

SOCIETY OF BUILDING SCIENCE EDUCATORS SBSE NEWS WINTER 1996



photo: The "Oasis"

Casa San Ysidro dormitory at the Oasis.

SBSE SUMMER RETREAT 1997 PREVIEW

CONTINUING ED AND TEACHING TECHNIQUES FOR GREEN ARCHITECTURE
SANTA BARBARA, CA, JULY 10-15.

Response to the call for retreat participation has been overwhelming. We have invited five presenters for the Professional Continuing Education session (July 11) and three presenters for SBSE working sessions (July 12-14) which may also include roundtable discussions on Vital Signs Issues, the Academy of Building Science, the EDEN Internship Program, the Boyer Report, Internet Use, Our Homepage, and SBSE initiatives. Post-conference field trips (July 14-15) may include the Fielding Institute, Harold Hay's Atascadero (skytherm) house, and Ken Haggard and Polly Cooper's homestead (featuring passive and sustainable design features as well as straw bale construction). Thirty-four participants and presenters have been invited. Consequently, we are considering reserving all the facilities of the oasis, a total of forty-one accommodations. The cost for each attendee should be less than \$300. If you want to be included (first come, first served), please contact Margot McDonald; Architecture Department; Cal Poly; San Luis Obispo, CA 93407; 805-756-1298; <mmcdonal@calpoly.edu>.

Topics selected for Continuing Education workshops include Designing High-Performance Buildings (Murray Milne), the Virtual Acoustics Workshop (Martin Gold), Sun/Building Interactions (Norbert Lechner), Green Architecture and the Internet (Walter Grondzik), and Transforming the Architectural Office (Don Watson). SBSE working session topics include Case Study of an On-Line Seminar (Chris Luebke), Participatory Research Methods (Jeff Cook and the Kettles), and Lighting Research and Patterns Revisited (Russ Leslie).

Stay tuned for further details about the schedule of events, participant responsibilities, travel arrangements, lodging, appropriate clothing, and meals. ||

—Bruce Haglund

SBSE CALENDAR

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| Jan 20 | Summer Retreat '97 non-presenter applications due |
| Apr 25-30 | Annual Meeting; Washington, DC |
| Jul 11-15 | Summer Retreat; Santa Barbara, CA |
| Aug 6-10 | Vital Signs '97 Training Session; Berkeley & San Francisco, CA |

LETTERS TO THE EDITOR

Another great newsletter. My recollection of the oatmeal pancake recipe was that it wasn't quite so exact.

I contacted the National Environmental Health Association regarding the IAQ "training kit" (p.7), and they didn't know what I was talking about. Who did you get this lead from?

—Eric Angevine, Oklahoma State

[Eric caught me in the throes of pancake passion. On the other hand, EPA misdirected me—the Building Air Quality Training Kit, including manual, slides, and handouts, is really available from NTIS at 800-553-6847 item #AVA-19188-ss-00 for \$150 +shipping. I'm so confused! Mea culpa.—ed.]



Grreeeaattt job on the newsletter. Do you know what's up with the address: <<http://brick.arch.vuw.ac.nz:85>>? Tried it, and it doesn't work. Even tried putting www after the slashes.

Did I take the CRS kitchen photo?

—Alison Kwok, UCalifornia

[Brick usually works. Photo credits for the brilliant cover (and stamp) photo and the CRS kitchen photo were swapped—Alison did the cover and Tom Bartuska did the kitchen—how could I be so confused!?!—ed.]



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NEW BUILDING REVIEW

[The University of Cincinnati was "blessed" with a new architecture building designed by Peter Eisenman. Our correspondent, David Lee Smith, whines—er—offers constructive criticism. In the next issue I'll try to get Mohamed Boubekri to explain the solar ovens, labeled faculty offices on the plan, in the new architecture building at the University of Illinois.—ed.]

