2022 RETREAT SEATTLE IS SORTED

BIO-INSPIRED TEACHING, LEARNING, AND PRACTICE

[Newly coined word of the day: Gaiaphilic Design meaning design in consideration of the planet as a living being per James Lovelock–ed.]

Despite the evolution of human–nature relationships and the long trajectory of “designing with nature,” from the earliest indigenous and vernacular dwellings to emerging high- and low-technological innovations, the recent challenges of the global pandemic and climate crisis shine a light on the importance for humans to redouble their efforts to understand the interconnectedness of all life and the fragility of our beloved planet. How might we clarify, frame, and/or reframe the “foundation and essential principles” of bio-inspired design (biophilic, biomimetic, bioclimatic, etc.) and their intersections with building science education coupled with sustainable and regenerative design theories; strategies; processes; and methods for the benefit of humans, other species, and the planet?

RETREAT DATES. Week of 11 Jul or during the week of 18 Jul.

CORE PROGRAM. We will employ a combination of classrooms at the University of Washington in Gould Hall (College of Built Environments) and the new Miller Hull-designed Hans Rosling Center for Population Health (HRC) which has great outdoor meeting space adjacent to one of our work rooms. We needed to reserve space in the adjacent HRC given lack of availability in Gould.

CALL for PROPOSALS. We are looking forward to your participation in the 2022 SBSE Retreat exploring the theme of “Bio-Inspired Design | Biophilic, Biometric, and Bioclimatic+ Perspectives.” Currently, we are planning for a hybrid retreat experience [Seattle/virtual].

Please see the call for proposals template; proposals are due 31 Mar 22.

—Mary Guzowski, Margot McDonald, Sandy Stannard, Alicia Daniels Uhlig

UPJOHN AWARD WINNER

Synergies between Ultra-Low-Energy Buildings, Microgrids, and Direct Current

Principal Investigators: Lisa White and Graham Wright, PhD (Passive House Institute US (PHIUS));
Collaborator: Walter Grondzik, PE (Ball State University)

This study will assess the feasibility and performance benefits of linking passive building design guidelines with a city-block microgrid, simulated in Milwaukee and composed of 20 to 30 residential buildings. It will develop an architect’s guide to analyzing and designing such blocks to manifest a resilient, low-emissions future. The goal of this project is to create a template for architects and other design professionals to incorporate both passive building strategies and microgrid design strategies into their projects to achieve optimal carbon performance.

See <https://www.aia.org/pages/11911-aia-upjohn-research-initiative-grant> for full info.
LETTERS TO THE EDITOR

I had hoped to have something for you this time, but I’m still quite focussed on recovery from my crash. It’s going well, but a lot slower than I ever imagined. I’ve been walking normally for a few weeks, this week starting to be able to do half-day hikes, slowly. The biggest challenge is that my strength doesn’t return as quickly as it once did.

Anyhow, given the current trajectory, I should be fit as a fiddle by next newsletter. 🌱

—Fred Tapfer, Oregon

We’re glad you’re on the mend and anticipate the next version of low-tech solutions!–ed.

Just have to add that I love hearing these stories from Don and Michael (next column), which makes me want to go see the exhibit in Chicago. A couple of years ago, for the 25th anniversary of the Lyle Center for Regenerative Studies, we organized an exhibit of John Lyle’s work curated by his daughter, artist Cybele Lyle. It was small, but beautiful. She collected and organized a lot of material that is now in CPP’s library. I felt so sad when we had to take it down. You can see a short video at <https://www.cpp.edu/env/lyle/exhibition/john-t-lyle-and-future-regenerative-design.shtml>.

—Pablo LaRoche, CalPoly Pomona

Thanks for sharing your thoughts and the video link!–ed.

THE DAWN OF MODERN PASSIVE SOLAR DESIGN

[I love this (and I bet John Reynolds does too)! See <https://www.architecturalrecord.com/articles/15511-new-exhibition-shine-a-light-on-george-fred-kecks-solar-home-of-1933>. Take a walk down memory lane with JR and me. Some did!–ed.]

