2017-2018 Distinguished Professor

Dana Buntrock 32007 The University of California, Berkeley (hereafter UCB), my home since 2000, is proud of its reputation as a hotbed for innovative trailblazers; we are consistently ranked among the world's top universities. Maintaining our excellence is formidable in the face of annual and aggressive funding cuts, money lost that the State demands we make up with ever-rising tuition. Our students are ill prepared to shoulder these increases. Roughly half my department's undergraduates rely on Pell grants; nearly half report that English is not their first language; about a third are the first in their families to attend college at all. In my graduate class for 50 students from architecture, engineering and business, about 30% have only just arrived in the U.S.; English is not their native language. When we challenge students to be leaders, we ask a lot of them.

To the 125-150 undergraduates in my Introduction to Construction class, I am usually one of the first dozen or so people they meet from within the profession of architecture. Our graduate students come with greater experience in the field, but often with little knowledge of the United States. How and what we teach deeply impacts students' perspectives of their place in the profession.

I believe that, in our work as faculty, we must advocate for the power of architecture.

The following pages outline my advocacy at various scales, from helping an inexperienced undergraduate engage with a diverse and daunting field to efforts to impact national policies in the U.S. and Japan. These efforts and accomplishments are discussed in 5 sections:

- Architectural education challenges inequity and creates economic opportunity.
- Architecture is a key part of the AEC community.
- Architectural licensing demands we act as leaders and public intellectuals.
- Architecture is a global community of potent yet intimate networks.
- Architecture's tools address society's economic, environmental and ethical challenges.



ARCHITECTURAL EDUCATION CHALLENGES INEQUITY AND CREATES ECONOMIC OPPORTUNITY.

I entered a Bachelor of Architecture program in 1975 when women were rare. I did not sign on to be a pioneer, but it has been an inevitable part of my experience, especially as I began to concentrate my research and teaching in two areas where women remain unusual: construction and Japanese architectural practice. Many of our students at UCB, too, do not conform to the economic or racial outlines of the profession today. Like me, they did not recognize the profession they chose would be so different from the people they are. In classes, I strive for the following:

An engaged educational experience.



Superintendent (in blue helmet) and I with students on site in 2007; note the buckling-resistant braces (BRBs), then novel, in the background.

Too often, construction is something within the architectural curriculum to be suffered and soon forgotten. Evaluations frequently identify my "Introduction to Construction" classes, though, as students' favorite; we take into account students' values and interests and embrace the construction industry's complexity.

- Each topic is addressed conceptually, with policy, economics, environmental change and labor as important issues connecting construction choices to the larger world.
- Undergraduates apply new knowledge in hands-on labs, building projects in wood, metals and concrete.
- Frequent visits to the field bring the textbook and lectures to life and allow students to incorporate pragmatic values into discussions about architectural accomplishment, as I do in lectures.

Healthy teams.



Teamwork is necessary to the profession and vital to peak performance.

- My carefully timed mini-lectures review literature on teamwork, highlighting the benefits of working with others, leadership models, and the professional need for teamwork. Undergraduates still struggling to form productive teams find additional support from teaching assistants and/or me, during labs or office hours.
- Students propose questions for quizzes and tests, but must do so in groups.
- We celebrate successful teams, like our undergraduates who compete annually in the Associated Schools of Construction (ASC) Student Competition in Reno, Nevada.
- Graduate student teams bring together individuals from a variety of backgrounds for more effective observation on site. International students with weaker language skills, for example, often rely more on their eyes than their ears and will discover things their more fluent classmates do not. Business students apply economic concerns foreign to many architecture students.
- Designing for people with disabilities.



Chris Downey (center) reviewing design by a student with hearing disabilities. The student and two sign-language interpreters are in the foreground. I am taking notes in the background.

Isolating or impairing people with disabilities is not only a code issue—it violates their civil rights. Universal design, furthermore, offers exciting opportunities for designers.

- I invited Chris Downey, a practicing, completely blind architect, as a visiting lecturer in my classes and then supported him as a colleague. After co-teaching one semester, he continued to teach a seminar on ADA and universal design solo for several years.
- When teaching building codes or stair design, I stress the coming flood of elderly throughout the developed world, another argument for universal design.
- Although I rarely teach studio, in 2003 I was part of a larger group of studio faculty challenging students to design a new facility for the Center for Independent Living, which serves people with a wide variety of disabilities. I borrowed wheelchairs and used other tools to help undergraduates create designs that were empathetic and engaged the non-visional senses. When I first taught with Downey, we took students through the award-winning building (now the Ed Roberts Center) which eventually emerged from many such community efforts.