After more than ten years of planning, designing, and construction, the Aronoff Center for Design and Art is about to open. Philip Johnson claims that there is "no equal to it anywhere in the world from any period of modern architecture." According to Herbert Muschamp, the building "really has no exterior to speak of. (But) step inside . . . and it is open-sesame time." Eisenman suggests that "the important thing is your experience as you enter and walk along the concourse." The experience is that of an architectural amusement park within an architectural cacophony of forms, grids, colors, and light. Exciting—yes; disorienting—probably; nauseating—perhaps.

The really frustrating aspect of Eisenman's building is that while it is an extremely exciting architectural sculpture, it seems to be a stage set that fails to respond to the needs of its occupants. The mechanical systems perform poorly; they violate some of the basic premises that I introduce to my students. For example, the ECS is a terminal reheat/variable volume system. It could be an effective system, using the benefits of terminal reheat during the winter heating cycle and those of variable volume in the summer cooling cycle, but it does require effective zoning—which doesn't exist. My office which has full exposure to western sun is in the same zone as those offices that have full exposure to eastern sun. As a result, the variable volume and reheat fight each other. The baseboard radiation also runs whenever reheat is called for, even during the cooling cycle when air cooling is operating.

While this and other issues are technical problems that Eisenman did not resolve, having assigned such mundane matters to his associated a/e partner, there are also significant problems with the lighting design. A luminous ceiling over the entrance, much of which is outdoors, is constantly electrically lighted. The measured illumination throughout much of the circulation space is **over 200 footcandles**. The skylights are visually blocked by a dropped grid of ever-operating fluorescent lights, which overpower the daylighting—the areas with fluorescent lighting often seem brighter, even on clear days. As is the case with the skylights, windows have apparently been used merely as compositional elements without regard to admitting light or permitting views.

My biggest concern is that the central space, intended to be a multi-level college gathering space, does not effectively encourage interaction. While the space extends beyond the atrium, occupants of those extensions cannot visually connect with the central space. The partitions that separate these spaces from the atrium are extremely high and wide; anyone of normal height cannot readily see into the central space. This supposed "central gathering space" is also awkwardly connected to the existing building that was extensively renovated and houses a major portion of the college. (In this scheme Eisenman seems to have achieved his stated objective of disturbing the user.)

While the building was still in the design stage, it was presented at the Venice Biennale and, later, at the Contemporary Arts Center in Cincinnati. At the CAC, a large model of the central space was placed in the center of the gallery. The model was gray, not the colors of the intended or actual space, and without apertures. A huge model, it represented only the physical configuration of the space without attempting to simulate the spatial experience. Surrounding this model, the gallery walls were lined with hand-drawn, "computer-like" drawings of overlaid forms representing the transformations of form in Eisenman's design—the result of shifting and torquing asymptotic curves intersected with chevrons which "emerged" from the existing buildings. I was intrigued that this large model was not intended to represent the spatial qualities of the design. Rather, it was an object on which to turn your back as you viewed abstract line drawings representing Eisenman's design intentions.

What I observed (at CAC) of the design stage seems to be what actually was built—a theoretical construct, but not what I would define as architecture. Perhaps it is an architectural "rendering" of virtual reality, but I'm not certain of this interpretation either. ■

—David Lee Smith

WHAT'S_UP.DOC

Besides the usual stuff—having meetings and retreats—it seems that our disparate, diverse, and dispersed group is wrestling with many issues. Some of these have gotten a lot of play on the SBSE list server, others not. So, we'll try to enumerate the elements of our frenzy.

THE ACADEMY

As well as being one of the foci of the upcoming summer retreat, the Academy of Building Science proposal has been pursued by Murray Milne and the founders committee comprised of Ed Arens, Jeff Cook, Ralph Knowles, John Reynolds, and Don Watson. To quote Murray, "It looks like we are going to try for the FIPSE money [3 years @ \$280,000–ed.] in mid-October [the preliminary application was filed under the auspices of SBSE–ed.]. So things are happening quickly right now. It was a very impressive meeting down here [the founders met at the Fielding Institute–ed.]; I think we [SBSE] will really be proud to be a part of it!!!!

