

Marc Eugene Schiler

FASES, LC

Education:

CORNELL UNIVERSITY
9'76 - 9'78, M.S. Architectural Science

UNIVERSITY OF SOUTHERN CALIFORNIA
9'71 - 9'74, B.S. Architecture

CALIFORNIA INSTITUTE OF TECHNOLOGY
9'69 - 6'71, Physics

Teaching Experience:

UNIVERSITY OF SOUTHERN CALIFORNIA, (USC) 8'82-present
Professor of Architecture, 9'2000- present
Associate Professor of Architecture, 9'85-8'2000
Assistant Professor of Architecture, 8'82-8'85

Prof. Schiler was responsible for rewriting the Environmental Controls curriculum. He teaches the required courses for the undergraduate Architecture students and the advanced courses for undergraduate and graduate students. He participates in undergraduate and graduate thesis committees throughout the school. He teaches the introductory and advanced thesis courses in the graduate Master of Building Science (MBS) program, is thesis committee chairman for approximately half of the graduate MBS students and sits on most of the remaining committees. (See separate course descriptions below.)

Director, Master of Building Science Program, 9'95 – 6 '02, 9 '06 - present
The MBS program consists of between 10 and 16 graduate students pursuing a thesis based degree. Each one is required to take three core courses and one advanced course in their specialization. Beyond that there is a freedom to take any course on campus which fits with the student's interest, works toward the goal of the student's thesis, and is approved by the thesis committee. The program has been in existence for about twenty years in its current form and students from the program have had over fifty papers published in national and international conferences and journals. Graduates from the program currently teach in New Zealand, Hong Kong, Taiwan, Indonesia, Saudi Arabia and the United States as well as working in the profession or government, here and abroad. Professor Schiler administers the program (recruiting, graduate admissions for the program, assigning funding, etc.) and conducts research in energy simulation, daylighting, lighting design, interactive computer graphics and teaching tools. This has included funded research for the Department of Energy, the California Institute for Energy Efficiency, California Energy Foundation, Southern California Edison and others.

Departmental administrative responsibilities have included:
the executive, dean search, admissions, computer, academic policy, curriculum, honors and awards, scholarships, library, Building Science Program undergraduate and graduate steering committees and college secretary of the faculty.

University administrative responsibilities have included:
Non-resident Faculty Fellow, member Academic Integrity committee, member Faculty

Senate Remuneration and Benefits committee, member university Tenure and Promotion appeals committee, member of the university Grievance committee, member of the university Library committee, member of the Joint Information Services committee and College of Architecture representative to the university Faculty Senate.

Courses currently taught at USC include:

Architecture 215: Design of the Thermal Environment, a required 3 credit lecture class with approximately 100 students. This course teaches heat transfer processes at the scale of buildings, energy conservation, principles found in vernacular architecture and passive solar design active solar design and mechanical equipment.

Architecture 315: Design of the Luminous and Sonic Environment is a required 3 credit lecture class with approximately 95 students that meets twice a week. This class teaches natural and artificial lighting, acoustics, fire safety, plumbing and conveyance systems.

The instructor consistently receives student evaluations over 4.00 (out of 5.0) in both classes despite the lecture format, the technical subject matter and the fact that most students consider the courses challenging.

Architecture 515: Advanced Topics in Environmental Controls is a 4 credit seminar that meets once a week for lab and once a week for lecture. (Undergraduate students may participate in the class by registering for the class as Arch 490: Directed Research.). In most recent semesters, the class has used Lighting Design as the vehicle for teaching about research in building science topics, graphic and empirical methods, the overlap of design and technology and technical consulting practices in Architecture. Students build and test models, subsequently producing lab reports. They learn about the graphic conventions of lighting design and contract documents specifying equipment. For their final project they enter a lighting design competition or design and build a prototype lighting fixture.

Architecture 596: Introduction to Thesis is a required 1 credit seminar for Master of Building Science graduate students that meets once a week. This course introduces students to the scientific method and the thesis process. Research tools and methods are covered (including everything from scholarly documentation to basic methods of empirical research.) Outside lecturers are brought in to discuss their current research interests and to introduce students to possible thesis topics.

Architecture 615: Research in Environmental Controls is a 4 credit seminar that meets once a week for lab and once a week for lecture. The class considers Computer Simulation of Energy Flows in Buildings, as a framework for learning more about Environmental Control Systems (ECS) in buildings, but also to understand what kinds of computer simulations are useful for examining what kinds of questions. The students learn to use several benchmark programs. They evaluate the output capabilities of the programs and mock up new programs of their own. The final class project consists of performing a parametric study of a building or writing a program they have mocked up.

Architecture 692aL: Master of Building Science Thesis is a 6 credit seminar that meets as a studio. There are presentations from outside lecturers, previous theses and work in progress. The students develop the research for their thesis, obtaining information from outside sources, in some cases writing computer programs, in other cases performing extensive physical testing and/or monitoring of buildings or models. The semester consists of assembling all of the information necessary for completion of a thesis. Each student makes an individual presentation to an outside jury at the end of the semester in preparation for the final semester of thesis.