• An awareness of cost.



Our students struggle to cover their costs; at graduation, one-third report skipping meals often or very often out of economic necessity.

- Cost is an important issue in construction; we highlight this throughout the term as undergraduates make choices about materials. Teaching assistants and I discuss minimal material use, scrap and other inexpensive options (and tell students the local scrap yards drop the price for women by about 25-30%...even as we declaim it as sexist, we recognize it is a rare benefit in a world where women are often underpaid). We ask student groups and contractors what things cost, establishing economics as an acceptable topic for debate and discussion.
- I invite more than 1/3 of the undergraduate class (with the occasional baby sister or brother) out to lunch at the Faculty Club over the Spring term. This also allows us to engage in informal discussions on their needs and concerns.

- The department imposes user fees for shop access that impacts some students (such as those using a waiver for other classes). Using discretionary alumni donations, I pay the fee for about six students a term. I regularly propose dropping shop-related work with undergraduates; they consistently argue this is money well spent.
- Each of the six times I have taken students to Japan, their airfare and lodging costs have been entirely covered. In the early years, I was able to use some of my start-up funds for this purpose; later I received donations of miles for travel; two trips were supported through the Center for Japanese Studies. With advanced planning, we are also able to rely on inexpensive government dormitories for lodging.

Creating career-oriented networks



With student research team interviewing Toyo Ito and his staff.

Many UCB students are from working class backgrounds or are immigrants and are unfamiliar with networking; our college also has limited resources for career services.

- I organized Fall '12 and Spring '13 freshman/sophomore seminars linking to our department's public lectures, connecting students with speakers. This subsequently became a student-led course (part of the De-Cal, or "Democracy in Action at Cal, program), which I supervised through 2014 (in addition to my normal load).
- O My undergraduate class ends each year with an "alumni panel" where students from past years return to talk about how what they learned in the class relates to their work today. Students find mentors they can turn to after graduating. We include alumni from firms like Apple or Gartner, a campus architect, a high-end party planner, and those working in "user experience" or industrial design—in addition to architects, engineers, and contractors.
- Professionals meet my classes in lectures, on site or during field trips. Graduate students
 in all my courses are required to interview or observe a variety of people involved in a
 project, both builders/fabricators and professionals. These interactions frequently
 include a discussion of a company's structure and how to pursue work with them.



Superintendent overseeing work at Wurster Hall.

ARCHITECTURE IS A PART OF THE ARCHITECTURE, ENGINEERING AND CONSTRUCTION ("AEC") COMMUNITY.

In the early 1990s, already a licensed architect, I worked at a Tokyo firm where award-winning architecture was the result of careful attention to craft; I began to see that the exciting work built in Japan resulted from rich interdisciplinary collaborations. In my research and in my teaching, I underscore the importance of collaboration to innovation.

• Hands-on experience.



With shop support, undergraduates explore new tools and develop a deeper appreciation for craft.

Through their own hands-on projects, students learn the value of craft. In class, we link these experiences to a respect for the trades and appreciation for the impact of production on architecture.

- In my undergraduate class, three- to four-person teams build small projects in wood, metals and concrete.
- We coordinate closely with the shop, reviewing desired learning outcomes; shop staff become an enthusiastic part of our extended teaching team, and often assist students in making on-the-fly adjustments to their projects.
- A rare opportunity for students to build in Japan: "Nest We Grow."



UCB student team, myself and Kengo Kuma in front of "Nest We Grow" in Hokkaido, Japan.

I organized and advised several *ad hoc* student teams developing proposals for the 2014 invitational 4th LIXIL International University Architectural Competition (above normal teaching). I invited outside jurors for reviews, encouraged student teams to reconfigure to meet the final challenge, and made the call as to which project would be sent to Japan. UCB's Mark Anderson and Gary Black, too, informally advised students early on.

I traveled to Japan with part of the student team for its finalist presentation. After winning, the team lived in Japan for the summer, preparing construction documents under the supervision of Kengo Kuma staff. Construction began in Fall, complete by November, 2014.