"I want to be sure that . . . all SBSers [are] involved in a detailed review of the Academy (overall objectives, philosophy of student-centered distance learning, governance, curriculum, and a concentrated look at core courses). I suggest that we reserve the last full day at the Oasis, then the executive committee could stay on (perhaps at the Oasis or elsewhere in the area) for another day to do the final face-to-face planning of the first offerings to be available in the fall."

ACSA AND THE TECHNOLOGY CONFERENCE

The list server has been abuzz with discussion of SBSE's role in ACSA and the newly formatted Technology Conference. Basically, ACSA is us, teachers of architecture. Our participation ensures that the agenda includes our concerns and opportunities to enlighten others. Martin Moeller, the new executive director, is committed to an all-inclusive ACSA.

MINNESOTA SCIENCE MUSEUM

NSF has funded the museum's proposed Buildings Exhibit for \$1,088,805. While this amount is \$764,180 less than originally requested, NSF's contribution, together with the \$350,000 commitment from the Science Museum Exhibits Collaborative, should enable the museum to create an outstanding exhibit about buildings. They have started an intensive planning process, and the energy use of buildings likely will be an important topic in the exhibit. Mary Guzowski and the museum staff are discussing possible involvement of SBSE in general and Vital Signs in particular in the Buildings Exhibit. [This project sounds like a terrific topic for a hands-on, SBSE retreat for 1998.–ed.]

ASES CONFERENCE

As well as the SBSE Annual Meeting, we're planning to initiate a forum on research and teaching with DC movers and shakers—ACSA, AIA, and DOE.

Dale Brentrup has suggested an SBSE housing opportunity (at \$27/night) during the conference in a UNCC-owned house on Capitol Hill. If you're interested in reasonable, convenient, group housing, contact Dale, 704-547-2664 or <dabrentr@email.uncc.edu>.

SBSE PEER REVIEW NETWORK

Mary Guzowski just mailed letters to 175 department heads and deans about the SBSE peer review network. If you are undergoing tenure and/or promotion review soon, you may want to remind your administrator that this network of qualified and appropriate peer reviewers is poised to offer assistance.

BELLAGIO RETREAT

Robert Hastings heads up a group, including Tom Bartuska, Dale Brentrup, Jeff Cook, Bob Koester, and Fatih Rifki, that is developing a proposal for a small Rockefeller Foundation supported conference at Bellagio on Lake Como. This event should work toward building ties among our European members, international colleagues, and North American contingent. The grant proposal is due April 30, 1997. ||

—Mary Guzowski, Bruce Haglund, Murray Milne

SBSE PEOPLE

✦ **Dale Brentrup** has begun the design development phase of an applied lighting and energy teaching lab at UNCC.

🏠 An Architecture + Energy Design Award was bestowed on Norm Thompson Headquarters in Hillsboro, OR, designed by Sienna Architecture Company with **G. Z. Brown** as Energy Consultant.

▲ **Raymond Cole** and a team of designers, researchers, and engineers have been hired by the City of Santa Monica, CA to draft Sustainable Development Guidelines for new buildings.

🐟 The Architectural Research Centers Consortium has elected **Bruce Haglund** as an at-large member of its board of directors.

🔗 **Walter Kroner**, has been named the new director of the Building Science Program at RPI.

🏠 **Don Watson** has authored the *Environmental Design Charette Workbook*, a summary of the 1995 charette sponsored by the AIA Committee on the Environment. The workbook has been distributed to all COTE members. ||



James Wasley, best smile at CRS.

AVAILABLE

ENVIRONMENTAL HOME DATA

The Lower Colorado River Authority has just released "The Environmental Home Database" on products, recyclers, manufacturers, and design issues that will be needed to build an environmentally sound project. Criteria for this information were originally written by the National Parks Service.

This interactive database contains access to information on 2,061 building products, 165 books and periodicals, 1,156 manufacturers' names, addresses, and phone numbers (for any state), 2,926 construction-site recycling, and 200 organizations and professional consultants.