Architecture 692bL: Master of Building Science Thesis is an 8 credit seminar that meets as a studio. There are presentations from outside lecturers, previous theses and work in progress. The students analyze data from the previous semester, repeating such tests as necessary, modifying and developing their project. Directions from critics at the preliminary thesis review held in the previous semester are addressed and included. The student writes the thesis and makes the final presentation to an outside jury at the end of the semester.

Courses taught in previous years include:

Earth Sheltered Architecture (Arch499h) This course covers energy, acoustic, security and land use benefits of building partly or completely underground. Special design constraints, problems and materials are considered.

First Year Design Studio (Arch102ab) is the standard entry level design course covering architectural elements and processes. Including a faculty member with interests in environmental issues has always been valuable.

Building Science Design Studio (Arch305a) is taught to undergraduate engineering students who elect the Building Science option in the Civil/Structural engineering program. This is a prime opportunity for cross-disciplinary teaching.

Upper Division Topic Studio (Arch 302-501) allows students to focus on an area of special interest with a faculty member whose expertise lends itself to teaching a special studio. Energy Efficient Buildings was offered as a special topic in the past.

In addition Professor Schiler has given guest lectures in most of the design studios, consulted with students in all levels of design studio, advised undergraduate and graduate thesis students in design and landscape architecture programs and been guest critic in reviews and final juries throughout the school.

TECHNION, ISRAEL INSTITUTE OF TECHNOLOGY, 10'02 - 6'03

Visiting Fulbright Senior Scholar and Professor, School of Architecture and Planning, teaching courses in environmental controls issues while on sabbatical from USC, including: Computer Simulation of Energy in Buildings, (Fall) and Measuring Climate Responsive Buildings (Spring), conducting research and collaborating with graduate students on various topics.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES (UCLA) 10'84 - 3'85

part-time visiting Assistant Professor of Architecture, Graduate School of Architecture and Urban Planning (concurrent with USC)
teaching Lighting and the Visual Environment (Arch 444)
and Energy Modeling Using DOE 2.1B, (Arch 28)

CORNELL UNIVERSITY, 10'78 - 7'82

Assistant Professor of Architecture, member of the undergraduate and graduate faculties in Architecture, and the graduate faculty in Landscape Architecture,
taught required courses in:
Building Technology, Materials and Methods (Arch 261),
Environmental Controls - Site Planning (Arch 262),
Environmental Controls - Mechanical and Passive Solar Systems (Arch 362),
taught elective courses in:
Energy Efficient Microclimate Design (Arch 563),
Earth Sheltered Architecture (Arch 564), and
Environmental Control Systems (Arch 662),

Independent Studies (Arch 561-562, 761-762)

Prof. Schiler's students won the *Landscape Architecture Foundation's Award for Research*, and the *Reynolds Aluminum Award* for their work in his classes.

Personal research involved: simulation of energy in buildings, interactive computer graphics, image processing, microclimate simulation, and computer aided design (CAD).

Administrative responsibilities included: admissions committee, continuing education coordinator, academic integrity committee, Eidlitz fellowship committee, development committee, faculty search committee, freshman adviser, research funding coordinator, ROTC committee, and shop committee.

CORNELL UNIVERSITY, 9'76 - 9'78

Assistant teaching in building technology and environmental controls, Graduate research assistant in the Cornell Computer Graphics Lab.

Research Experience:**FULBRIGHT SENIOR SCHOLAR, MIDDLE EAST, 10'02 - 6'03**

Prof. Schiler conducted research on climate responsive buildings in conjunction with the Desert Studies Unit of the Blaustein Institute, Ben-Gurion University of the Negev and the School of Architecture, Technion. Buildings from 300 BCE to 1980 CE were instrumented and studied to document and understand thermal and sustainable behavior. He also taught seminars in computer simulation of energy in buildings and building energy measurement as well as supervising graduate student thesis work.

EMPA (EIDGENNÖSSISCHE MATERIALPRÜFUNGS-UND-VERSUCHS ANSTALT or the SWISS NATIONAL BUREAU OF STANDARDS / NATIONAL RESEARCH LABORATORY) sabbatical 6'88 - 6'89:

Prof. Schiler was responsible for organizing the matrix of annual simulations and comparisons of building elements and strategies for the daylighting studies performed in four varying climates and cultures by the respective international teams: Rome/Italian team, Zürich/Swiss team, Brussels/Belgian team and Oslo/Norwegian team. He ran all the simulations for the Swiss series. Prof. Schiler wrote a shell and translator which embedded the results of the daylighting simulation program, Superlite, in the energy analysis program, DOE2.1D. He discovered and traced the DOE bug which caused HVAC system simulation and building loads simulation to mismatch in leap years. He also prepared a report of the results of the zero energy residential project, Autarkit, and observed the Thali zero energy office and warehouse project design during his stay. He prepared the english translation of the "status" report of passive solar projects in Switzerland. He coordinated and accompanied the Swiss demonstrations and displays for the Seville, Gersau and Copenhagen meetings of the IEA.

Prototype Curriculum:

"Interior Illuminance, Daylight Control and Occupant Response," *Vital Signs Resource Package*, University of California at Berkeley, U.S. Department of Energy and Pacific Gas and Electric, 1995

Books:

Energy Efficient and Environmental Landscaping; w/ Anne Simon Moffat, Appropriate Solutions Press, South Newfane, Vermont, January 1994

Simplified Design of Building Lighting; John Wiley and Sons, New York, August 1993.