 Past problems with communication and consultant support became apparent in my conversations with the 2013 Harvard team leader, Mark Mulligan. I then asked

- structural engineer Masato Araya to advise our students during design development (and he continues to advise student winners for LIXIL annually).
- Influenced by my research, two UCB students lived on site doing construction administration; Araya and I traveled to Hokkaido to confirm structural detailing (including rebar and steel connections) with Kuma staff, students and the contractor.
- I coached the team on press packages and sat in for their first interview. Their impressive publication record is listed elsewhere in these materials.
- "Nest We Grow" received the following awards:
 2017 Honorable Mention, "Applied Innovations," Zumtobel Group Award.
 2016 New York Council Design Award, Society of American Registered Architects.
 2016 "Green Building by Nature," U.S. WoodWorks Wood Design Award.
 2015 U.S. Vectorworks Design Scholarship for Architecture.
- This project is already frequently assigned for study in studio and construction classes.
- My research and teaching underscore the contributions of the AEC community to architectural success.



Good architecture requires buy-in from other professionals, builders and fabricators; this respect is earned and is not innate to our profession.

- My published research includes two major monographs and 80 pieces in books and refereed or trade journals, published in English, Japanese, Chinese, Korean and Spanish.
 The following selected works highlight collaboration:
 - 「アートと科学の結合が競争優位を生む [A Competitive Edge born from the Fusion of Art and Science] 」 in Yoichi Funabashi, ed. ガラパゴス・クール [Galapagos Cool] (Tokyo: Tōyō Keizai Shinpō, '17) p. 62-89. English edition under contract: Reinventing Japan: New Directions in Global Leadership (Praeger). With Kengo Kuma.
 - "Prefabricated Housing in Japan," in Ryan Smith, ed. Off-Site Architecture: Theory of Modern Methods of Construction (London: Routledge: '17) p. 190-213.
 - "Toyo Ito and Masato Araya's Experiments in the Structural Use of Aluminum" *Journal of Architecture* vol. 21 no. 1 (Feb. '16) p. 24-54.
 - "Wei Wu Ying Cultural Center," *Taiwan Architect* 建築師 no. 466 (Oct. '13) p. 98-101. In Chinese.
 - "What Japan Suggests for Seismic Safety," ArcCA: Journal of the American Institute of Architects, California Council 11:1 (May '11), p. 9.
 - "Teshima Art Museum by Ryue Nishizawa, Teshima Island, Japan," *Architectural Review* (March '11) p. 32-7.

- "After his triumph in Sendai, Toyo Ito charted a new course, which is now becoming visible" *Architectural Record* 196:1, (Jan. '08) p. 94-[5].
- "Build" in George Wagner, ed. *Tokyo from Vancouver 2* (Vancouver: University of British Columbia, School of Architecture, '08) p. 116-27.
- "Terunobu Fujimori: Working with Japan's Small Production Facilities" in Logoria, Rafael and Kim Tanzer, eds. *Green Braid: Towards an Architecture of Ecology, Economy, and Equity* (London: Routledge, '07) p. 212-2.
- Buntrock, Dana. Japanese Architecture as a Collaborative Process: Opportunities in a flexible construction culture (London: Spon Press, '01). Published excerpt: Buntrock, Dana. "Working in the Midst of Construction" ArcCA: The Journal of the American Institute of Architects, California Council 6:1 (May '06), p. 27-[31].
- I underscore the importance of collaboration in workshops, conference papers and interviews to the AEC community.
 - "Taichung's Opera House: Its Antecedents and Implications," College Art Association (Feb. '09).
 - "Fab: Making It Possible" sponsored by the American Institute of Architects-San Francisco and *Dwell* (June '03).
 - Moderator, presenter and coordinator. "Architecture in Japan: A Collaborative Process," featuring myself, Tim Macfarlane (Dewhurst Macfarlane) and Tim Culbert (project architect for the Miho Museum in Japan). Japan Society and Material Connexion of New York (Feb. '03). Book signing followed.
 - "Shaping the context for successfully saving industrial heritage" Symposium on Forestry Cultural Industry and Spatial Development in Taichung, Taiwan (May '04). Invited speaker.
- Students in my classes come from across the AEC industry. They engage directly with builders and fabricators—in class and in the world.



Students on site photograph and record what they hear, check vocabulary and concepts against lectures and the textbook, and write reports.

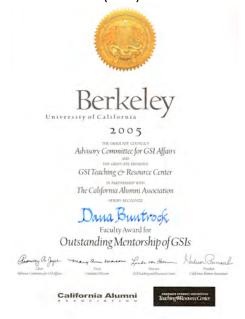
It is especially important for architecture students to hear what others working in the AEC industry say about architecture and building. Some voices are critical, noting unrealistic expectations or an inability to add—but most, much to students' surprise, demonstrate nuanced and enthusiastic commitment to a shared vision and high quality.