Splendid. To add to the anecdotal history:

George Fred Keck and William Keck were a brother architectural team. Fred had passed away at the time I wrote about their work in “Designing and Building a Solar House” in about 1975, but I was able to interview George and write about the Crystal House of 1933 being an experiment in glass and steel ... the solar effect only discovered during construction when workers were inside in tee-shirts in the Chicago winter. They later adopted the name “solar house” in describing their subsequent work to Chicago newspapers (perhaps the first to use the term), combining south windows, shading, curtains and thermal mass (fireplace wall) in 1940 Green Ready Built Homes, photos now familiar ... completed shortly before WWII.

The American Society of Solar Energy gave the “Solar Pioneer” award to the Keck Brothers in 1979 (annual meeting in Chicago). George Fred was there to receive the award. I was able to sit with him and Harold Hay in one of the front rows awaiting the ceremony to begin. George and Harold knew one another and almost immediately on greeting, each pulled from their coat pockets some notebook or paper to show their latest solar designs ... for George it was a house he was working on at the time ... two masters as excited as one could be about their solar designs. Harold received the same award a decade or so later.

—Don Watson

Great article about the Keck Brothers, and Don’s remembrance of their receipt of the Solar Pioneer Award in Chicago. I was fortunate to have worked with both brothers on several AIA/RC projects ... one having to do with residential development planning and architectural design in flood plains for the new National Flood Insurance Program, and a second having to do with solar home design for the HUD Solar Heating and Cooling Demonstration Program, in which you were also so involved. I remember one meeting I had with both brothers in Chicago, and after the meeting they took me to The Chicago Club for lunch ... a magnificent private club for the Chicago elite. They were both very kind and generous people and full of great stories about Chicago. I have fond memories of them and all that they accomplished as a small architectural firm.

I also have fond memories of Harold Hay, who had a personal war with DOE about how he and his inventions (roof pond) were being poorly treated and not widely promoted. He would show up at my office at AIA/RC and be so angry and frustrated with DOE and the “solar establishment” that it would take an hour to calm him down. I loved his passion, and I think his personal war against DOE and his love of humanity kept him alive for so many years.

We have a lot of wonderful characters in the solar architecture movement ... many who are no longer with us, but many who still are and need to be recognized for their many contributions. Thanks for sharing your story about the Keck Brothers, who made a great contribution to passive solar design.

—Michael Holtz

I, too, appreciate all these thoughts and recollections. I visited the Keck Show at the Elmhurst Art Museum yesterday and came away with a couple of thoughts. First, the Kecks were early and committed solar designers who provided prototypes and examples of integrated residential design for all of us. Second, the show would have benefited by including some of the work that followed as reflected by all those involved in the solar movement in the ’70s and ’80s. SBSE has a role to play here and, sharing these stories could someday be another show. 🌱

—Jack Kreemers

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So, here we were … at a conference in Miami in person! How much have we longed to exercise our social skills, stand in line for coffee and for lunch, chit chat with colleagues … drink coffee together, debate, laugh, and listen, while in the same space—all at the 2022 ARCC/EAAE conference on the Resilient City: Physical, Social, and Economic Perspectives. International participants came from Switzerland, Hungary, the Netherlands, the UK, France, Italy and further from Chile and Djibouti, but there will also be a virtual session in May. Miami in March was, of course, the perfect location for this in-person reunion, because all social activities could be staged outside in the beautiful courtyard of FIU’s Paul Cejas Architecture Building designed by Bernard Tschumi. “Architecture is not simply about space and form, but also about event, action, and what happens in space.” As noted and quoted from the Manhattan Transcripts, projects so influential for a whole generation of architects, those of the 80s, my generation. Architectural space as manifested program.