Simulating Daylight with Architectural Models; (edited by Schiler) Daylighting Network of North America, Los Angeles, June 1987

Mechanical, Electrical, Plumbing and Life Safety Systems; (course and text) Architectural Licensing Seminars, Los Angeles, March 1986, 2nd Ed. March 1991.

Landscape Design that Saves Energy: co-authored by Anne Simon Moffat; William Morrow, New York, March 1981.

Monographs:

Daylight Harvesting; the Gas Company Energy Research Center, Los Angeles, 1996.

Book chapters:

"Daylighting" in *Passive Solar Commercial and Institutional Buildings: A Sourcebook of Examples and Design Insights*; edited by Robert Hastings, John Wiley & Sons, Ltd., Chichester, UK, January 1994.

"Division G: Mechanical, Plumbing, Electrical and Acoustical Systems", in *New Questions and Answers*; Architectural Licensing Seminars, Los Angeles, January, 1995.

Articles and papers in refereed journals, conference proceedings:

"Zero Peak Residential Electric Demand: An Evaluation of Strategies for Eliminating Peak Demand in Climate Zone 10," Buntine, Chris and Schiler, Marc, *Proceedings of the American Solar Energy Society Conference*, Cleveland, July 5-9, 2007

"An Open-Source Program to Animate and Visualize the Recorded Temperature and Relative Humidity Data from Dataloggers including the Building's 3D Geometry," Baker, Tareq, and Schiler, Marc; *Proceedings of the American Solar Energy Society Conference*, Cleveland, July 5-9, 2007

"Interior Glare Problems of Watt Hall 3rd Floor in University of Southern California," Suk, Jae, and Schiler, Marc; *Proceedings of the American Solar Energy Society Conference*, Cleveland, July 5-9, 2007

"Post-treatment Analysis of the Glare Remediation of the Walt Disney Concert Hall", Suk, Jae, and Schiler, Marc; *Proceedings of the American Solar Energy Society Conference*, Cleveland, July 5-9, 2007

"Thermal Comfort Performance Tests of Three Libraries at USC using Data Loggers" Suk, Jae, and Schiler, Marc; *Proceedings of the American Solar Energy Society Conference*, Cleveland, July 5-9, 2007

"Thermal Comfort in a Sustainable House by Frank Lloyd Wright," Schiler, Marc and Brahmhatt, S.; *Proceedings of the Passive and Low Energy Architecture (PLEA)*, Geneva, Sept. 6-8, 2006

“Urban Environmental Glare: the Secondary Consequence of Highly Reflective Materials ,” Schiler, Marc and Valmont, E.; *Proceedings of the Passive and Low Energy Architecture (PLEA)*, Geneva, Sept. 6-8, 2006

“Thermal Comfort Performance Study Of The Frank Lloyd Wright Freeman House,” Brahmhatt, Sumit and Schiler, M.; *Proceedings of American Solar Energy Society Passive Solar Conference*, Denver. July 8 - 13, 2006

“Stewardship as Architectural Aesthetic,” Schiler, Marc; *Christian Scholar’s Review Theme Issue: The Future of Values in a Post-Naturalism World*, Vol. XXXV:4 Summer 2006, pp. 505-516.

“Microclimatic Impact: Glare around the Walt Disney Concert Hall,” Marc Schiler and Valmont, E.; *Proceedings of the Solar World Congress 2005 Joint American Solar Energy Society / International Solar Energy Society Conference*, Orlando, August 6-12, 2005.

“3,000 Years of Passive Solar Architecture in a Hot Arid Climate,” Marc Schiler and Kristan, R.; *Proceedings of the Solar World Congress 2005 Joint American Solar Energy Society / International Solar Energy Society Conference*, Orlando, August 6-12, 2005.

“The Influence of Atrium Orientation on the Daylight Performance in an Office Building,” Giovannopoulou, Evdoxia, Schiler, M. and Knowles, R.; *Proceedings of the Solar World Congress 2005 Joint American Solar Energy Society / International Solar Energy Society Conference*, Orlando, August 6-12, 2005.

“Stewardship as an Aesthetic,” Schiler, Marc; *Making All Things New: The Good, the True, and the Beautiful in the 21st Century*, C. S. Lewis Foundation, Oxford and Cambridge, July 24 – August 6, 2005

“Effects of Sun Controls on Buildings Interior Lighting and Thermal Environment in Hot Arid Regions,” Noureddine Zemmouri and Schiler., M. E.; *Centre de Développement des Energies Renouvelables (Algerie)*, Volume 7, Numéro 1, 2004-06-00.

“Research vs. Consulting: Student Researchers and Student Employees in the Disney Hall Glare Amelioration Project,” Marc Schiler and Valmont, E.; *Proceedings of the European Association for Architectural Education and Architectural Research Centers Consortium joint Research Conference*, Dublin, Ireland, June 2-4, 2004 (paper accepted, but not presented for legal reasons.)

“Using a Helium Bubble Generator to Visualize Airflow Patterns In and Around Building Models,” Rashed Al-Shaali, Schiler, M. and Koenig, P., *Proceedings of the American Solar Energy Society Conference*, 2003

“Toward a Definition of Glare: Can Qualitative Issues Be Quantified?” *Proceedings of the 2nd EAAE – ARCC Conference on Architectural Research*, European Association for Architectural Education (EAAE) and Architectural Research Centers Consortium (ARCC), L’Ecole des Beaux Arts, Paris, France, July 4-8, 2000.