- Undergraduates in groups of 20-25 students visit at least three construction sites (wood, steel and concrete) each Spring. I arrange all 15-18 tightly timed visits directly with area contractors each year, no small feat in its own right.
- To the extent that I am able, my classes are open to students from engineering and business. This adds to my workload, but enhances teams, which can draw on multiple perspectives. We promote transdisciplinary perspectives in class and in teams.
- Graduates in both introductory classes and advanced seminars (on Japanese practice or off-site fabrication) observe work under construction and speak to builders, fabricators and professionals in preparation for a semester-long report.
- People with unusual AEC perspectives are invited to speak in classes. Spring '17 visiting speakers included Steve Badanes of Jersey Devil, a project superintendent overseeing work at Wurster Hall (Rene Gomez), an architect assessing and advising groups on safely living in Oakland warehouses following the "Ghost Ship" fire (Tom Dolan) and Bill Zahner, on expanding design-assist practices in the metals industry.

ARCHITECTURAL LICENSING DEMANDS WE ACT AS LEADERS AND PUBLIC INTELLECTUALS.

Licensing is an important tool to protect health and life safety; students must recognize their responsibilities to society as experts in the field and intellectuals. Thoughtful mentorship cultivates leadership and public engagement.

Mentoring Graduate Student Instructors (GSIs).



Graduate student teaching is an important path to confident leadership.

- Since 2000, "Introduction to Construction" has grown from a small elective to a popular undergraduate class of 125-150 students (depending on demand and available resources). I have supervised 32 teaching assistants ("Graduate Student Instructors" or "GSIs"), many working with me more than once. More than 20% of department GSIs each Spring teach my undergraduate course.
- Twelve GSIs under my supervision have received the "Outstanding GSI Award." Students in their first term of teaching and those who have graduated are ineligible; many fine GSIs I worked with were not acknowledged because their first term teaching was also their last term as students.
- Former GSIs who themselves became educators include:

 David Jaehning (GSI,'17); Lecturer, UCB ('17).
 Jeff Carney (GSI, '06); Associate Professor, Louisiana State University.
 Grant Adams (GSI,'06); Instructor, Diablo Valley Community College.
 Cy Keener (GSI,'05); Assistant Professor (Art), University of Maryland.
 Lauren Mallas (GSI, '04, '05); Lecturer, UCB ('06-10); USF ('09-14), elsewhere.
 Aaron Brumo, (GSI, '02, '04, '05); Lecturer, UCB ('10).
- My university service also addresses GSI needs: Advisory Committee for GSI Affairs (Spring '08 – Spring '09); GSI Teaching Conference/Orientation, Speaker (Fall '02; Spring '04; Fall '05; Fall '08; Fall '11).
- In 2005, teaching assistants I supervised successfully nominated me for a campus-wide award, "Outstanding Mentorship of GSIs." A second group again nominated me in 2017, the first time a UCB professor was nominated again. The campus decided the award should be given only once in a career.
- I taught the department's required pedagogy class for first-time GSIs ('08, '09 and '11).
 The class is now taught by a PhD student under supervision of the Chair, but I recently taught a smaller seminar for a group of students with scheduling conflicts ('17).
- Leaders engage the profession and public through publication.



From the early 1990s and for a period of about 20 years, I published regularly in professional journals such as *Architectural Review* and *Architecture*. This experience helps me to embolden students to believe they, too, can have a voice in the professional press.

"Nest We Grow" has been published in one book and 16 print publications around the world. I coached the team to develop a strong story and deal effectively with journalists, but they handled all promotional work leading to publication—as well as broad dissemination on-line (not listed here).

Celebrating Excellence in Wood Architecture, 2015-2016 Wood Design Award Winners (Ottawa: Canadian Wood Council, '16) p. 322-5.

FuturArc 49 (Jul-Aug. '16) p. 32-9.

Garden Design Journal (March '16) p. 15-9.

Toyota 優活誌 44 (Winter '15) p. 18-9, in Chinese (Taiwan).

Wired, UK edition only (Oct. '15) p. 22.

新假期 Weekend Weekly 822 (8 June '15) p. 6-7, in Chinese.

Green [Taiwan] vol. 035 (June '15) cover and p. 16-7, in Chinese.

Mark 56 (June/July '15) p. 42-3.

Arquitectura Viva 174 (May '15) p. 64-7, in Spanish.

Architect (May '15) p. 72.

Le Moniteur du btp (24 April '15) p. 11, in French.

Interni China (April '15) p. 36-9, in Chinese.

Taiwan Architect no. 484 (April '15) p. 110-5, in Chinese.

LegnoArchitettura 19 (April '15) cover and p. 20-7, in Italian.