This database (on 5 diskettes) costs \$12.50 and can be obtained from LCRA <<http://www.lcra.org/>>, e-mail <marcia.roberts@lcra.org>, or fax 512-473-4097 attn: Marcia Roberts, AIA.

TECHNOLOGY ATLAS

The 1997 edition of E Source's *Technology Atlas Series* is now available in softbound and CD-ROM formats. This comprehensive, five-volume set covers the primary areas of building energy use—Lighting, Cooling, Heating, Drivepower, and Appliances—with over 1,700 pages of practical, technical information, including detailed graphics and case studies. Ideal for academic use in the architectural and energy engineering fields, the *Technology Atlas Series* can also be purchased with a "site license" for network use and classroom distribution. [The atlas is offered to corporations for \$40,000 annually, but to academic institutions for a \$950 (educational version) or \$2,950 annually (includes updates and subsequent releases). Look for Walter Grondzik's review of the atlas in the SBSE News.—ed.]

For more information, contact: Reid Barcus at 1-800-376-8723 or see the website at <<http://www.esource.com/atlas>>. ■

JOB OPPORTUNITIES

WASHINGTON STATE UNIVERSITY—ECS TENURE-TRACK POSITION

WSU seeks an Assistant/Associate Professor to teach Environmental Control Systems at the Pullman campus. Candidates must demonstrate expertise in mechanical, lighting, electrical and plumbing systems in buildings—including alternative as well as traditional energy systems. A Bachelor's or Master's degree in Architecture or Engineering is required. Dual degree, doctorate, and professional registration are preferred. Duties include teaching environmental systems to architecture and construction management students, plus an additional course, as well as scholarship in areas of interest.

Salary commensurate with experience. Detailed position description available by contacting the school or at <<http://www.arch.wsu.edu>>. Position commences August 16, 1997. Application should include letter of interest identifying expertise related to position description, desired rank, current vitae, and names of three references. Send to Gregory Kessler, Chair, Faculty Search Committee; School of Architecture; PO Box 642220; Pullman, WA 99164-2220; 509-335-5539. Screening of applicants will begin January 10, 1997, and continue until position is filled. WSU is an EO/AA educator and employer. Protected group members are encouraged to apply.

PENNSYLVANIA STATE UNIVERSITY—DEPARTMENT CHAIR

The College of Engineering invites nominations and applications for the position of Head of the Department of Architectural Engineering. The college seeks an individual who will provide innovative and energetic leadership with strong administrative skills and a commitment to higher education. The successful candidate must possess academic credentials of the highest quality and an established and widely recognized reputation in architecture/engineering/construction. A doctorate and demonstrated ability to work with industry are desirable.

The department has 12 full-time faculty members representing 4 major instructional and research areas: construction, lighting/electrical, mechanical, and structures. An emerging research program with current annual expenditures of \$1.8 million is being built on the foundation provided by an established, professionally oriented undergraduate program. The department confers a full range of degrees, including the Ph.D. and M.S. as well as the 5-year Bachelor of Architectural Engineering (BAE) at the undergraduate level. Current enrollment includes 40 graduate and 360 undergraduate students.

Nominations and applications, including curriculum vitae, will be sought until January 13, 1997. However, applications will be considered until the position is filled. It is intended that the position be filled in advance of the 1997-98 academic year. Inquiries should be directed to: George J. McMurtry, Associate Dean for Administration and Planning; College of Engineering; 101 Hammond; University Park, PA 16802; e-mail <gjmdo@enr.psu.edu>; phone 814-864-2151. ■

NOTABLE WEBSITES

[Even though Mark's words on the web do not grace our pages this issue, news of "interesting" sites has infiltrated the News.—ed.]

