



by Nathalie Rozot

The contemporary architect is thought of as someone who can think and build. Shouldn't lighting professionals aspire to the same standard?

"Everything should be made as simple as possible, but no simpler."

Einstein

William Cronon's words in *The Goals of a Liberal Education*—"It is much easier to itemize the requirements of a curriculum than to describe the qualities of the human beings we would like that curriculum to produce"—bring up a delectable question: What qualities do we want lighting education to manifest?

I will start by quoting my friend and former teaching colleague Margaret Maile Petty, head of the School of Design at Victoria University of Wellington: "Perhaps more than any other field involved with the design of the built environment, lighting design transcends disciplinary boundaries and must call upon a broad knowledge set and skill base. That richness and diversity offers great potential for the future of lighting design, and in particular, for lighting design to take a leadership role in the design of the built environment."

Maile Petty's description raises another question: Do our credentials such as the Lighting Certification (LC) or Bachelors and Masters degrees validate an ability to practice and advance lighting design as an interdisciplinary field of expertise? Many in our design community come from a background in liberal education and can appreciate that transversal knowledge is a dynamic force of creativity that drives modernity. However, we should ensure that we are not depriving our field of the fluid knowledge and research that characterize design studies.

Today, much—if not most—of the offerings in lighting design education cater to

a vocational training demand and deliver knowledge for professional practice in the form of "fundamentals" and "basics." A "made simple" approach permeates the numerous trade-based educational programs provided by professional organizations and industry groups such as the IES, the IALD, the American Lighting Association (ALA), as well as eminent professors' textbooks and seminars, and training programs and workshops at manufacturers' institutes, academies and training centers.

Moreover, in the academic arena, programs with lighting curricula or lighting minors or majors for interior and architectural design studies focus on project-based learning; students empirically apply the teachings they receive on the compositional, physiological and physical principles of light in design projects, and have limited exposure to critical theory. The models for future educational programs in lighting developed by PLDA proposed that theory be a module, and research, which in our field is typically focused on functional specialties, be a database.

ARCHITECTS DO IT: LET'S ALL DO IT

William Robert Ware, who founded two architectural schools at MIT and Columbia University, already believed in the 19th century that a liberal education was of more value to an architect than technical training, and wished to give equal consideration to practical, scientific and artistic studies. Historically, culture has distinguished "architecture" from "craft," or architects from builders and carpenters. Initially, "culture" meant knowledge, and knowledge was history. Then culture became the ability to curate knowledge through critical analy-

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sis: history and historical context became questions. Beyond the craft of drawing and building, innovative answers in the design of space have built the architect, and the 20th-century explosion in architectural education scaled up a culture of thought. Today, architects embrace their role as builders to a varying degree, but the contemporary model of an architect is of someone who can think and who can build.

The transformative processes of abstraction, analysis, criticism and hypothesis have notably advanced professional lighting practices. I have not researched in detail the biographies of the founding figures who helped lighting design enter collective conscience as a new academic and professional discipline, but the correlation with liberal arts is definite: Stanley McCandless came

from architecture and Richard Kelly from science and architecture. McCandless co-founded the School of Drama at Yale in 1925 where he taught until 1964, whereas Kelly, who received a Gold medal from the AIA in 1967, became an architectural lighting icon and was an influential teacher at Yale. In time, McCandless developed a theory for theatrical lighting and Kelly a theory for architectural lighting.

Theory is useful to bridge liberal and professional education: it reflects on practice within a cultural historical context and it provides an analytical foundation for design practice. In *Theory Construction in Design Research*, Ken Friedman, professor of design at Swinburne University of Technology in Melbourne, writes that “Theory construction is important to design, the design

process, the field of design, the discipline, the profession.” William M. Sullivan, a scholar at the Carnegie Foundation for the Advancement of Teaching, similarly argues in *A Life of the Mind for Practice* that “The professions and the liberal arts and sciences need one another to realize their deepest potential and to answer the public questions that currently challenge them.”

THE VALUE OF PLURALISM

When Maile Petty adds: “At the center and heart of such interdisciplinarity we should insure a solid foundation of the principles of design and [...] an equally interdisciplinary approach to design,” her words resonate with Friedman’s: “The discipline of design involves inquiry into the plural domains of design.”

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For Brian McGrath, professor of urban design and current dean at the School of Constructed Environments at Parsons, the value of pluralism in design studies is clear. Trained as an architect, he has investigated cities as natural systems and grounds for

socially engaged practices, and used collaborative and multidisciplinary processes throughout his professional and educational practices for design and research projects. When first exposed to lighting expertise in the 1990s by Leni Schwendinger, he

found lighting to be a particular provocation for the “daytime bias” of urban projects. As a practitioner and an academic, he was prompted to include lighting not only in his projects but also in courses he taught at Columbia University and Parsons.

As dean, McGrath’s vision is to foster a cultural shift in design studies and to prepare an array of design collaborators to address the complex issues around constructed environments. He envisions that expanding and developing integrated curricular models such as true collaborative studios will contribute to dismantling hierarchies among disciplines, and to developing the sensibilities necessary to remodel the playing field in design.

The complexity and transdisciplinarity of lighting is attractive, and we should celebrate it: Per McGrath, “Lighting is particularly expansive: it operates at all scales.” We should aspire for our academic and professional practices to contribute great innovation to future design challenges across disciplines. By situating our unique lighting perspective within plural domains of design, we can play a large role in the modernization of design culture and content.

Light can behave as wave and particle: let’s learn and teach to behave as design generalists and lighting specialists.

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