Frameworks (Fall '14).

A+U (July '14) p. 2-3; (March '15) p. 2-3, in English.

Shinkenchiku (April '14), p. 36; (June '14) p. 31-2; (Jan. '15) p. 44-7, in Japanese.

Journals briefly used Flickr to discover fresh photographs; students who traveled to
 Japan with me in 2009 published their photography in the following:

Franck, Karen, ed. *AD Special issue: Architecture Timed: Designing with Time in Mind Profile* no. 239, vol. 86, no. 1 (Jan./Feb. '16) p. 134. By Woranol Sattayavinij.

Raffaelli, Baires *The Fast Guide to Architectural Form* (Amsterdam: BIS Publishers, '16) p. 16-7. By "Amy" Hay Mew Hwang.

Zona #6, Supplement to Arbitare #054 (Aug. '10), n.p. By Li Qingyue.

Buntrock, Dana. "Making Small Buildings Large" Volume 34: Student Publication of the College of Design ('10). Erin Tompkins, all photos.

Buntrock, Dana. *Materials and Meaning in Contemporary Japanese Architecture* (London: Routledge: 2010). Björn Lundquist (p. 38, 42 and 43); Eduardo Pintos Perez (62); Erin Tompkins (38, 42, 43, 55 and 60).

"House before House," *Pasajes Arquitectura y Critica* no. 109 (Sept. '09). Jeff Gaines (p. 19); Eduardo Pintos (p. 21); Woranol Sattayavinij (p. 24).

"La Cultura Expresada a Través del Concreto," *Noticreto* no. 95 (July/Aug. '09). Maria Carrizosa (p. 17); Ibone Santiago (p. 16); Woranol Sattayavinij (p. 17).

Opportunities for other students to publish seminar-related texts included:

Lueck, Ben. "Endangered in Berkeley," Clog (Feb. '13). p. 68-9.

Gasser, Dan. "Architect/Artisan Collaboration," ArcCA: The Journal of the American Institute of Architects, California Council 11:4 (Feb. '12).

Arroyo, Paz et al. "California Prefab: Market Report," *ArcCA: The Journal of the American Institute of Architects, California Council* 11:2 (Sept. '11), p. [30]-3.

El-Husseiny, M. (Book review) *Journal of Architectural Education* 62: 3 (Feb. '09) p. 90-2. Reiner, Tom. "Design for Innovation through Fabrication" *Connector* 8:1 (Spring '04) p. 10. Padgett, Brian. "Off-site Fabrication: Opportunities and Evils" *ArcCA: The Journal of the American Institute of Architects, California Council* 03:1 (May '03), p. 29-30.

- Exhibitions of creative work with students
 - "Nest We Grow" (The 4th LIXIL International University Architectural Competition), at two LIXIL galleries in Tokyo ('15).
 - "Politics on the Presidio: Portraying History in a Popular Setting" (undergraduate studio, Fall '01) exhibited at the National Japanese American Historical Society in San Francisco (May 13 September 15, '02).

ARCHITECTURE IS A GLOBAL COMMUNITY OF POWERFUL YET INTIMATE NETWORKS.

Drop any two architects at a table together, and they will soon become friends. If they do not have a common language, they will sketch or share photos on their phones. Our profession is unusually congenial and global. We'll travel to odd corners of the world to see important buildings; we invite international experts (some who lack English language skills) to teach shoulder to shoulder with us. Our students, too, intend to be international citizens, living and working across the world.

• Critical scholarship in Japan.



With students at Meiji Shrine.

Since 2001, as resources and opportunities were available, I've arranged for many graduates and undergraduates to interact critically with Japan's AEC industry.

- Students in a Japan seminar ('01, '03, '05, and '09) interviewed architects, contractors and others about innovative buildings under construction. Most visited construction sites, professional offices and fabricators. With four to five research teams each trip, I expected students to manage travel planning and interviews in Japan without relying excessively on my involvement. Many students discovered the confidence to work or continue research in Japan because of this experience.
- Although the '11 seminar trip was cancelled (we were to travel a week after the 3.11 triple disasters), three advanced-level graduate students joined a workshop in Tokyo that year (discussed below). One, David Fannon, is now a professor at Northeastern University and continues to travel to Japan for his research.
- An *ad hoc* competition team won the 4th LIXIL International University Architectural Competition ('14); my work with them is discussed earlier.
- O Professor Susan Ubbelohde and I supervised eight UCB graduate students from architecture, engineering, and Japanese studies working in three research teams in May, 2015. A team analyzing environmental conditions at Junya Ishigami's KAIT Workshop (a popular but environmentally problematic case) was joined by a graduate student team from the University of Tokyo, working under Dr. Masayuki Mae.
- Supporting international students at home.

