good reasons for addressing these broad concerns and ensuring that *LJ* is recognized as the equal of more frequently cited journals in environmental management and landscape planning such as *Landscape and Urban Planning*, *Environment and Planning B Planning & Design*, *Environmental Management*, and the increasing number of related journals recognizing the relevance of design such as *Landscape Ecology*, *Urban Forestry and Urban Greening*, and *Journal of Urban Design*. In its own way *LJ* can speak more strongly to such critical issues and in doing so substantially heighten landscape architecture’s contribution to solving societal problems.

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#### NOTES

1. Academic presses represented in editor interviews: Berghahn Journals, Callway-Verlag, Elsevier, Routledge (Taylor and Francis Group), Sage, Springer, and the University of Wisconsin Press. Organizations represented in other interviews included ASLA, CELA, *Landscape Architecture* magazine, and the National Recreation & Park Association.
2. A journal’s impact factor for the Thomson Reuters *Journal Citation Reports* is calculated by dividing the number of citations received by articles published in a given year of a journal by the total number of articles published during the preceding two years. For 2007 we did a Web of Science Cited Reference Search and found one article published in 2007 that cited one article published in *LJ* during 2005 to 2006. To this we added journal self-citations (*LJ* articles citing *LJ* articles) from an Adobe Acrobat search of 2007 issues and found another two articles, each citing *LJ* once. From this information we calculated the impact factor as:

Number of citations from 2005 to 2006	
articles cited in 2007:	3
<hr/>	
Total articles from 2005 to 2006 (not including editorials, reviews):	20
<b>Estimated Impact Factor</b>	<b>.15</b>

3. Editors' note: The University of Wisconsin Press offers an electronic submission and review system. The editors of the *Journal* are evaluating this system.
4. Editors' note: While this article was in production, electronic versions of all *Journal* articles were made available.

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