“Websites as a Computer Toolshed and Library,” w/ Anish Tripathi, Doug Noble and Karen Kensek, *Proceedings of PLEA 2000 - Architecture, City, Environment, The 17th International Conference on Passive and Low Energy Architecture*, The Martin Centre for Architectural and Urban Studies, Department of Architecture University of Cambridge, Cambridge, UK. 2-5 July, 2000.

“Effectiveness of Light Shelves in the Natural Illumination of Indoor Spaces: a Comparison of Two Latitudes, 34N (Los Angeles) and 10N (Maracaibo) w/ Pablo La Roche and L. Rodriguez, *COTEDI 2000 Conferencia Internacional Solare Confort y Conmentamiento Termico de Edificaciones*, Maracaibo, Venezuela, 21-23 Junio, 2000.

“Thermal Processes in Buildings: A Web Based Tool,” w/ Kensek, Karen; Noble, Douglas; and Tandon, Geetika, *Sociedad Iberoamericana de Grafica Digital (SIGraDi 2000)*, Universidade Federal do Rio de Janeiro, Brazil, accepted for publication (abstract/CD), September 2000.

“Wind & Human Comfort in Thailand: A Web Based Tool,” w/ Kensek, Karen; Noble, Douglas, and Svastisinha, Rungsrithep; *Sociedad Iberoamericana de Grafica Digital (SIGraDi 2000)*, Universidade Federal do Rio de Janeiro, Brazil, accepted for publication(abstract/CD), September 2000.

“Augmented Reality: An Application for Architecture” w/ Kensek, Karen; Noble, Douglas and Tripathi, Anish, *the 8th International Conference on Computing in Civil and Building Engineering (ICCCBE-VIII)*, Palo Alto, California, August 14-17th, 2000.

“WebArc: Controlling and Monitoring of Building Systems,”w/ Kensek, Karen; Noble, Douglas; Schiler and Narang, Vagish, *the 8th International Conference on Computing in Civil and Building Engineering (ICCCBE-VIII)*, Palo Alto, California, August 14-17th, 2000.

“LIGHTNET: A Web Based Tool for Artificial Lighting Principles,” w/ Kensek, Karen; Noble, Douglas and Gupta, Madhu; *the 8th International Conference on Computing in Civil and Building Engineering (ICCCBE-VIII)*, Palo Alto, California, August 14-17th, 2000.

“Websites as a Computer Toolshed and Library,” w/ Anish Tripathi, Doug Noble and Karen Kensek, *Proceedings of PLEA 2000 - Architecture, City, Environment, The 17th International Conference on Passive and Low Energy Architecture*, The Martin Centre for Architectural and Urban Studies, Department of Architecture University of Cambridge, Cambridge, UK. 2-5 July, 2000.

“Websites as a Technology Transfer Library and Software Dissemination Source,” (published poster session) w/ A. Tripathi, D. Noble & K. Kensek, *CISBAT'99 Conference Internationale de Solaire-energie et Bâtiment*, Ecole Polytechnique Federal de Lausanne, 1999.

“A Comparison of Window and DOS Versions of DOE2 in Simulating Passive Buildings” w/ Sukanya Nutalaya, B. Givoni, & T. Labib, *PLEA '99 - 16th International Conference on Passive and Low Energy Architecture*, Brisbane, Cairns, 1999.

“Predicting Natural Light in Atria and Adjacent Spaces using Physical Models,” *Energy and Buildings*, w/ Ibrahim Alturki, Vol. 59, Nos. 4-6, pp 241-245, Pergamon, 1997.

“HSC: An Automated Louver Overhang System Using Temperature Sensors and X-10 Protocols”, w/ Song Ho, K. Kensek & D. Noble, *Solar 97: Proceedings of the American Solar Energy Society Conference*, Washington, D. C., April 1997.

"The Thermal Behavior of Atria: Measured Data Compared with a Computational Fluid Dynamics Model of the Bradbury Building," w/ Amitabh Barhakur & P. Koenig, *Solar 97: Proceedings of the American Solar Energy Society Conference*, Washington, D. C., April 1997.

"Shading Mask: A Tool for Sun Shading Devices," w/ Effendi Setiadarma, K. Kensek & D. Noble, *Automation in Construction: An International Journal for the Building Industry*, Elsevier, vol. 5, no. 3, September 1996, pp. 219-23.

"Shading Mask: A Computer-Based Teaching Tool for Sun Shading Devices," w/ Effendi Setiadarma, *Proceedings of the American Solar Energy Conference*, Asheville, NC, 1996.

"Improving Daylight in Mosques Using Domes," w/ Ibrahim Alturki & Y. Boyajian, *Proceedings of the American Solar Energy Conference*, Asheville, NC, 1996.