A significant number of the students who take my graduate "Introduction to Construction" class have only just arrived from other nations; many struggle with English.

- O The course covers dimensioned lumber / heavy timber, insulation, and Title 24, the California building code (which requires seismic stability, energy efficiency and disabled access). Overseas students do not automatically take to these topics. Wood, for example, is a common building material in California, but not in China or Taiwan. I demonstrate why practices may change, discussing the oldest wooden structure (c. 586 AD) and the tallest (157' / 48 m. tall), both in Japan; Bohlin Cywinski Jackson's Tsingtao Pearl Visitor Center in China, built with nail-laminated timber; and conditions that may expand the use of timber in architecture: labor mobility, the industrial nature of wood products today and the environmental benefits of using wood structurally.
- o I strongly recommend having new international students on each of the site observation teams; these students bring useful perspectives and observation strategies to groups.
- Students lacking confidence in English can join a weekly, "group office hour." We review lectures and discuss things they've photographed during construction site visits. This session promotes confidence in course material, language development and future academic success while at UCB.
- Creating paths for international scholars to develop leadership at UCB and in the U.S.

Academically strong international students nonetheless have some difficulty assuming leadership roles at UCB and in our community. The reasons are both structural and cultural. This is an area where I continue to grow.

- Teaching assistants in my undergraduate course must anticipate construction site dangers and be fluent both in English and on the topic. This has been a high bar; of the 32 GSIs I have worked with to date, only two have been international students (and only four have been women). This Spring I supervised an independent study involving site observation by two women who excelled in the Fall graduate course. Both hope to teach with me next Spring; one is an international student. I believe this approach will develop a pipeline to greater diversity on teaching teams.
- In the last year alone, I've worked closely with at least 15 overseas graduate students and 17 undergraduates on strategic plans for job hunts and graduate student applications. I routinely place students in offices in Japan, Taiwan, and throughout California.
- Chairing the Center for Japanese Studies expanded my mentorship to Japanese Visiting Scholars from the AEC industry (three last year), exchange students in the field (two last year) and other students of all ages and disciplines. I meet with employers or advisers during trips to Japan and discuss how these returning scholars can create rich benefits for themselves, their community, and mine.

ARCHITECTURE'S TOOLS ADDRESS SOCIETY'S ECONOMIC, ENVIRONMENTAL AND ETHICAL CHALLENGES.

A massive 2011 earthquake triggered *tsunami* and nuclear meltdowns. Until that moment, my public role had been modest: if a large earthquake struck, I might be on local news; I spoke to the public about retrofits or international exchange. In March, 2011, I found myself on a panel of mostly nuclear engineers, facing a panicked crowd (some just in from Japan), explaining that Japan's nuclear power was squandered: buildings consumed 70% of Japan's electricity, no longer tapping wind and sun for comfort, nor were insulation or thermal breaks the norm. I soon foresaw, too, the sweltering summer ahead, because Eastern Japan, including Tokyo, faced severe electricity shortages. The nation's professionals were unprepared. With Susan Ubbelohde, I planned the first of many workshops for Japan's AEC community, explaining California's building performance tools and practices.



"Tokyo Workshop: Architecture · Energy · 2011," Day 3.
Brendon Levitt, George Loisos and Susan Ubbelohde explain how to use anemometers to measure air movement. (I am on right.)

We arrived June 2011, three months after the disaster: ten highly trained people with \$10,000 of sophisticated equipment and a customized curriculum—with modest funding by UCB.

Japanese architects and builders responded aggressively four decades ago when the Oil Shocks hit, but in the boom years of the "Bubble Era" this commitment to energy efficiency eroded. Heavily subsidized, eye-catching outliers maintained Japan's reputation for conservation overseas, but much of the AEC community lost interest and understanding. Today there are significant knowledge gaps between California (a global leader in building performance) and Japan. Through workshops with others, I promote academic and professional collaboration.

As I complete this package, I have just hosted still another group from Japan, including professors from leading universities), a bureaucrat shaping new energy regulations, and staff from three major contractors (Takenaka, Shimizu and Kajima) and a large window manufacturer. The group visited California Zero Net Energy buildings, studied Title 24 and a simple simulation tool that has potential value in Japan, EnergySoft. These workshops are making a difference in Japan's professional awareness of the tools available to address energy conservation and climate change. Universities, especially public ones like UCB, are an ideal driver for promoting significant technical and intellectual innovation.