But the Resilient City … in Miami? Doubts became apparent, when, after first drinks we sat in the auditorium and listened to the first keynote by James F. Murley, the Chief Resilience Officer of Miami Dade County. The road to resilience is still very long, thus one member of the audience asked if Miami would be under water soon? Well, it depends: the question remained unanswered, but what’s clear is they have a steep road ahead to change the trajectory, but at least they are talking about change—even though a bicycle is painted on the road it does not alone make the city bikeable.

Second keynote, the next morning, Jeremy Till, Head of Central Saint Martin’s and Pro-Vice Chancellor of the University of the Arts, London, UK, “Architecture after Architecture: Spatial Practice in the Face of the Climate Emergency.” Instead of solutions, he exacerbated the challenge by questioning pretty much everything. The search for spatial practices in the face of the emergency continues. More hope and tangible actions were provided in a presentation by Toni Griffin (Professor in Practice of Urban Planning at Harvard University and founder of UrbanAC), “Justice as Space and Place: Towards a New Design Vocabulary and Practice,” which provided the first highlight and approaches to overcome current injustices in research <https://www.designforthejustcity.org/about> and through design and planning in cities such as Detroit, DC, and St. Louis with her practice UrbanAC <https://urbanac.city/>. She showed that change can be possible, even if step-by-step.

Parallel sessions—the meat of the conference—circulated around the resilience theme and subtopics framed by climate, equity, technology, and public health. I was impressed by our SBSE colleagues and friends from Chile, Andrea Martinez and Pablo Arriagada, who presented their evaluation for post-disaster housing after earthquakes and tsunamis as well as public school retrofits. Abdou Idriz, Université de Djibouti, presented a fascinating take on the bioclimatic building performance for hot climates. Discussions were vivid and engaged.

Graduate students were invited to thesis and research development workshops, a very important addition to the conference. Two NSF program directors patiently answered many questions regarding the proposal submission process. Poster sessions happened in the arcades of the courtyard.

All in all, I can only applaud the organizers at FIU, ARCC, and EAAE for a successful and engaging event. The next joint ARCC/EAAE conference will be in 2024 in Aarhus and the next ARCC conference in 2023 in Dallas, TX. Stay tuned. 🌟

—Ulrika Passe

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**PENNSYLVANIA COLLEGE OF TECHNOLOGY**

Penn College, located in Williamsport, PA, is seeking a permanent full-time faculty member. We are excited to be starting the NAAB accreditation process in the fall with our new Bachelor of Architecture degree.

Please see full listing at <https://www.pct.edu/jobs> as well as the posting at Higher Ed Jobs: <https://www.higheredjobs.com/faculty/details.cfm?JobCode=177813139&Tite=Faculty%2C%20Architecture>.

We have a strong sustainability and technology focus. Examples of student work can be found at our online gallery: <https://www.pct.edu/academics/et/architecture-sustainable-design/student-gallery>.

—Dorothy Gerring

**AALBORG UNIVERSITY**

The Integrated Architecture group at the Department of Architecture, Design and Media Technology at Aalborg University Denmark, invites applications for appointment(s) as Assistant Professor in Sustainable Architecture (Vacancy number 2022-224-04441). Application deadline was 10 Mar 2022.

You may obtain further information from Head of Section Lea Holst Laursen, mail <llhl@create.aau.dk>, tel. + 45 9940 7174. Please refer to Aalborg University’s web site for more detailed information and for applying online <https://www.vacancies.aau.dk/show-vacancy/?vacancy=1183935>.

—Runa Hellwig
Fionn Stevenson officially retired from the School of Architecture at the University of Sheffield after forty years in academia and practice. “It was a privilege to work with amazing colleagues over the decades in six different UK universities (Strathclyde, Edinburgh, Robert Gordon, Dundee, Oxford Brookes, and Sheffield) as well as visiting and collaborating with colleagues in other wonderful universities abroad. It’s also been great to combine academia and industry through practice-based and interdisciplinary research. Thanks to everyone for giving me the chance to do that. I will miss the thousands of students I’ve taught as well as all the people I’ve worked with, but I suspect after a wee break, I will be back in another #climateaction guise—yet to be decided.”