- Texas A&M has a homepage, "Energy & Daylighting Programs" <<http://archone.tamu.edu/~energy>>
- A directory of Building Energy Tools is now available from the USDOE <<http://www.eren.doe.gov/buildings/toolsdir.htm>>
- The web page for the fall '97 *Greening of the Campus II Conference*, including the call for papers, is finally operational <<http://www.bsu.edu/events/events2/green1.html>> ■

BUILDING AN ENERGY-EFFICIENT FUTURE

The goal of the Leading Edge Student Design Competition is to provide teaching and applied learning experiences in the principles and requirements of energy-efficiency for tomorrow's design professionals. The competition, now in its sixth year, is being offered through schools of architecture, drafting, and design. The 1997 call-for-entries has been sent to over 900 schools worldwide. The competition is designed for students in two-year or four/five-year programs with separate challenges that capture the interests and address the design experience of each.

This year's challenge, *Building the Affordable American Dream Through Energy Efficiency*, is a real-life, production builder problem. A 2,000-acre parcel in Lake Elsinore, California, has 950 developable acres. The two-year students are to lay out one street of the development, taking into consideration the solar orientation of the homes, and fully develop/design one model home using state-of-the-art, energy-efficient techniques and features. The four/five-year students will focus on a 25-acre parcel of the development, designing two model homes and providing a site plan that displays energy efficiency. All entrants are required to exceed by 20% the California Title 24 Building Energy Efficiency Standards. First-place winners receive scholarships of \$2,000, plus \$1,000 for her or his school. Second-place winners receive a \$1,000 scholarship. Winners will be acknowledged at a sponsored reception and at the prestigious Gold Nugget Awards program that is part of the Pacific Coast Western Builders Conference.

Since the competition began in 1991, approximately 400 students from Arizona, California, Nevada, and Oregon have participated. The founding sponsors of the competition were Southern California Edison, Southern California Gas Company, and the California Energy Commission. Sponsorship has expanded to include the California Building Industry Association, California Building Industry Foundation, California Institute for Energy Efficiency, Sacramento Municipal Utility District, Owens Corning, San Diego Gas and Electric, Western Area Power Administration, and the U.S. Department of Energy. We hope to expand the sponsorship nationally and globally and to develop a working relationship with Habitat for Humanity, so that winning entries can be used by Habitat for their building projects.

The competition is a perfect example of market transformation—make sure that tomorrow's designers are well-versed in the attributes and applications of energy-efficient design principles and practices. Participating professors report they count on the competition as a teaching tool—it is the only competition which consistently focuses on energy efficiency. Also, the competition managers are extremely pleased that at least five prior competition participants are now teaching architecture and design and have introduced the competition to their students.

We hope the expansion of the competition will bring a wider variety of schools and student participants as well as many new and interesting submissions and provide a vision for our future. Let's accomplish that goal!!!

Competition entries are due May 25, 1997. If your school didn't receive the competition poster, contact Carroylin at <CTHRELKE@energy.state.ca.us>. ■

—Carroylin Threlke



Last year's jury seizes a photo of.

EVENTS

HOPES ECO-DESIGN ARTS

The third annual HOPES conference, *Cultivating Communities and Healing Environments*, will be held at the University of Oregon, **April 11-13, 1997**. For information contact HOPES at 541-346-0719, <hopes@aaa.uoregon.edu>, or <<http://gladstone.uoregon.edu:80/~hopes/>>.

RECENT RESEARCH IN ARCHITECTURE AND PLANNING

ARCC's annual conference will be held **April 25-26** at Georgia Tech in Atlanta. Abstracts of no more than 250 words are due by January 15, 1997, to Julia Robinson; University of Minnesota; Department of Architecture; 89 Church Street SE; Minneapolis, MN 55455; e-mail <robin003@maroon.tc.umn.edu>.

SUMMER LIGHTING WORKSHOP

IESNA/IALD are sponsoring a summer workshop in Durham, NH, during the **2nd and 3rd weeks of July 1997**. It is an intensive, two-week session intended for educators in engineering, architecture, technology/building science, theater, and interior design. If you have questions, contact Dee Ginthner, phone 612-624-3293, fax 612-624-2750, or <dginthner@che2.che.umn.edu>.