- Co-organizer (with Hajime Iseda), "Energy policy and simulation in Northern California and Japan," UCB (Nov. '16, follow-up Aug. '17).
- Moderator and co-organizer (with Joonhong Ahn), "Before Hiroshima and Nagasaki: Perspectives on 70 Years of the Nuclear Age: From Berkeley, a Birthplace of the Atomic Bomb," UCB (Sept./Oct. '15). Funding: Japan Society for the Promotion of Science and UCB.
- o "Sustainable Architecture, Cities: Methods of Design," Architectural Institute of Japan (Tokyo, March '15). In Japanese.
- o "Innovation: Energy in Japanese Architecture," University of Tokyo (Nov. '14).
- Organizer and panelist. "After 3.11: New Architecture and Engineering," UCB (March '14). Funding: Japan Society for the Promotion of Science, UCB.
- o 『3.11 以降の「建築家の職能」について』 ["After 3.11: Architects' Task"], "Post-Architecture·Energy·Japan 2012," University of Tokyo (June '13).
- Co-organizer with Susan Ubbelohde and Masayuki Mae. "Architecture · Energy · Japan · 2012," UCB (Aug. '12). Funding: Center for Global Partnership.
- o "Tokyo Workshop: Architecture · Energy · 2011," UCB (Nov. '11).
- Co-organizer with Susan Ubbelohde. "Tokyo Workshop: Architecture · Energy · 2011,"
 Tokyo, Japan (June '11). Funding: Center for Japanese Studies.
- "Japan's Aftermath," Institute for East Asian Studies, UCB (March, April, '11).

• Published texts on our workshops by others:

The strategies we present are of great interest to architects with international experience and to young architects, thirsty to respond to on-going energy shortages—although many Japanese professionals and policy-makers continue to fear new expectations may destabilize the profession and the AEC community, and thus the nation's economy.



- LaRiviere, Frank. "Architecture and Energy Workshops 2011 and 2012: Towards an integrated approach to designing buildings with low energy demand and high occupant comfort. Part 1." JIA Bulletin (July '13). In English and Japanese.
- "Energy Efficient Japan" Frameworks (2013 May).
- o Kawashima, Norihisa. 「建築とエネルギー カリフォルニアに置けるサステナブル・デザインの動向/Architecture and Energy: The Sustainable-Design Movement in California" 建築雑誌/Journal of Architecture and Building Science 128:1644 (April '13) p. 34-7. In Japanese.
- Interviews and talks addressing Japan's AEC community.

I am also called upon to speak directly to groups about the opportunities to address energy shortages through a collaborative, multi-disciplinary approach to architecture.

- o 「日本における建築のエネルギー問題を考える [Thinking about the Problem of Energy and Architecture in Japan]」 *JIA Magazine*, Vol. 319 (Japan Institute of Architects' monthly periodical: Sept. '15) p. 4-12. In Japanese.
- 「環境を考える 4 [Thinking about the Environment, #4]」 *KENCHIKU* 新聞 / *Kenchiku Shinbun* (June '15) p. 3. In Japanese.
- "Building Performance: Getting the Most out of Your Professionals," 2015 Urban Land Institute Asia Pacific Summit, Tokyo, Japan (June '15).
- Panelist, "Sustainable Architecture, Cities: Methods of Design," Architectural Institute of Japan (March '15). In Japanese.
- Talks to non-specialists on the political and economic value of building performance:
 - Organizer, briefing to a contingent from the Dwight D. Eisenhower School for National Security and Resource Strategy (a.k.a. National Defense University) and U.S federal government, UCB (April '17).

- "The Profession of Architecture: Different Practices in Different Places," Shibaura University (June '15).
- "Japanese Architecture: What it is; what it ain't [and why it matters]," University of Tokyo (May '15).
- "Architecture, Energy, Japan," briefing to a contingent from the Dwight D. Eisenhower School for National Security and Resource Strategy and the U.S. Military, U.S. Embassy, Tokyo (March '15).
- o "An American in Japan," Seoul National University (Nov. '14).
- o "Opportunities for Innovation Today," University of Tokyo (Nov. '14).
- "How Architecture Relates to Energy: Japan," to a contingent from the Dwight D.
 Eisenhower School for National Security and Resource Strategy and the U.S federal government, UCB (April '14).
- o "Retrofit," Softbank Tomodachi Leadership Program, UCB (July '13)
- o "Architecture and Energy: Japan," to a contingent from the (April '13).
- "Rebuilding: Tange after WWII," Softbank Tomodachi Leadership Program, Berkeley (July '12).
- Selected professional and academic recognition.