"The Climatic Performance of Traditional Indonesian Architecture : A Comparison Of Madurese and Javanese Architecture," w/ Effendi Setiadarma & P. Koenig, *Proceedings of the American Solar Energy Conference*, Minneapolis, MN, 1995

"Superinsulation Applied to Manufactured Housing in Hot, Arid Climates," w/ Soner Keskinel & P. Koenig, *Proceedings of the American Solar Energy Conference*, Minneapolis, MN, 1995

"A Method of Post Occupancy Glare Analysis for Building Energy Performance Analysis," w/ Shweta Japee, *Proceedings of the American Solar Energy Conference*, Minneapolis, MN, 1995

"The Climatic Performance of Traditional Indonesian Architecture : A Comparison Of Madurese and Javanese Architecture," w/ Effendi Setiadarma & P. Koenig, *Proceedings of the East/West Architecture Conference*, University of Hawaii, 1995

" Validating a Daylighting Computer Simulation Program", w/ Ibrahim Alturki, *Proceedings of the American Solar Energy Conference*, Minneapolis, MN, 1995

"The Indian Himalayan Energy Code as a step towards Energy Conservation," w/ Sharmila Bharali, *Proceedings of the American Solar Energy Society Passive Solar Conference*, June 1994, San Jose, CA.

"Using an Interactive Computer Program for Defining and Drawing Solar Envelopes." w/ U. F. Yeh, *International Solar Energy Society World Congress*, August 1993, Budapest, Hungary

"SolVelo: An Interactive Computer Program for Defining and Drawing Solar Envelopes"; w/ Uen-Feng Yeh, *Proceedings of the American Solar Energy Society Passive Solar Conference*, April, 1993, Washington, D. C.

"Hoyt Street Yard Redevelopment Plan: A Case Study Using an Interactive Computer Program for Defining and Drawing Solar Envelopes"; w/ Uen-Feng Yeh, *Proceedings of the American Solar Energy Conference*, April, 1993, Washington, D. C.

"A Passive Solar Heating System for the Perimeter Zone of Office Buildings," *Energy Sources*, w/ James Guthertz, Vol 13, pp 39-54; Taylor & Francis, 1991, UK

"Design Tools: Future Design Environments for Visualizing Building Performance," w/ M. Milne *Proceedings: International Building Performance Simulation Association Conference*, August, 1991, Nice, France

"Interactive Graphic Input for Superlite," *Proceedings of the International Solar Energy Society Solar World Congress*, w/ Eric James, August, 1991, Denver

"CAAD Input for Daylighting and Energy Simulation," *CAD futures '91, Association. of Computer Aided Design in Architecture*, w/ Eric James, Zürich, July, 1991.

"Daylighting Applications for Energy Management and Controlled Load Growth," *International Congress for Building Energy Management*; w/ G. Ander, Oct. 1987, Lausanne

"Development of a Passive Evaporative Cooler" w/ Turki Haif Al-Qahtani & P. Koenig, *12th Annual Passive Solar Conference*; July 1987, Portland, Oregon

"Fenestration Design Tool: A Microcomputer Program for Designers," *1986 International Daylighting Conference, Proceedings I*; w/ G. Ander & M. Milne, Nov. 1986, Long Beach

"Strategies and Tools in Teaching Energy (or The Misunderstood Gifts)," *Society of Building Science Educators Newsletter*; July/August 1984.

"The Calculation of Translucent and Opaque Shadow Effects on Building Thermal Loads," w/ D. Greenberg, *CAD 80: Fourth International Conference and Exhibition on Computers in Design Engineering*: IPC Science and Technology Press, Guilford, Surrey, March, 1980.

"Computer Simulation of Foliage Shading in Building Energy Loads," w/ D. Greenberg, *Proceedings: 16th Design Automation Conference*: San Diego, June 1979

Articles in non-refereed publications and conferences:

Stewardship as an Architectural Aesthetic, University of Southern California Veritas Forum, 2005.

"Disney Hall Glare Reduction," *SBSE News*, Society of Building Science Educators, Winter 2003.

"UCLA BeRUINS: a Continuing Report on the Technology Situation at UCLA.," *SBSE News*, Summer 1998.

"UCLA Critical? That's the Theory," *SBSE News*, Spring 1998,

Collins Center Glare Study, for Southern California Edison, unpublished contract report, Irwindale, 12/7/1994

"Interactive Graphic Input for Superlite," California Institute for Energy Efficiency Conference, August 24-27, 1991, San Diego

"Malcolm Wells' Gentle Architecture", *Passive Solar Journal*: (a review) August 1983, American Solar Energy Society.

"Sowing the Seeds for Energy Savings," *Sierra* (the Sierra Club Bulletin); w/ Anne Simon Moffat, May/June 1983.

"Landscape for Energy Efficiency," *Earth Shelter Living*: No. 20, March/April 1982, Webco Publishing.

"How to Landscape to Save Energy," w/ Anne Simon Moffat, *Family Handyman*: March 1982.

"Uncle Sam Breaks Ground on Energy Conservation," w/ Anne Simon Moffat, *Technology Review*: MIT, October, 1981, Volume 84, Number 1.

"Energy Saving Concepts Applicable to Landscapes," w/ Anne Simon Moffat, *Weeds, Trees & Turf*: February 1981, Harcourt, Brace, Jovanovich.

"Temperate Zone Landscape Design for Home Heating and Cooling," w/ Anne Simon Moffat, *Horticulture*: May 1981, Volume LIX, Number 5.

Invited Lectures, Seminars, Radio and Television:

There have been numerous invited lectures including radio, television, universities, professional societies, building associations, community groups, etc. Only more recent or more significant presentations are recorded here.