GREENING OF THE CAMPUS REDUX

In April 1996, Ball State University hosted its first *Greening of the Campus* conference, attracting 200 participants from 29 states and 5 countries for a successful international exchange of ideas on environmental concerns. We invite and encourage you to participate in the sequel, *Greening of the Campus II: The Next Step*, scheduled for **September 18-20, 1997**. For more information contact Becky Amato; University College NQ 323; Ball State University; Muncie, IN 47306-0220; e-mail <00rfamato@bsuvc.bsu.edu>; 317*-285-2385; fax 317*-285-2384; <<http://www.bsu.edu/events/>>.

* Effective February 1, 1997, the area code changes to 765.

ENERGY-EFFICIENT LIGHTING

The 4th European Conference on Energy-Efficient Lighting will be held in Copenhagen, Denmark, **November 19-21, 1997**. For information contact Conference Secretariat; Association of Danish Electric Utilities; Rosenørns Alle 9; DK-1970 Fredriksberg C; Attn: Gert Nielsen; fax +45-31-39-5958. ■

VITAL NEWS

TRAINING

The 1997 Vital Signs Training Session will take place from Wednesday, August 6, through Sunday morning, August 10, in San Francisco and Berkeley. The session will offer an optional, one-day equipment training on Tuesday, August 5. Application forms will be available in the spring. Contact Bill Burke <bburke@ced.berkeley.edu> for more information.

TOOL KITS

You will be able to check out Vital Signs Equipment Tool Kits beginning fall 1997. An RFP for faculty members and schools interested in borrowing the tool kits will be announced in February. The RFP will be publicized directly to SBSE members, as well as through professional newsletters and the Vital Signs Internet site <<http://www.ced.berkeley.edu/cedr/vs/index.html>>. Stay tuned. █

—Bill Burke

LETTERS TO THE EDITOR [CONT.]

Not to worry about those mistakes. The *SBSE News* looks great. The John Reynolds stamp is simply brilliant. Are you sure you're an administrator?

—Walter Grondzik, Florida A&M

[Thanks for the praise for the newsletter (I'll pass on kudos to ed's ed) and for my lack of administrative trappings. As you know, I tried to mingle with the dark suits at Miami in December in my full Don Johnson wardrobe! I gotta talk to someone about duck blinds and camouflage. I'm still confused.—ed.]

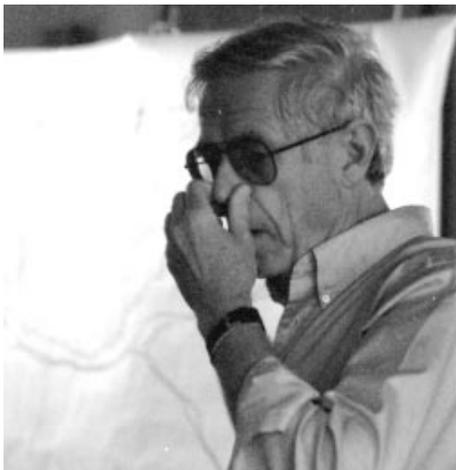


photo: Marc Schiller

[Murray's Letter to the Editor?—ed.] █

BOOK REVIEW—BEYOND GROWTH

Herman E. Daly, Beacon Press, 1996, \$27.50.

Often we need to consider books that fall outside the boundaries typically understood to define the purview of the design professions. This expansion of horizons seems inescapable as concerns for energy efficiency, resource conservation, sustainability, and even regeneration push the comfortable confines of architecture, engineering, and planning to areas previously thought off-site and out-of-sight. Microeconomics, for example, intrudes into the day-to-day design process by way of first-cost bidding and life-cycle cost analysis. As concern for efficiency and performance increases, so does the need for thoughtful economic analysis. Anyone claiming to be designing "sustainably" without a moderate understanding and consideration of microeconomics is deluding himself or herself as well as his or her clients.