From left: Kengo Kuma (Chief Juror), Tomonari Yashiro (Juror of 2nd–7th competitions), Kundo Koyama (Juror of 4th and 7th competitions), Dana Buntrock (Instructor of the winner of 4th competition, Juror of 5th–7th competitions), Yoshiharu Tsukamoto (Juror of 6th and 7th competitions), Masato Araya (Juror of 6th competition).

Jury discussion of the 7th LIXIL International University Architectural Competition in Hokkaido, Japan, published in A+U 557.

o Juror.

The 7th LIXIL International University Architectural Competition. Comments published in *Shinkenchiku* (Jan. '17) p. 38-43; *Shinkenchiku* (June '17) p. 28-31; *A+U* 557 (Feb. '17) p. 1-4.

The 6th LIXIL International University Architectural Competition. Comments in *Shinkenchiku* (Feb. '16) p. 20-1; *Shinkenchiku* (June '16) p. 35-8; *A+U* 545 (Feb. '16) p. 2-3; *A+U* 553 (Oct. '16) p. 2-3.

The 5th LIXIL International University Architectural Competition. Comments published in *Shinkenchiku* (Jan. '15) p. 48-9; *Shinkenchiku* (June '15) p. 31-4; *A+U* 534 (Feb. '15) p. 2-3.

- Reviewer. Architecture and City Planning peer review panel, Fulbright Scholar Program, Institute of International Education ('11-3)
- o Juror. American Institute of Architects (AIA) Tokyo Chapter Awards ('07).
- o Interviewer. U.S.-bound Fulbright M.B.A. applicants, in Tokyo ('07).
- Member. Architect Screening and Selection Committees, Berkeley Art Museum ('04-6).

- o Editorial Board, Journal of Architectural Education ('99-02).
- Member. Alumni Society Board of Governors, Taubman College of Architecture and Urban Planning, University of Michigan, Ann Arbor ('97-03).
- Japanese Studies leadership.



By far the most surprising development has been my role as Chair of the Center for Japanese Studies. I represent the interests of nearly 40 faculty and 100 graduate students across our campus and work with myriad Japanese governmental agencies. Hosting academic and corporate partners, we drive deep intellectual exchange on a remarkable variety of topics.

- o Chair ('15-) and Executive Committee ('12-), UCB Center for Japanese Studies.
- Executive Committee ('12-3; '15-), UCB Institute for East Asian Studies.
- Abe Fellowship, Social Science Research Council ('13).
- Editorial board, Cross-Currents: East Asian History and Culture Review ('10-'4).
 Works authored:
 - "A Nation, a World, in a Bowl of Tea," Cross-Currents: East Asian History and Culture Review no. 7 (Nov. '13) p. 507-12.
 - "Katsura Imperial Villa: A Brief Descriptive Bibliography, with Illustrations" Cross-Currents: East Asian History and Culture Review no. 3 (Nov. '12, print and June '12 on-line), p. 469-504 and cross-currents.berkeley.edu/e-journal/issue-3/katsura-imperial-villa.
- Reviewer, Japan Ministry of Education, Culture, Sports, Science and Technology Research Scholarships, San Francisco consulate (June '17).
- P.I. (on behalf of the Center for Japanese Studies), "Nurturing Networks, Growing Stronger Scholars," Japan Foundation U.S.-Southeast Asia-Japan Collaboration and Exchange Initiative ('17-21). \$75,000 annually for three dissertation workshops bringing together young scholars from Southeast Asia, Japan and UCB. Topics:
 - Gender and Sexuality in Japan (Spring '18)
 - Religion and Cultural Heritage amid Social and Environmental Change (Spring '19) Remapping Asia: Competing and Conflicting Political Goals (Spring '20)
- Organizer and moderator. "New Topics, Technologies and New Times: Japan Ahead."
 UCB (Feb. '17). Funding: Japan Society for the Promotion of Science and UCB.

IN CONCLUSION

Every architect was once a newbie. Every one of the 125+ undergraduates and nearly 50 graduates I teach each year has the potential to someday soon perform in influential and unexpected places, just as I have.

My role—and the role of the many other fine faculty who make up the ACSA--is to help students understand the exciting opportunities we enjoy also exist ahead for them—and are very much worth the effort to pursue.

Their challenge is to ignore their fears and society's headwinds; to have the courage and drive to find their own place within our broad and intellectually diverse community.

They, too, can advocate for and through the power of architecture.

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