There will be 33 keynote speakers and workshop leaders, including 4 brilliant plenaries sponsored by the Jeff Cook Trust.

Plus breaking news: there will be an Edinburgh Castle Opening Party, 4 Sep. Historic Environment Scotland is throwing the Castle open for us to explore, see the Scottish Crown Jewels, enjoy a reception, and take in the best view in Scotland.


For more information please contact <enquiries@comfortattheextremes.com>.

— Sue Roaf

One of my favorite conferences is back in person (with a virtual component) in Washington, DC, 14–16 Nov 2022! Abstracts are due 1 Apr 2022.

This year’s theme is “Engaging All Voices,” because cutting emissions in half by 2030 requires all hands on deck!

Over the past 16 years, the Behavior Energy and Climate Change (BECC) community has applied behavioral research and practice to foster individual and organizational change. We are back in person for the 2022 conference, ready to discuss behavioral solutions that engage all voices and ensure equity and inclusivity.

BECC invites all educators, architects, engineers, and planners to present your work and learn from others. Whether designing new buildings and communities or planning creative retrofits, designers work with many trades, entities, and individuals to help transform the built environment towards a zero-carbon future. In working with these different voices, what have you learned that would help pave the way to achieve more sustainable, equitable, and net-zero buildings and communities? BECC wants to hear from you! More information at <https://beccconference.org/>.

— Therese Peffer
The decision not to air-condition the shrine artificially was made yesterday.

In the East, the West, North and South, these man-built caves have been the very natural atmosphere of antiquity. Churches, synagogues, mosques—domes of any sort throughout the ages in winter. Furthermore, the dome is open at the top and so shaped that the warm air is pressed upward by the cool ground. In addition, we have provided a circular spray of fountains in the East, the West, North and South, these man-built caves have been the very natural refuges from the confinement by summer heat.

The decision not to air-condition the shrine artificially was made yesterday. —Frederick Kiesler

The victory was over the contractor in eliminating air-conditioning from the Dome Vessel and from the underground corridor leading to it.

For two years we have been waging a war with the mechanical engineers, who automatically impose the cancerous growth of ducts on any building small or large, religious or profane. Cafeteria-and-skyscraper air-conditioning is invading our homes and churches. Artificial air is the fashion. I am sure they propagate air-conditioning brothels from Rio to Damascus.

An air-conditioned sanctuary for Dead Sea Scrolls sounded embarrassingly contradictory. Functionally speaking, it is simply this: dry like champagne; the sanctuary is half underground, partially buried in rock, earth, and fill. That provides for natural cooling in summer and warming in winter. Furthermore, the dome is open at the top and so shaped that the warm air is pressed upward by the cool ground. In addition, we have provided a circular spray of fountains over the upper part of the dome; they provide continuous cooling which can be diminished or strengthened as the summer heat demands. To add mechanized dehydration and frigidity to the air would be a sheer waste of equipment and money, and, worst of all, artificial in this atmosphere of antiquity. Churches, synagogues, mosques—domes of any sort throughout the ages in the East, the West, North and South, these man-built caves have been the very natural refuges from the confinement by summer heat.

The decision not to air-condition the shrine artificially was made yesterday. —Frederick Kiesler

BATTLE OF YOM KIPPUR—11 OCT 1959

[From Frederick Kiesler’s journal, “Inside the Endless House”—ed.]

Unexpectedly—a battle was won on Yom Kippur.

The Tectonics issue investigates the intersection of structure and construction, together with the emerging research in intelligent buildings, building and material science (biomaterials, composites, assemblies), architectural kinetics, mass customization, and parametrically driven digital fabrication and simulation. TAD promotes research that redefines/deconceptualizes ways architecture and construction address the diverse technological, cultural, economic, and ecological imperatives of our times.