In *Beyond Growth*, Herman Daly provides a wonderful overview of the macroeconomics of sustainability. This overview, however, has drawn a fair amount of criticism and is not without its detractors. In effect, Daly argues that the basic premise underlying macroeconomics is faulty—that the study of the ongoing flow of goods and services and factors of production that is called an economy has historically excluded natural capital (resources from the environment). In other words, natural capital is not valued and therefore not addressed in economic analyses such as those that produce reports on gross national product, a commonly used indicator of a nation's economic success. If Daly's hypothesis is true (and he makes a compelling case), the ramifications are enormous.

To leave natural capital—the quality of air, quantity of water, tons of iron ore, nonrenewable energy resources, and the like—out of economic thought seems blatantly dumb. Maybe this oversight helps explain the average person's inherent distrust of economists and their predictions and pronouncements, and the general malaise infecting the rank-and-file's view of the future compared to the rosy view held by Wall Street. Daly puts the case quite clearly—one can build houses with financing, saws, and lumber, but cannot replace the lumber by financing more saws. Daly's premise, in effect, is like saying Einstein's renowned $E=mc^2$ is missing a critical variable.

Beyond Growth is eye-opening, challenging, and thought-provoking, if a bit eclectic. In 253 generally smooth-flowing pages Daly presents and often assails current thinking on sustainability from a range of perspectives. These perspectives look at sustainability as a trade issue, a measure of national well-being, a development issue, and a concern of religion and ethics. Occasionally bogging down, equally often soaring, Daly's thoughts on the economics of sustainability should be mandatory reading for the so-called political and design leaders of the world. Ideally, leaders should have a destination in mind, and Daly suggests that an understanding of sustainable economics may show some destinations to be greatly preferable to others.

Daly has strong opinions and is not loath to express them clearly and forcefully. The combination of an unconventional and unpopular viewpoint and a willingness to proclaim it loudly led to *Beyond Growth* being temporarily "banned in Boston"—the mainstream publisher that commissioned the book refused to publish it. Thanks to Beacon Press for lifting the veil of thought-control.

For a non-economist reading *Beyond Growth*, the experience may be a lot like a hike through the mountains—some fog and occasional heavy going, with well-earned spectacular views and insights now and then. Mumble as you stumble through the jargon of the economist, but don't give up or you'll miss the summits. Daly's introductory chapter, "The Shape of Current Thought on Sustainable Development," should be required reading for all design professions. His distinction between "growth" (an increase in quantity) and "development" (an increase in quality) is, by itself, a wonderful summarization of a path worth exploring. █

—Walter Grondzik

SPOTLIGHT ON TEXAS A&M RESEARCH

1. A NEW INTERFACE TO ENER-WIN

This fall Larry Degelman, Veronica Soebarto, and doctoral research fellow Scott Arvin will complete the work on improving the interface to the ENER-WIN energy simulation software. This work is part of a one-year research project to develop a tool that calibrates hourly energy simulation models to existing utility records for retrofit projects. The project was funded by the Center of Energy and Mineral Resources at Texas A&M University.

ENER-WIN, developed by the Texas A&M University Department of Architecture, has been introduced to architecture schools through the Vital Signs Resource Package, in the "Whole Building Energy Performance—Simulation and Prediction for Retrofits" course material. The new version of ENER-WIN includes a CAD-like drawing interface and more detailed hourly solar shading calculations. For retrofit projects, the simulation results will be calibrated to measured data (which need to be provided by the user). Calibration guidelines and added graphical output of simulation results are also part of the improvements to this software. The program now also accepts hourly recorded weather data in TMY2, WYEC2, and custom formats.

An annual energy simulation software seminar is scheduled for January 10–11, 1997. This seminar is open to educators, practitioners, energy specialists, and others who are interested in energy simulation. The beta version will be released at the end of fall 1996 and at the seminar. For further information on the seminar and ENER-WIN, visit the Energy Program homepage <<http://archone.tamu.edu/~energy>>.