Modern Marvels and Engineering Disasters: Glare and the Disney Concert Hall (Episode 17); The History Channel (in depth television interview with multiple airing times)

"Sustainable Design: Environmental Stewardship," Veritas Forum, University of Southern California, Los Angeles, February 24, 2005. (no published proceedings, taped lectures available on internet.)

Radio Interview: "Disney Hall Glare, To the Point," KCRW - Reporter's Notebook: Wednesday, December 8, 2004

Radio Interview: "Disney Glare": Rachael Myrow, Business, Transportation & Entertainment Reporter KPCC 89.3 FM and scpr.org/news, December 4, 2004.

"5,000 Years of Climate Responsive Architecture," public lecture jointly sponsored by Committee on the Environment (COTE) of the Los Angeles American Institute of Architects and the University of Southern California Building Science program, September 23, 2004.

"The Blinding Impact of Frank Gehry's Disney Hall Design," *Which Way, L. A.?*, NPR and KCRW interview about the Disney Hall Glare Reduction project, Tuesday, February 15, 2004.

"Lighting Applications for Visual Performance," Illuminating Engineering Society of Los Angeles, September 6, 2003.

"Toward a Numerical Definition of Glare," Ben Gurion University of the Negev, Sede Boqer, Desert Research Institute, 23 January, 2003.

"Natural Lighting in Museums," and "Using Physical Models to Simulate Daylighting," Technion, Israel Institute of Technology, Haifa, 5 November, 2002.

"Daylighting: Accident or Technology" a full day workshop presented at LightFair International 2001, Las Vegas, NV, May 28, 2001.

“A Numerical Method for Glare Analysis,” Arizona State University Graduate Program in Environment, March, 2000.

“Glare in the Architectural Environment” and “A Method for Glare Analysis,” lecture and design reviews at Ball State University Center for Energy and Regenerative Studies 1999 and 1997.

“Energy Efficient and Environmental Landscaping,” on The Environment Show, ABC Radio network, National Public Radio, the Armed Services Network, and Voice of America (a total of 200+ U.S. stations and 143 foreign countries.) March 11, 1998.

“On Interior Illuminance, Daylight Control and Occupant Response,” the Energy Center, San Francisco and University of California, Berkeley, presentations on that part of the *Vital Signs Resource Package*, 1998

Daylight Harvesting; a full day workshop presented at the Gas Company Energy Research Center, Los Angeles, 1996.

“State of the Art Daylighting Simulations,” Zumtobel Dornbirn Research Facility, 12 June, 1989

“A Comparison of Daylight Harvesting in Four Climates and Cultures,” International Energy Agency, (Task 13) Copenhagen, Denmark, 2-7 June 1989

University of Belgrade, public lectures for Dept of Architecture, Dept of Mechanical Engineering, Yugoslavia, 13 & 17 April, 1989

“Integrating Analysis from Daylight into DOE2.1 Simulations,” International Energy Agency, (Task 11) Gersau, Switzerland, 24-25 March, 1989

“Advanced Algorithms and Daylight Simulation Programs,” International Energy Agency, (Task 11) Seville, Spain, 6-11 November, 1988

“Graphic Input for Daylighting Simulation Programs,” Laboratoire d'Architecture (LASH), Lyons, France, 15 November, 1988

“Energy Simulations for Buildings,” University of Valencia, School of Architecture, Spain, 2 November, 1988

“American Algorithms and Daylight Simulation Programs,” Ecole Polytechnic Federale Lausanne (EPFL), Laboratoire d'Energie Solaire (LESO), Lausanne, Switzerland, 12 July 1988

Professional consulting jobs doing business as Schiler + Associates and/or as subcontractor for Southern California Edison in the Design Assistance program:

Certified as LC (lighting certified) by National Council on Qualifications for Lighting Professionals (NCQLP) since March 2000

RELATED Grand Ave Residential Towers, Glare Study and Analysis of Solutions (Frank Gehry, Craig Webb, Architects.)

Lewis Science Library at Princeton University, Glare Studies and Remediation (Frank Gehry, Architect.)

Dohar International Airport, Glare Studies and Remediation (HOK Architects, ASI Engineers)

LAUSD Central High School #9, Glare Studies and Remediation (Koop Himmelblau, Architects)

Walt Disney Concert Hall, Glare Studies and Remediation (Frank Gehry, Architect)

Oak Park Joint Use Library, Ventura (Fields Devereaux., Architect)

Will and Ariel Durant Branch Library, Sunset Blvd., (Barton Phelps, Architect)

Los Feliz Public Library, (Barton Phelps, Architect)

Palm Springs Chamber of Commerce, (Reuel Young, Interactive Design Assoc.)

Santa Monica Community College Student Activities Center

Compton Transit Center

Yardley Office/Warehouse

East Valley Law Enforcement Facility, Ventura Co.