Perhaps this peer-review opportunity is a fit for your research. Please also consider forwarding this invitation within your community and respective network. —TAD Editorial Board

STUDENT OPPORTUNITIES

IIT

The College of Architecture and the Department of Civil, Architectural, and Environmental Engineering at Illinois Institute of Technology in Chicago has recently started offering a joint post-professional Master of High Performance Buildings degree program. The new program is intended for students with bachelor or professional degrees in architecture and/or engineering who seek to develop a better understanding of the theories, methods, and technologies necessary to achieve high performance, energy efficient, healthy, and sustainable buildings. The program places emphasis on collaboration between engineers and architects and integrated design in which architects and engineers work together to achieve common goals. Approximately half of the courses are taken in the College of Architecture and half in the Department of Civil, Architectural, and Environmental Engineering, with a culminating design experience centered on the Department of Energy’s Solar Decathlon Design Challenge. For more information and instructions on how to apply see https://www.iit.edu/academics/programs/high-performance-buildings-mhpb.

SOLAR DECATHLON

Fifty-Five Solar Decathlon Design Challenge Teams Advance as Finalists

Fifty-five teams representing thirty-eight universities are advancing as finalists in the U.S. Department of Energy Solar Decathlon® 2022 Design Challenge.

Finalist teams were chosen based on presentations and design submissions at the semifinal competition event, held virtually 25–26 Feb 2022. During this event, teams pitched their unique building designs, impressing industry expert jurors with their creativity and ability to tackle the most difficult issues in the built environment.

See https://www.energy.gov/eere/articles/fifty-five-solar-decathlon-design-challenge-teams-advance-finalists for the competing teams line-ups. Unfortunately, USDOE doesn’t name the team members or their faculty sponsors. Is your team among the finalists? —DOE Building Technologies Office
**LAST WORD**

**MOSCOW FOR UKRAINE**

No, not that Moscow! 🗺️
—Bruce Haglund

**SBSE CALENDAR [COVID–19 RESTRICTIONS MAY CAUSE CANCELLATIONS]**

- **2022**
  - Apr 7: Resilient Design Symp 2022/London, UK and virtual
  - May 21-22: Reynolds Symp 2022/Portland and Mt. Angel, OR, USA
  - Jun 21–23: ASES Solar 2022/Albuquerque, NM, USA
  - Jul TBA: SBSE Retreat 2022/Seattle, WA, USA
  - Sep 5–6: CATE22/Edinburgh, UK
  - Nov 9–11: VIBRArch 2022/Valencia, SPAIN
  - Nov 14–16: BECC 2022/Washington, DC, USA
  - Nov 23–25: PLEA 2022/Santiago, CHILE 🇧🇷

**SUMMER ISSUE SUBMITTAL DEADLINE—JUNE 1**

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To: SBSE Members & Friends
Planet-wide

**PRITZKER PRIZE GOES TO KÉRÉ**

The 2022 Pritzker Prize Laureate is Diébédo Francis Kéré, Hon. FAIA, of Burkina Faso and Germany. Kéré is the first African recipient of the Pritzker Prize, and Burkina Faso is the 23rd country to be represented among the Pritzker laureates.

Kéré was born in 1965 in Gando, a village of approximately 2,500 residents in Burkina Faso, a small landlocked nation in West Africa. In explaining its selection, the jury citation says, “In a world where architects are building projects in the most diverse contexts—not without controversies—Kéré contributes to the debate by incorporating local, national, regional, and global dimensions in a very personal balance of grass roots experience, academic quality, low tech, high tech, and truly sophisticated multiculturalism.”

In the sole quote from Kéré released by the Pritzker Prize, the new laureate says: “I am hoping to change the paradigm, push people to dream, and undergo risk. It is not because you are rich that you should waste material. It is not because you are poor that you should not try to create quality. Everyone deserves quality, everyone deserves luxury, and everyone deserves comfort. We are interlinked and concerns in climate, democracy and scarcity are concerns for us all.”

—Edward Keegan, AR

**HAROLD* MAIL**

*Harold Hay inventor of the Skytherm and Passive Pioneer.