2. MAINTAINING A "NATIONAL IMAGE" AND ENERGY CONSUMPTION IN CHAIN-OPERATED RESTAURANTS

Often a chain-operated restaurant can easily be recognized through its architectural form, regardless of its location. However, planting the same design in disparate locations without regard for the local climate may result in high energy consumption when the building operator tries to maintain an acceptable comfort level in the building. Larry Degelman, Anat Geva, and Veronica Soebarto are beginning a year-long study on assessing the energy penalty for maintaining a "national image" in chain-operated buildings in Texas. They have selected fast-food restaurants as their prototype. Using ENER-WIN, they will evaluate the energy consumption in these restaurants in different climatic regions and generate recommendations that will help them reduce energy consumption while maintaining their national identity. Though they can't force the fast-food industry to radically change its building designs, they do hope to have documentation that shows how making regional adjustments can minimize energy waste and, potentially, increase profits.

This research is also funded by the Center for Energy and Mineral Resources at Texas A&M University. ||

—Veronica Soebarto

STRUCTURES TEACHERS ORGANIZE

Chris Luebke is organizing a structures teachers network. Persuade your I-beam, tie-tacked brethren to contact Chris at MIT's Department of Architecture after winter break, and they can become founding members of this potentially mutually beneficial group modeled after SBSE. Testify about your SBSE experiences. Both Chris and Ed Allen, advocates for the new group, have infiltrated SBSE and can appropriate some of our eccentricities and other strengths. ||

—Bruce Haglund, Chris Luebke

JON PICARD WAS RIGHT!?

Those who attended the Pomona retreat this summer may remember an investment tip (during a field trip) regarding Starbucks and the Internet. Well, believe it or not, it seems to be true. I heard late last night (Nov 26) on CNN (technology portion) that Intel and Starbucks have signed an agreement.

—Walter Grandzik

Wow! The CD-ROM caddy will now double as a cupholder for those long nights in front of the machine?

—Marc Schiler

Evidently caffeine is the only way to speed up that processor.

—Victor Olsyan

But I wonder, will the coffee taste the same when they make it out of ground up processors rather than beans. But I suppose, the different speeds of processors will make a nice variety of coffees, each with its own flavor and ability to process us at different speeds—depending on how late we want to work. ||

—Terri Meyer Boake



photo: Bruce Haglund

A good cuppa mud always was required accompaniment to hand calculation methods.

VIRTUAL RETURN TO RETREAT 1996



photo: Walter Grondzik

Ed. takes a stand; he's not confused after all.

e design Online, an electronic journal of “best practices,” continues to publish material of interest to SBSEers. A photoessay on the Center for Regenerative Studies (CRS) at Cal Poly, Pomona was recently added to *Online*’s sustainability thread at <<http://fcn.state.fl.us/fdi/e-design/online/9611/photo-sa.htm>>. Those who attended the 1996 SBSE retreat at CRS may find the images nostalgic [*The photos will take your breath away and bring back fond memories.*—Alison Kwok], those who could not attend the retreat may wish to take a virtual tour of this truly innovative project. While in the area, be sure to add your “Thoughts on Sustainability” to the on-going discussion that includes comments from Florida Governor Lawton Chiles, the Democratic Party’s National Committee, and numerous practitioners and educators (including a few, bold SBSE members).

Book and web site reviews are a staple of *e design Online*. Recent book reviews include *Deep Design*, *Financing Change*, *The Digital Economy*, *Conservation Design of Subdivisions*, *Proceedings Green Building Materials '96*, *Greening of the Campus Proceedings*, and *Beyond Growth* [see “Book Review,” page 6.—ed.]. Contributed reviews of recently published books, software, and web sites are solicited.

If you’d like to let others know of an important design resource or just enter the exciting world of web publishing, please let me know.

e design Online <<http://fcn.state.fl.us/fdi/e-design/online/edo.htm>> ||

—Walter Grondzik

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