Lancaster Activity Center

Grand Way, El Segundo

BOYS Market, Willowbrook, CA

Glazing Parametrics, California Energy Commission
Standard Nonresidential Building

Fairway Molds Plant and Offices, Walnut, CA (Williams Architects)

Knott's Berry Farm, Warehouse & Tagging Bldg. (Store, Matakovich & Wolfberg, Engineers)

Woodcrest Carpet Mills, Moorpark, CA (Rasmussen & Assoc., Architects)

Domingues Technical Center, Carson, CA (Kowalski - Harding & Assoc., Architects)

Fillmore Senior Center, Fillmore, CA (Scott Ellinwood & Assoc., Architects)

Alhambra Post Office GMF, Alhambra, CA (Jacobs Engineering Group, Inc.).

Moorpark City Hall, Moorpark, CA (D. I. aL., Architects)

STOR Building "A", City of Industry, CA (Musil Perkwitz Ruth, Inc.)

Santa Monica Community Center, Santa Monica, CA (Koning, Eisenberg, Architecture)

Cal Poly Hospitality Management Center, Pomona, CA

Santa Barbara Community Development Center

Natural Resources Defense Council Offices, NYC

U. S. Postal Facility, Van Nuys, (Valencia) CA

Projects done in conjunction with or working for other Lighting Designers:

PATRICK QUIGLEY AND ASSOCIATES, 6'86 - 6'87, 7'89-present
lighting design, lighting and daylighting calculations, project designer for:
Mall of the Americas
Epson Corporate Headquarters
Irvine City Hall
Rancho Cucamonga City Hall
Northrop Offices
Mazda U. S. Corporate Headquarters
Sheraton Grande Ballroom renovation
P.O.S.H. Clothiers
First Church of Christ Scientist, Pasadena,

GRENALD ASSOCIATES, 8'84 - 3'86
lighting design, lighting and daylighting calculations
project designer for:
IBM offices, 400 S. Hope St.
Steelcase Showroom, Pacific Design Center
Civic Center Subway Station, Los Angeles Metro Rail
5th and Hill Subway Station, Los Angeles Metro Rail
Northrop Remanufacturing Bldg. renovation
Skyline Residential Towers, Los Angeles
Kasparian's Showroom, Houston TX
Birtcher Residence, San Juan Capistrano, CA
Marshall Residence, Las Vegas, NV
Marshall Showroom, Caesar's Palace, Las Vegas, NV

Languages:

fluent Swiss-German
fluent German
reading level French

Memberships:

American Society of Heating Refrigerating and Air-conditioning Engineers (ASHRAE, Assoc. member)
American Solar Energy Society (ASES) lifetime member and Fellow (FASES)
Designers Lighting Forum, Los Angeles (DLFLA)
Illuminating Engineering Society of North America (IESNA)
International Association of Lighting Designers (IALD) educator
International Energy Agency Task XI: Passive and Hybrid Solar Commercial Buildings

International Solar Energy Society (ISES)
Society of Building Science Educators (SBSE)

Honors and Awards:

Elected **Fellow of the American Solar Energy Society (FASES)**, 2006.

Elected to **Phi Kappa Phi** Honor Society, May 11, 2005

Fulbright Senior Specialist List, Architecture, 2004 – present, permanent listing of specialists pre-qualified to visit for short duration projects.

Fulbright Review Committee, Architecture, 2004 – present, technical reviewer for Fulbright applicant files.

Fulbright Senior Scholar, Middle East 2002-2003, award for teaching and research at Technion, Haifa, Israel and Ben Gurion University of the Negev, Israel.

The monograph, *Daylight Harvesting*, published by the Gas Co. was selected as a **Project of Special Merit** by the Energy Resource Center.

The curriculum package “Interior Illuminance, Daylight Control and Occupant Response,” was produced as part of the *Vital Signs Resource Package*, funded by the U.S. Department of Energy and Pacific Gas and Electric. The package won Honorable Mention in the **1997 AIA Education Honor Awards**.

Invited referee and session chair for numerous conferences and publications, 1980 – present.

"Computer Simulation of Foliage Shading in Building Energy Loads," *Proceedings: 16th Design Automation Conference*: San Diego, June 1979. (voted best paper in Architecture group)

EMPA visiting research position, 1988-89

Cornell Humanities Council junior faculty research grant, 1981

Cornell teaching assistantships, academic terms 1976-77, 1977-78

Cornell graduate research fellowships, summers 1977, 1978

Service:

Professional

Member, Illuminating Engineering Society of North America, Los Angeles Section, board of managers (1988-99). USC Student Chapter Liaison (1990-present)

Member, IESNA, Daylighting Committee (1986-1987)

University

Director of the Master Building Science program, 1990-99, 2006 – present, (For MBS work during this period, please visit the web site: [http://www.usc.edu/dept/architecture/mbs/.](http://www.usc.edu/dept/architecture/mbs/))

Member, University Grievance Committee, 1997-present

Member, University Academic Integrity Committee, 1994-97

Member, Architecture and Fine Arts Library Committee. 1988-1997

Past Member, University Joint Information Services Committee,

Past Member, Doheny Library Retrofit Committee,

Community

Pro bono consultant African American Community Unity Center

Lay Minister, Apostolic Christian Church of Pasadena, 1983-present

The Apostolic Christian Church of Pasadena is a small Anabaptist church originally composed of predominantly Caucasian professionals which now serves a completely diverse and semi-transient community composed of Hispanics, African-Americans, Armenians, Pacific Islanders and mixed Native Americans. There are no paid ministers. All work is done on a voluntary basis.

Pastor, Apostolic Christian Church of Pasadena, 1995-present

The previous elder of the Pasadena church died unexpectedly on June 30, 1994. Prof. Schiler is elder and pastor.

Trustee, Southwestern Region, Apostolic Christian Church Foundation, 1985 – 1991

The Southwestern Region of the Foundation includes 12 churches in California, Nevada, Arizona, New Mexico and a portion of Colorado.

President, Apostolic Christian Church Foundation (national), 1991-92

The Foundation is a small service, missionary and relief agency of the Apostolic Christian Church which delivers roughly one million dollars a year in conflict resolution counseling, short term disaster and refugee relief, missionary and medical services in North America, Eastern Europe, Ghana, Brazil, Argentina and New Guinea. Total overhead is less than 3%.

Reviews, feature articles and citations of Prof. Schiler's work:

Croce, Sergio, "PATOLOGIE DEL MODERNO?" *MODULO progetto tecnologia prodotto*, Dicembre 2006-Gennaio 2007, "www.modulo.it"

"Sandblast will dull Disney Hall walls, Steel on downtown concert hall created glare that led to complaints from residents," By Melissa Lopez, *Daily Trojan*, Wednesday, March 9, 2005

Radio Interview: "Disney Glare," **Canadian Broadcasting Network**, March 4, 2005

"Hit the Dimmer, Disney Hall Is Told," By Natasha Lee and Jack Leonard, *Los Angeles Times*, March 1, 2005.

"Glaring beauty," By Joanna Lin, *Daily Trojan*, Friday, January 28, 2005

"Glare Report to Prompt Changes at Disney Concert Hall," *Architectural Record*, December 15, 2004

"Dulling Disney, Sandblasting is all part of becoming an L.A. Icon", by Greg Goldin, *LA Weekly*, December 12, 2004.

"A Glaring Concern, Study Sheds Light on Disney Hall Reflection Snafu," Kathryn Maese, *L.A. Daily News*, Friday, December 3, 2004.

"Gehry Would Blast Glare Off Los Angeles Showpiece"; By Robin Pogrebin, *New York Times*, December 2, 2004

"Disney Concert Hall Shines Too Brightly," *Walt Disney World News*, 11/29/2004 9:31 AM EST

"House Warming: Frank Gehry's new \$274 million Walt Disney Concert Hall in Los Angeles is Hot," *Herman Miller DesignLink*, March 22, 2004, Zeeland, MI.

"Whose Bright Idea Was This? Disney Hall Glare Gets to Neighbors"; Jia-Rui Chong, *Los Angeles Times*, Los Angeles, Calif.: Feb 21, 2004. pg. B.1

"The Blinding Impact of Frank Gehry's Disney Hall Design," *Which Way, L. A.?*, **NPR and KCRW** interview about the Disney Hall Glare Reduction project, Warren Olney, Tuesday, February 15, 2004.

"Disney Glare," Rachael Myrow, Business, Transportation & Entertainment Reporter, KPCC 89.3 FM and scpr.org/news December 2, 2004.

"Visual Field Digital Image Analysis Methodology," Jeff Culp, *SBSE News*, Spring 1999.

Kiplinger's	10/95	review
Ecolution		review
Green Living		review
Garbage		review
Solar Update	11/89	article
Architectural Research	12/88	review
Daylighting Network	10/87	citation
Pasadena Star News	9/4/87	article

Interior	6/85	article
Cornell Alumni News	10/81	review
Garden	10/81	review
Country Journal	9/81	review
New York Times	7/23/81	citation
New York Times	6/25/81	citation
Ithaca Journal	5/14/81	article
Solar Times	5/81	article
Library Journal	5/81	review
Library Review	2/81	review
Cornell Countryman	10/80	article

Further non-academic citations were not researched. A Google search for both words *in the same citation* Schiler *and* Disney yielded 28,700 hits.

Travel:

Austria, Belgium, Canada, Denmark, France, Great Britain, Germany, Ireland, Israel (one year sabbatical), Italy, Jamaica, Jordan, Lichtenstein, Luxembourg, Mexico, Palestine/West Bank, Scotland, Spain, Sweden, Switzerland (one year sabbatical), Yugoslavia/Serbia

Sketch:

born Mansfield, Ohio, January 28, 1951;
studied and practiced architecture in Southern California, September 1969-1974;
married to Dianne Irene Kinkel, January 29, 1972;
studied architecture, landscape architecture, energy, thermal processes,
and computer graphics in Ithaca, New York, August 1976-1978;
first child, Karen Elisabeth, born July 10, 1977;
began teaching architecture in Ithaca, New York, 1978;
second child, Jonathan David, born March 15, 1979;
first book published, March 19, 1981;
third child, Marianne Renee, born June 29, 1981;
began teaching and consulting in Los Angeles, August 1982;
ordained lay minister, California, October 6, 1983;
tenured, USC, May 1985;
second book published, March 1986;
third book published (edited by Prof. Schiler), June 1987;
sabbatical at EMPA, Dübendorf, Switzerland, July 1988-June 1989;
second edition of second book; March 1991;
fourth book published, August 1993
fifth book published, January 1994
ordained elder, 1995
first monograph published, January 1996
Fulbright Senior Scholar, sabbatical at Technion, Israel 2002/03
elected Fellow of the American Solar Energy Society 2006

Contact:

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